

Tyre Industry

Tyre Industry is a sub-industry of Auto-component Industry, which is in turn a part of Automobile Industry. Automobile Industry is cyclical in nature and hence any adverse effects on Automobile industry will affect the tyre industry. Conversely, any uptrend in the automobile industry will be first seen in the rise in demand in the tyre sector.

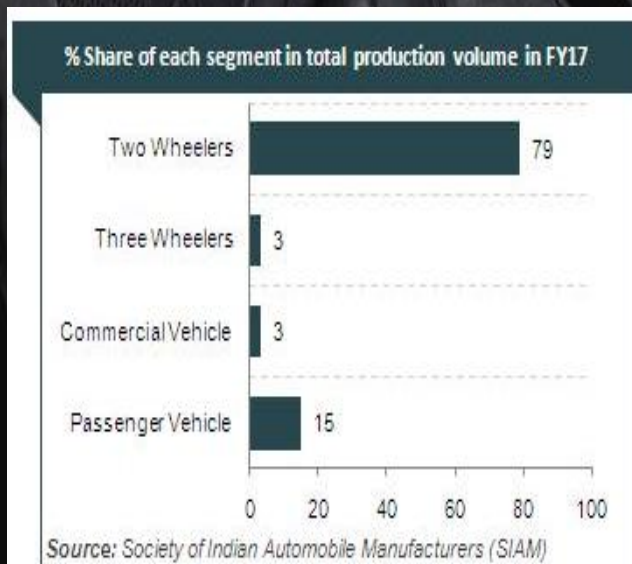
Recently, this industry is going through a capex phase where all the major companies involved are investing heavily into the business so as to beat competition and capture market share and also to dive into strategic areas which were previously unexplored. The industry is slowly recovering from the hit suffered during demonetization.

Automobile Industry

Indian Automobile Industry is the 3rd largest industry in the world and the 7th largest manufacturer of commercial vehicles. Indian Automobile Industry (including auto-component manufacturing) is expected to reach Rs. 16.16 - 18.18 trillion (Rs. 16,16,000 Cr. - 18,18,000 Cr.) by 2026.

The industry is expected to grow at a CAGR of 3.05% from 2016-2026. Automobile industry contributes to approx. 7% to GDP. Out of total FDI inflows in 2017, 5% went to automobile sector. Various government initiatives viz. 'Make In India', 'Automotive Mission Plan 2026', FAME scheme (*Faster Adoption and manufacturing of (Hybrid) and Electric Vehicles in India*).

In 2016-17, automobile production witnessed an uptrend of 5.4% in FY 2016-17.



The 2 wheeler segment faced slowdown after demonetization. The first 2 quarters the segment grew tremendously and the last 2 quarters lagged. Overall, 2 wheeler segment witnessed a growth of 6.9% YoY basis with 11% growth in scooters.

PV: In 2016-17, Passenger Vehicles recorded an overall growth of 9.2% on YoY basis.

Commercial Vehicles: LCV segment recovered slowly with a growth of 7.4% YoY basis. Flat sales were seen in HCV segment due to slowdown after demonetization. Bus segment contributed 14% to industry sales and witnessed a growth of 5.1% in terms of volume.

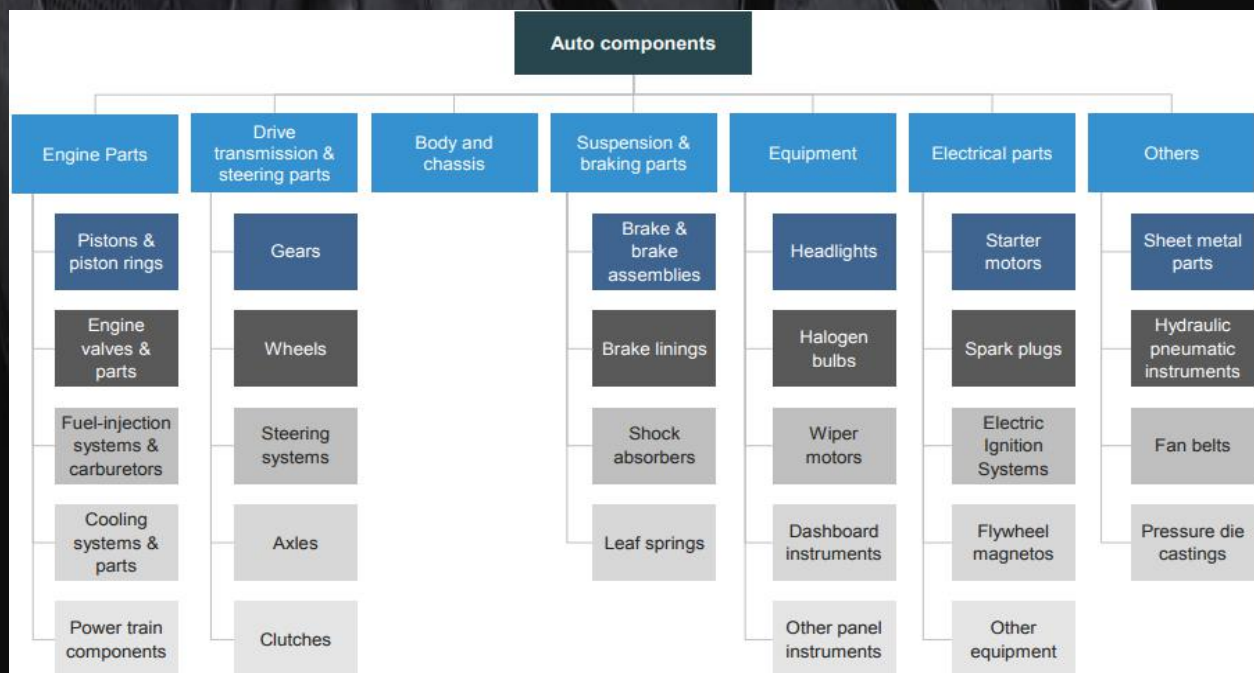
Tractors: In 2016-17, tractors recorded a highest volume growth of 20%.

Strengths

- The Indian government has come up with a lot of initiatives to facilitate electric vehicles in the Indian economy. (FAME, EESL - public transports).
- India has also become a prominent auto exporter.
- Indian Automobile Industry is supported by pillars of low cost skilled labour, robust R&D and government regulations, projects and initiatives.

Auto-Component Industry

- The current size of the industry is Rs. 292184 Cr. and the industry has been growing at a CAGR of 7% for the last 6 years.
- In FY 2016-17, this industry had a 4% share in India's exports.
- The auto-component industry is seeing a gradual uptrend. A lot of auto-component companies have started doing capex to ride the uptrend wave. Government support for low cost raw material through GST is also a huge benefit.
- This industry accounts for almost 2.3% contribution to GDP and provides direct employment to ~15 lac people and indirect employment to ~15 lac people.
- 100% FDI is allowed under automatic route for auto-component sector.



- 'Engine parts' accounts for 31% of entire product range of the auto components sector followed by 'drive transmission & steering parts' (19%).
- Major export market for auto-component industry is Europe (35%) followed by Asia (27%) & North America (26%).
- Asia is becoming a beacon for auto & auto-component manufacturing industry.
- India is also supported by various government initiatives.

Government Policies

1) Auto-Policy 2002

This scheme has 2 major highlights:

- a) 100% FDI in auto-component manufacturing facilities through automatic route.
- b) Manufacturing and imports are exempt from licensing and approvals.

2) NATRiP – National Automotive Testing and R&D Infrastructure Project

- a) The government has set up a total cost of approx. Rs. 2500 Cr to enable the industry to adopt & implement global performance standards.
- b) Focusing on providing low-cost manufacturing & product development solutions.

3) Department of Heavy Industries & Public enterprise

- a) It has created a fund of approx. Rs. 1287 Cr. to modernize the auto components industry by providing an interest subsidy on loans and investments in new plants & equipment.
- b) Provided export benefits to intermediate suppliers of auto components.

4) FAME Scheme

- a) It aims to incentivize all vehicle segments including hybrid and electric tech.
- b) The scheme has been extended to March 2018 from March 2017.

5) Automotive Mission Plan 2016-2026

- a) This policy aims for a four-fold growth in the automobile sector in India, which includes the manufacturers of automobiles, auto-components & tractor industry over the next 10 years.
- b) Additional employment for 6.5 Cr people.
- c) Focus of AMP is to promote safe, efficient & comfortable mobility for every person in the country with environmental protection & affordability through both public and personal transport options.

Tyre Industry

Global Tyre Industry

- Currently, global tyre industry is valued at USD 80 Billion .
- Passenger tyre, Truck and Bus tyre and Off-Highway tyre constitute around 90% share.
- For the last 7 years, the industry has been growing at a CAGR of 4.5%.
- The global tyre market produced more than 2.9 Billion units in 2016.

Chinese Tyre Market

- China is the world's largest market for tyres.
- In 2016, China's export was down by 6.9% on YoY basis.
- US had imposed anti-dumping and countervailing duty on Chinese imports, due to which Chinese Trucks and Bus tyres suffered a huge hit and fell below USD 1 Billion in first 11 months in 2016. ==> Exports to US constitutes of about 16.3% of China's total export value of tyres.
- UK the second largest market for Chinese exports constitutes of about 4.2% of China's total export of tyres.

US Tyre Market

- Second largest automobile market in the world.
- Falling oil and food prices and rising standard of living are increasing the production and vehicular sales. (*although recently the prices have started to pick up*).

European Tyre Market

- European Tyre Market is predicted to grow at 5% CAGR during 2014-2019.
- Germany, UK, France, Italy, Spain and Poland are major markets that contribute to >60% of total Europe tyre sales in volume terms.

Tyre Industry (Contd...)

Asia-Pacific Tyre Market

- Emerging as a hub for production for automobiles.
- Passenger tyre and 2-3 wheeler tyre categories dominate the tyre demand in the region.

African Tyre Market

- The tyre market in Africa is expected to surpass USD 8 billion by 2022.
- Forecasted to grow at a CAGR of 8% .
- Increasing GDP and purchasing power across the major African economies were the other predominant factors improving tyre sales in the region, during 2012-2016.
- African tyre market is majorly import-driven and hence an effective tyre sales growth is foreseen.

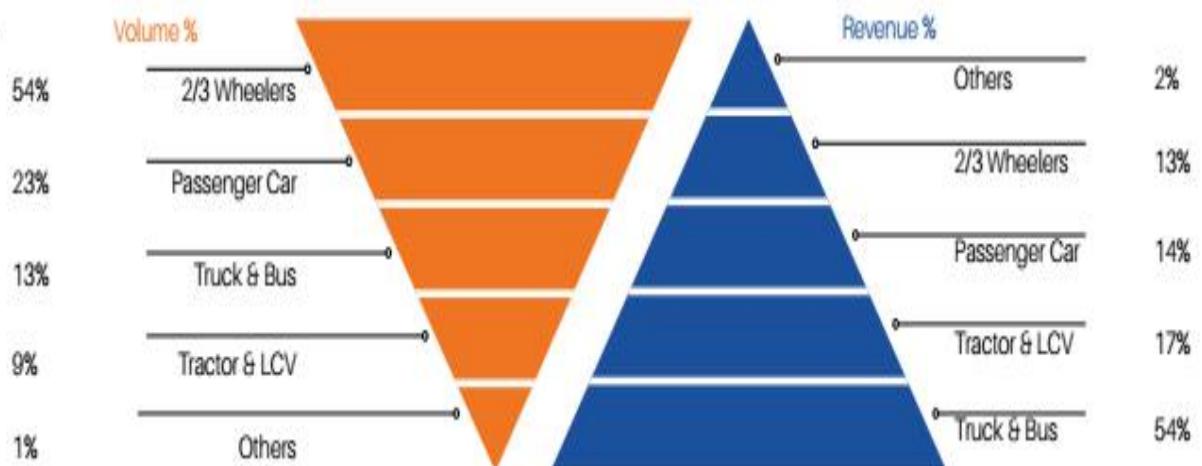
#Outlook for Global Tyre Industry

- Asia-Pacific, which accounts for >50% of global sale is likely to grow the fastest through 2019.
- Countries like India, Indonesia and Thailand are also projected to witness an increased demand for tyres.

Indian Tyre Industry

- Indian tyre industry is valued at Rs. 530 Billion (i.e. rs. 53000 Cr.) or USD 8.19 Billion. Therefore the Indian tyre market constitutes of about 10.15% of the global tyre market. (Conversion rate of Rs. 64.79 used)
- The industry grew at a steady CAGR of 8% from FY 2010-11 to FY 2015-16. (with FY 2016-17 growth in sales as 10.6%).
- Although, revenue and profit growth were severely affected in FY 2016-17 due to various factors like Demonetization, subdued realization due to hike in raw material prices and excess of Chinese imports.
- Chinese imports have grown by >350% since FY 2012-13 against the overall import growth rate of 129%.
- The expected revenue growth is projected between 12% to 13% CAGR during 2017-2020.
- Indian tyre industry is highly competitive with the presence of a large number of global and Indian auto-companies. However, top 10 companies account for about 80% of the market share.

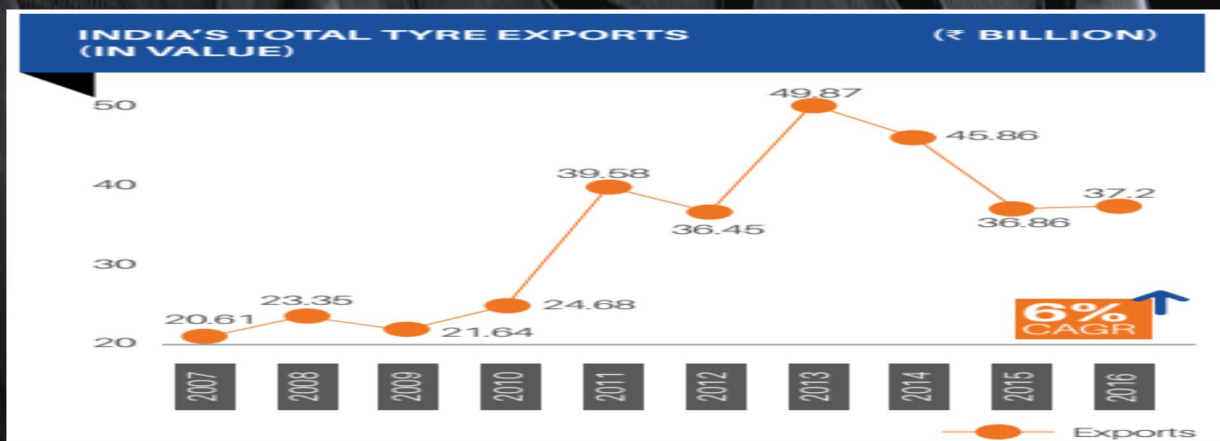
TYRE INDUSTRY: VOLUME & REVENUE SEGMENTATION



Indian Tyre Industry (Contd...)

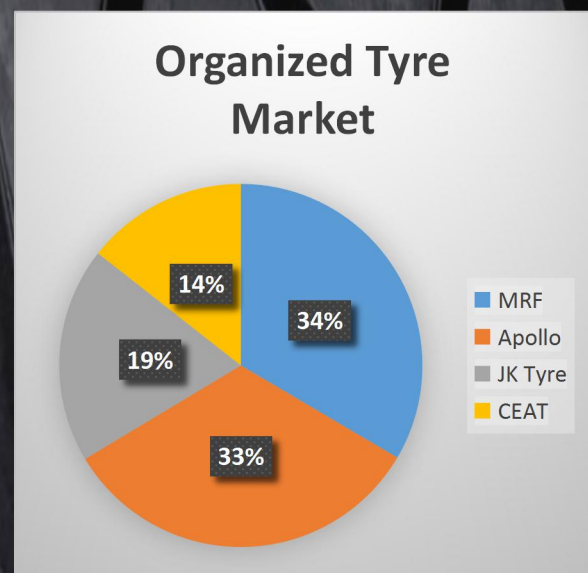
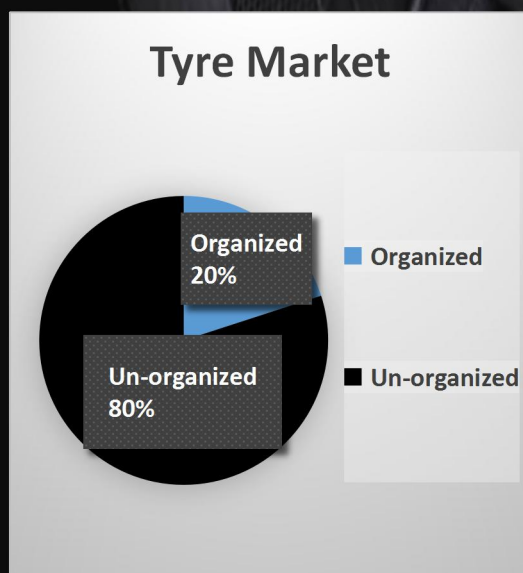
Exports

- Indian Tyre export has increased at a steady CAGR of 6% in the last 10 years.
- In volume terms, 2-3 wheeler tyres witnessed the fastest growth of about (17%), followed by passenger vehicle tyres (13%) and truck and bus tyres (12%).



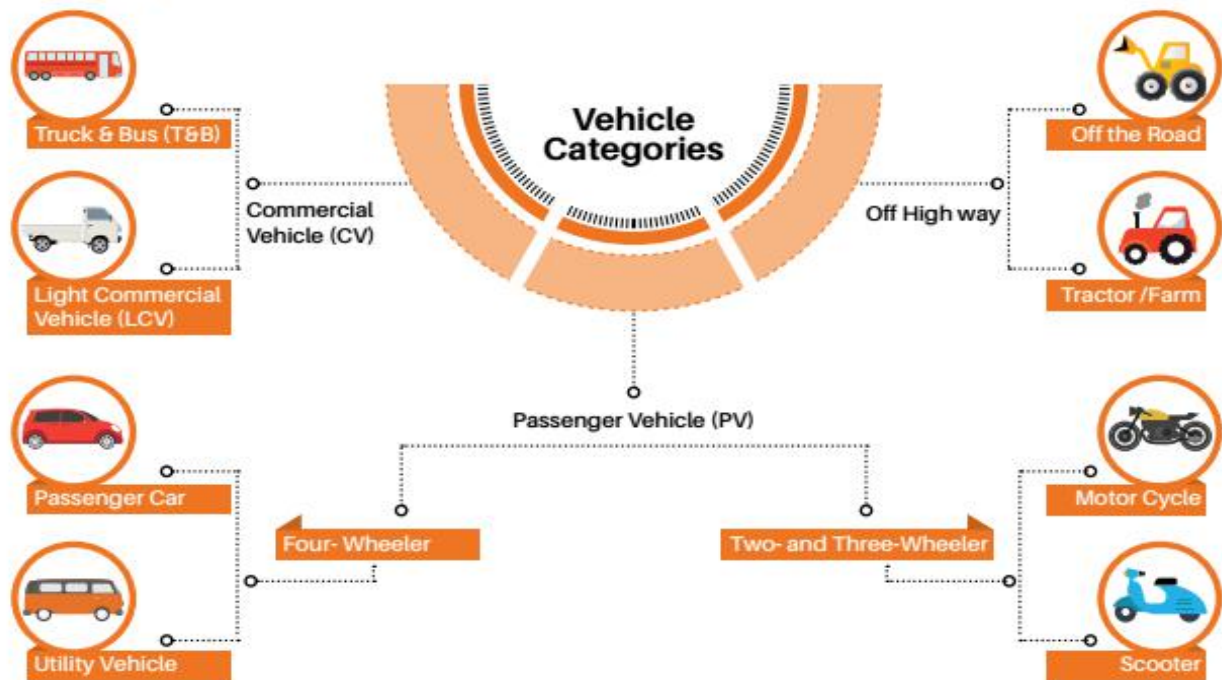
Organized and Unorganized Tyre Market

- The Indian Tyre market is valued at Rs. 53000 crores.
- The organized players consists of approx 20% out of the entire market.
- 80% of the Tyre market is unorganized.
- Major players are MRF, Apollo, CEAT and JK Tyres.



Vehicle Categories

Tyre Industry Segmentation



Growth in various segments

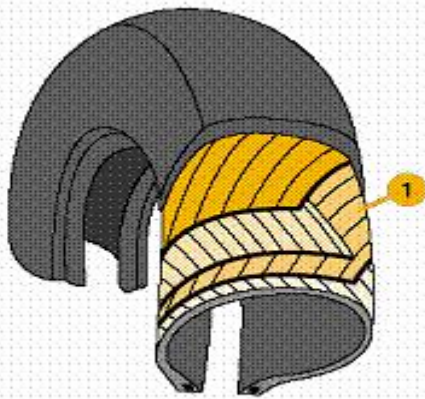
- Indian tyre Industry shows a volume growth of 12% led primarily by the PV, Scooters and Motorcycle/Moped, which account for nearly 77% of the total tyre production.
- Overall growth in domestic demand for 4 wheel tyres was 7%.
- TBB segment continued to decline slowly.
- TBR segment recorded a growth of 8%. (For most part, the TBR market reeled under the impact of Chinese Tyre imports which constituted of 92% of total imports and accounted for a peak market share of 38%).
- Passenger tyre segment grew at 8%.
- In LCV segment, there was a substantial dip of 7%.
- Small Commercial tyre demand saw a growth of 5%.
- Due to the upswing in agricultural sector, farm tyres registered a growth of about 26%.

Design Deviation

CROSS-PLY

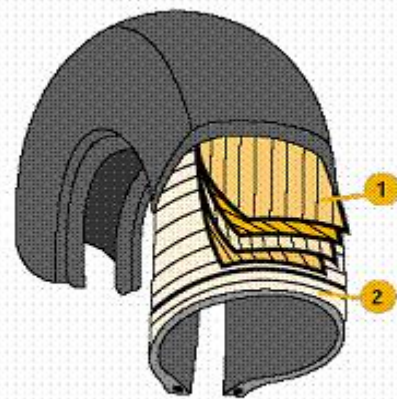
- Cross-ply, also known as Bias tyre, is an old manufacturing technology and has been almost discarded by developed economies like USA and Europe long back.
- It's penetration levels have witnessed gradual decrease in the last few years owing to increasing awareness about the inherent advantages of radial tyres.

Crossply tyre



The fabric plies (1) cross over each other at the same angle.

Radial tyre



The belt (1) and casing plies (2) overlap at different angles.

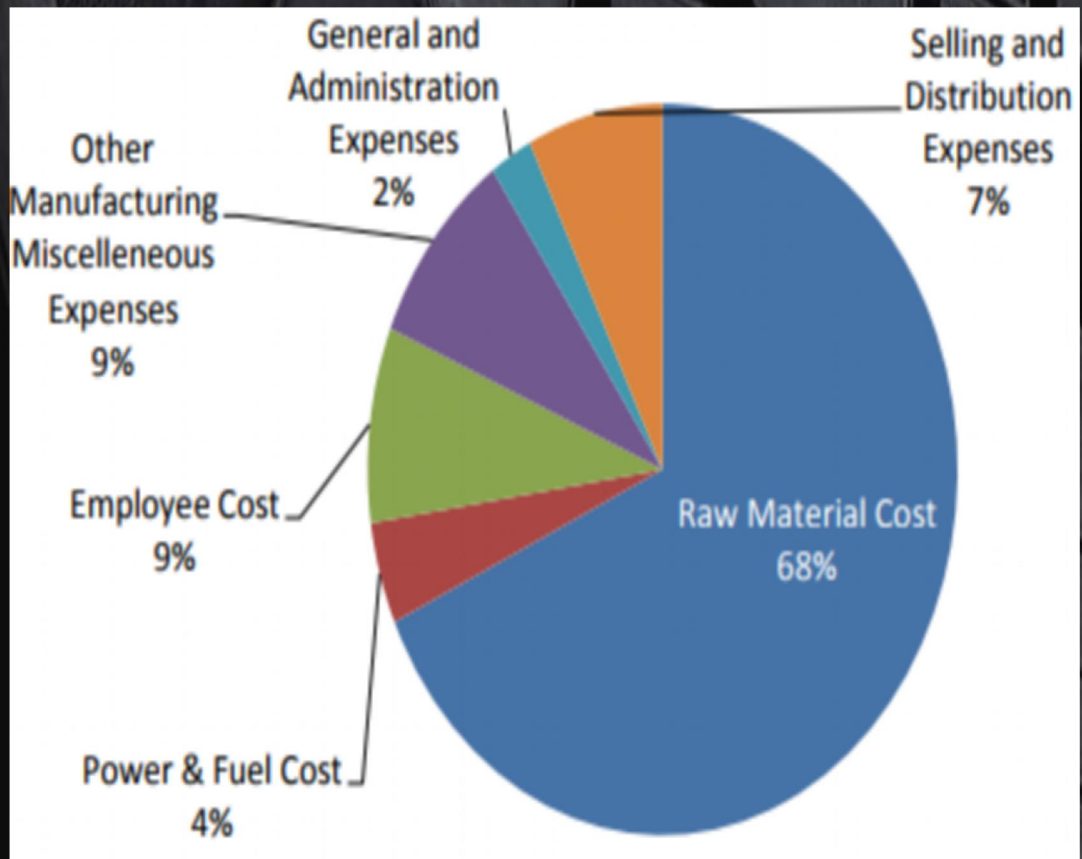
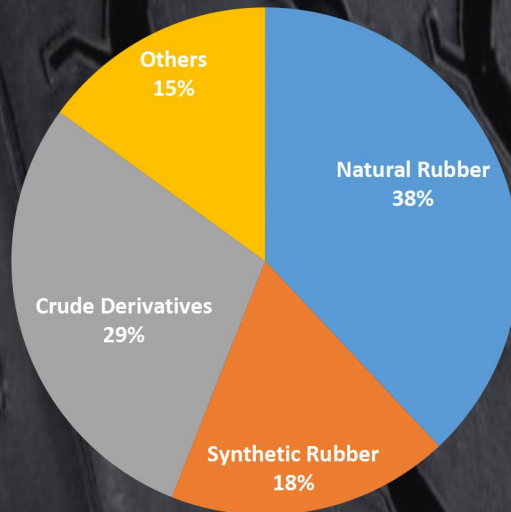
RADIAL TYRES

- Acceptance of radial tyres, which are of superior quality and have a longer life-cycle, as compared to cross-ply tyres, has been continuously increasing in the Indian market.
- However because of their higher price and lower adaptability in bad road conditions, these tyres are less preferred for vehicles with commercial usage like trucks, buses, LCV's, tractors etc.
- However, growing awareness about the advantages of radial tyres has led increasing proportion of vehicle operators across all the vehicle categories to migrate towards radial tyres.
- Over the last few years, India has seen increased adoption of radial tyre technology.
- Radialisation is highest in Passenger cars (98%) followed by LCV (40%) and then HCV (37%). This presents a huge scope of growth.

Raw Material Used

RAW MATERIAL USAGE OF INDIAN TYRE INDUSTRY

■ Natural Rubber ■ Synthetic Rubber ■ Crude Derivatives ■ Others



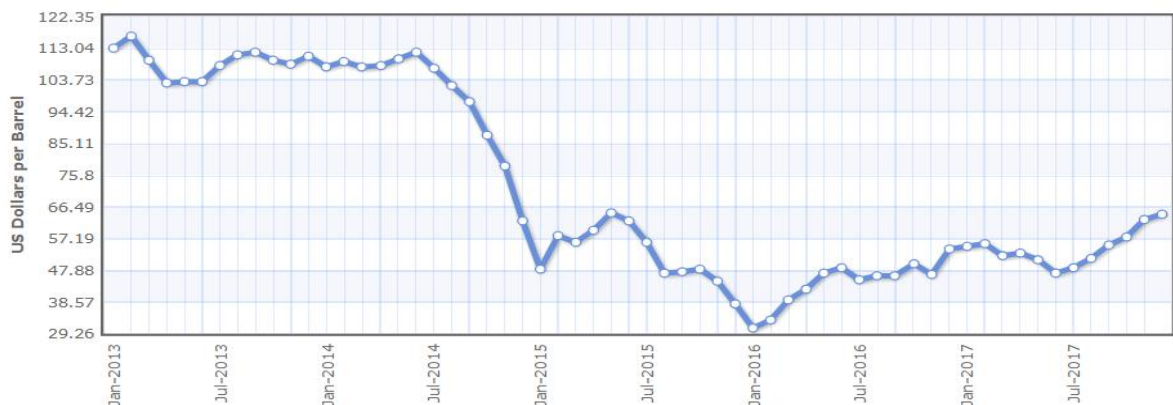
Raw Material Used (Contd...)

- The main raw materials used to manufacture tyres are natural rubber, poly butadiene rubber (PBR), styrene butadiene rubber (SBR) and nylon tyre cord fabric.
- Rubber including (natural and synthetic), nylon tyre cord fabric (NTC) and carbon black constitute a significant portion i.e. ~60-65% of the overall raw material cost of the industry. Hence any change in the prices of these materials impact the overall industry's profitability.
- However, the price of rubber is prone to fluctuations and in 2016-17 (Apr-Feb), domestic and international rubber prices increased by about 28% after declining by 24% and 15% y-o-y for two consecutive years.
- With high rubber prices, imports of rubber has increased over the past few years to about 45% in the 2015-16 from about 18% in 2010-11.

Crude Oil (petroleum); Dated Brent Monthly Price - US Dollars per Barrel

Range 6m 1y 5y 10y 15y 20y 25y 30y

Jan 2013 - Dec 2017: -48.760 (-43.16 %)



Rubber Monthly Price - US Dollars per Kilogram

Range 6m 1y 5y 10y 15y 20y 25y 30y

Jan 2013 - Dec 2017: -1.650 (-50.00 %)

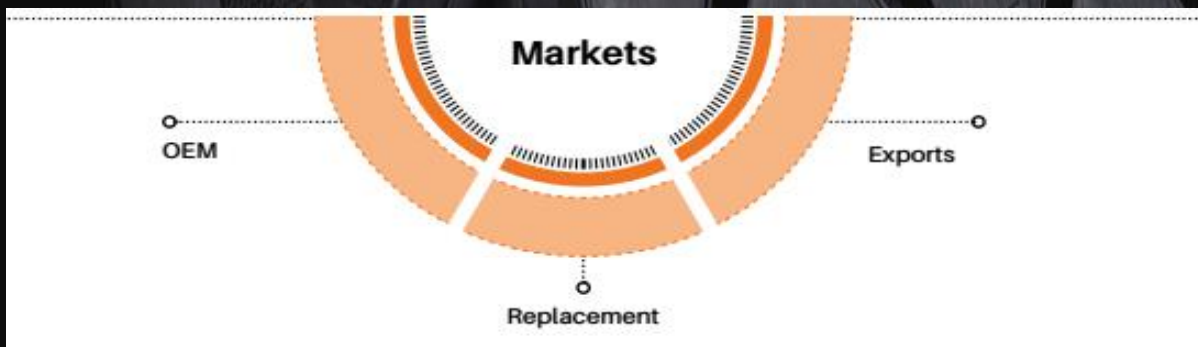


Industry Opportunities

- Governments recent thrust towards agriculture and rural development have upped the tractor sales. (5 new schemes benefiting the agricultural and rural sector were launched by the government in 2016) viz. crop insurance policy, blue revolution, improve milk production, energy-efficient irrigation and Launch of Paramparagat Krishi Vikas Yojana).
- Better monsoons for the past 2 years would lead to better income for farmers and rural population.
- 2-3 wheeler tyre sales are increasing at a faster pace due to an increase in rural income.
- Import Duty on tyres has been raised from 10% to 15%.
- **ADD imposed on Chinese tyres.**

Anti-Dumping Duty

- Initially, the anti-dumping duty was removed in 2015 due to which, Chinese tyre (TBR) imports became the biggest threat to tyre firm's revenue and profitability.
- TBR - Truck and Bus Radial tyres imports have increased 10 times in the last few years causing a big hit to domestic firms.
- TBR's constitute around 2/5th of total tyre imports and also 1/4th of total replacement market for TBR's.
- These tyres are 25-30% cheaper than domestic products.
- Due to surge in Rubber prices, the cost of production for domestic products increased further and Chinese imports prevailed.



2017 Anti-Dumping Duty on Chinese Tyres

- Again in the year 2017, the Central Board of Excise and Customs have imposed a ADD on Chinese Imports for 5 years.
- The ADD has been imposed in the range of USD 245.35 - 452.33 per tonne, i.e. an anti-dumping rate of 10% to 12%.
- The duty has been imposed on new/unused pneumatic radial tyres with or without tubes and/or flap of rubber (including tubeless tyres) having a nominal rim diameter code above 16 inch” used in buses and lorries/trucks.
- Due to ADD, the price of imported tyres will increase by 9-14%.
- Major benefitors are JK tyres, Apollo tyres, CEAT and MRF.
- JK tyres’ 3/4th of total domestic revenue comes from TBR tyre sales to medium and heavy commercial vehicles segment.
- Apollo tyres’ overall replacement market to original equipment mix is about 77:23.
- At the moment, rubber prices are fairly stable compared to aluminium and steel, that goes into making automobiles, which are skyrocketing.

Industry Concerns

- The Automotive Tyre Manufacturers Association (ATMA) has asked the Ministry of Commerce for duty free import of natural rubber equivalent to deficit in domestic production. The request by the body came after the Rubber Board projected domestic natural rubber deficit of 3.4 lakh tonne during the year 2017-18.
- Tyre industry consumes 65-70% of the natural rubber produced in the country. However, import of natural rubber in India attracts 25% duty which is highest in the world. Higher import duties will hurt the margins of tyre manufacturers as they will be left with no option other than importing natural rubber in case of a deficit in production.
- Manufacturers are also worried about the rampant dumping of cheap Chinese radial tyres in the domestic market.
- India had to import Rs. 3.5 lac ton of natural rubber because total consumption was Rs. 10.5 lac ton and production was Rs. 7 lac ton.
- Since natural rubber and crude oil prices are controlled by external environment a lot of volatility in raw material impacts the profitability of raw material.
- Tyre imports from China are cheaper by 25-30% so a lot of the replacement market for tyres is taken over by cheaper Chinese imports. TBR market alone saw an increase in imports from 40 thousand units per month in FY 2013-14 to 1 lac units per month in FY 2016-17.
- Due to Chinese imports, capacity utilization of plants in India remained dim.
- This business has historically transacted in cash and will face difficulties going forward in a digital era with increasing pressure to use alternate and modern methods of payments viz. in Digital / Cheque / NEFT etc., to reduce cash dependence.
- Ban on diesel cars older than 10 years in NCR and the changeover in emission norms (BS III to BS IV Norms).
- Availability of raw material was adversely impacted due to floods in Thailand in early 2017 as India had to import a lot of Natural rubber.
- Carbon black is used as a reinforcing filler in tyres and other rubber products. The ADD on carbon Black was imposed in November 2015. **The ADD is valid for 5 years.** This is creating a scarcity of carbon black in India as China was the main source of imports for this. The companies are facing a lot of pressure due to high raw material costs because of this, as they are already facing shortage of natural rubber. ATMA has requested to the commerce ministry to look into this matter or chances are a lot of tyre manufacturing units would shut down.

Steps of Tyre Manufacturing

- The tyre is an assembly of numerous components that are built up on a drum and then cured in a press under heat and pressure.
- Heat facilitates a polymerization reaction that cross-links rubber monomers to create long elastic.

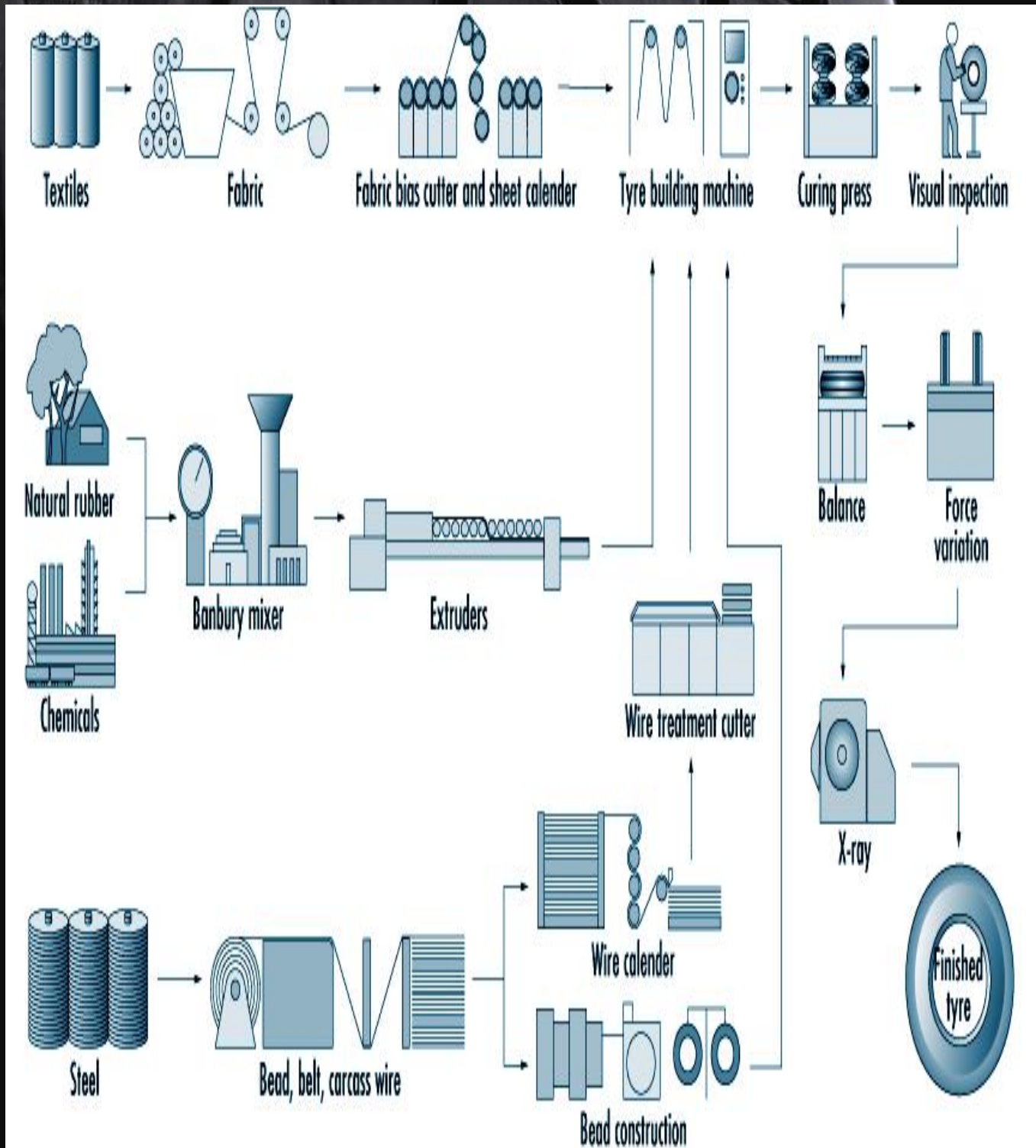


Chart 1: Tyre manufacturing process





CEAT Ltd.

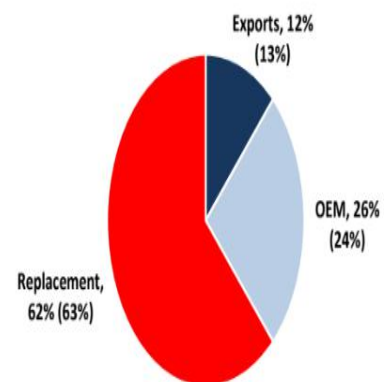
Company Information!

- Incorporated in the year 1958, CEAT Ltd. is a part of RPG Enterprises since 1981.
- The company has a distribution network of 4500+ dealers, 250+ two-wheeler distributors, 450+ franchisees, 600+ district covered, 350+ multi-brand outlet.
- Company's major revenue comes from Automotive tyres and the rest from tubes and flaps.
- India's first electric bike Tork T6X was launched on CEAT Tyres.
- The company grew at a CAGR of 11% (net sales) from FY 08-09 to FY 16-17.
- The company has 6 manufacturing facilities at Bhandup, Nashik, Halol, Nagpur, Ambernath & Sri Lanka, out of which 2 facilities (Ambernath and Sri Lanka) are owned through subsidiary and JV.
- The company has come up with a new products viz. 'Puncture safe tyres for 2 wheelers - India's 1st self-sealing tyre', 'Fuelsmart tyres - less rolling resistance, saves up to 7% of fuel' and 'Milaze tyres for SUV segment - higher mileage up to 1 lac K.M.
- CEAT has a **strategic focus** on Passenger Vehicle and 2 wheeler segment since past 6 years. Revenue from PV tyre segment is continuously growing at a CAGR of 25%.
- The company has more than 50% market share in the Sri Lanka tyre market, where the company is established through a JV of 50:50 with CEAT Kelani Holdings Ltd.
- The company's district coverage has risen to 601 in FY18 from 464 in FY15.
- CEAT had a total production of 2.98 lac MT in FY 16-17.
- The company going through with its strategic focus has installed a greenfield facility in Nagpur focusing on 2 & 3 Wheeler segment.
- The company does 2/3rd of the production in-house and the rest through out-sourcing partners.
- Approx. 87.5% of CEAT's revenue is from India and the rest is from exports.

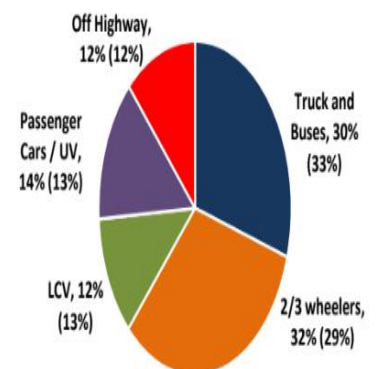
Overview

Face Value (Rs.)	10.00
Industry P/E (x)	23.85
TTM P/E (x)	28.61
P/BV (x)	2.59
EV/TTM EBITDA (x)	12.86
MCap/TTM Sales	1.02
MCap (Rs in Cr.)	6501.14
Promoter Holding (%)	50.76%
PATM (%)	5.14
ROCE(%)	17.32
ROE(%)	14.8
CFO/PAT (x)	1.01
CMP. (Rs.)	1670.20

H1 FY18 Revenue Breakup by Market

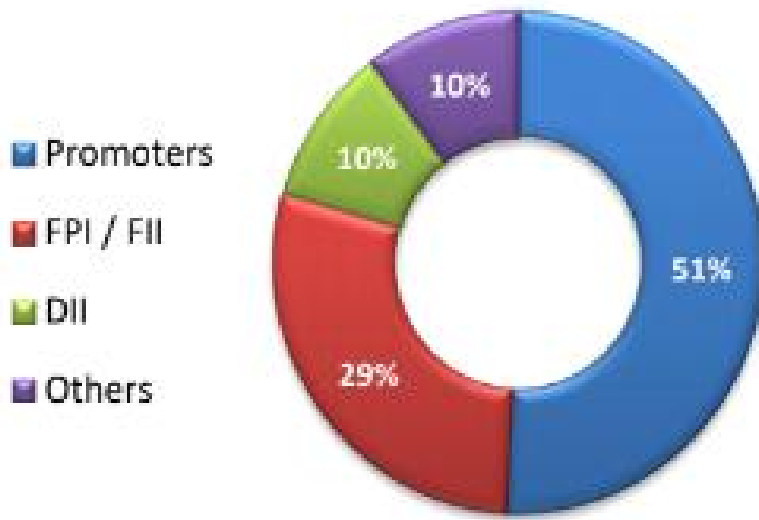


H1 FY18 Revenue Breakup by Product



Note : Figures in parenthesis denote H1 FY17

Shareholding Pattern as on December 31, 2017



Anant Goenka



Managing Director

Kumar Subbiah



Chief Financial Officer

Arnab Banerjee



Executive Director
- Operations

Milind Apte



Senior Vice President
- Human Resources

Tom Thomas



Executive Director
- Projects

Dilip Modak



Senior Vice President
- Manufacturing

Chandrashekhar Ajgaonkar



Senior Vice President
- Quality Based Management

Peter Becker



Senior Vice President
- R&D and Technology

Price Vs Sensex Chart

Period: 21-02-2017 - 20-02-2018



Investment Rationale!

1) Investment:

CEAT is committed on making an investment of Rs. 2800 Cr. for the next 5 years. The company has already started doing capex as when required. The company is expected to do more capex of Rs. 400 to 550 Cr. in this year and another capex of Rs. 1500-1700 Cr. next year. The company is funding this capex by debt and internal accruals. The company plans to invest this amount to ramp-up Halol Plant, a brownfield facility and to set up a greenfield facility at Nagpur. The Nagpur plant is already set up and functioning and yet only 50% to 60% capacity is utilized at this plant.

2) Venturing into OHT segment

The company has set up a greenfield plant at Ambarnath, Maharashtra for off-highway tyres. The plant is already up and running. The company has invested Rs. 330 Cr. for Phase 1. For Phase 1 the capacity is expected to be 40MT per day which is expected to be further ramped-up to 100MT per day.

3) Presence in India

CEAT is rigorously working hard to increase it's presence across India. This can be seen, as the number of district coverage increases.

The company also established its first Truck Service hub in Kolkata.

4) R&D

The company has significantly invested into R&D in FY 2016-17 and will continue to do so to keep in line with their expansion agenda.

RISKS!

1) The company plans to take more debt to fulfill their capex requirement. The management has made it clear that the debt levels will rise in the coming few years, reaching its peak in 2020. Increase in finance cost will affect PAT in the coming years.

2) Currently, the crude oil prices are rising slowly but rubber prices are stable so on the raw material front, the company is stable at this point but if rubber prices were to rise speedily then margins would be affected as rubber constitutes of approx. 50% of raw material consumed by the company.

3) The company's cash and bank balances have reduced significantly in the last 2 years so if immediate debt repayment situation arises then the company would be in a slight fix to fulfill the immediate debt repayment requirement.

Profit & Loss Consolidated (Rs. Cr.)

Description	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13
Net Sales	5,766.51	5,483.55	5,752.14	5,553.98	5,052.21
Expenditure					
Increase/Decrease in Stock	-75.49	-11.39	56.39	-111.98	-45.86
Raw Material Consumed	3,475.26	3,102.24	3,476.94	3,677.73	3,521.62
Power & Fuel Cost	178.01	156.01	173.4	180.78	173.21
Employee Cost	406.31	388.25	378.89	310.92	283.04
Other Manufacturing Expenses	483.36	471.12	637.95	497.44	386.22
General and Administration Expenses	100.18	103.93	90.28	82.08	75.63
Selling and Distribution Expenses	408.9	375.3	153.86	170.16	140.04
Miscellaneous Expenses	125.36	118.37	93.59	74.15	65.19
<i>Less: Expenses Capitalised</i>	-	-	-	-	-
Total Expenditure	5,101.89	4,703.83	5,061.29	4,881.27	4,599.08
Operating Profit (Excl OI)	664.63	779.72	690.85	672.71	453.13
Other Income	18.63	27.68	22.59	14.14	17.67
Operating Profit	683.26	807.4	713.44	686.85	470.8
Interest	89.57	101.4	142.32	187.03	195.99
PBDT	593.69	706	571.13	499.82	274.81
Depreciation	143.08	107.72	93.43	86.54	80.62
Profit Before Taxation & Exceptional Items	450.61	598.28	477.7	413.27	194.19
Exceptional Income / Expenses	-13.33	-11.4	-6.13	-10.04	-27.7
Profit Before Tax	437.28	586.88	471.57	403.23	166.5
Provision for Tax	106.42	187.34	157.65	132.44	46.31
Profit After Tax	330.86	399.54	313.92	270.79	120.19

- **Raw material purchases** has increased since the last year. Rubber prices saw a hike in January 2017 during which time crude oil was a little stable. Raw Material CAGR for the last 5 years is **-0.26%**.
- **Expenses** of the company are steadily increasing which can be attested by current efforts to increase ramp-up in the facilities to facilitate expansion. But if compared as a percentage of sales, all expenses are stable other than Selling & Distribution expenses as the company has been putting considerable efforts to increase their visibility in the market.
- Currently the **interest rates** have declined but they are expected to increase in the next few years owing to rise in debt to fund their capex.
- **Exceptional expenses** owing to Voluntary Retirement Scheme opted by employees.
- **Provision for Tax** is down by approx. 43% on YoY basis due to MAT credit entitlement.
- **Sales** has been growing at a CAGR of **2.68%** for the last 5 years.
- **PAT** has been steadily growing at a CAGR of **22.45%** for the last 5 years.

Balance Sheet Excerpt (Rs. Cr.)

Description	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13
Equity & Liabilities					
Shareholder's Funds	2,414.95	2,054.74	1,682.25	1,028.61	785.55
Secured Loans	836.77	543.81	281.63	328.62	305.2
Unsecured Loans	30.31	55.43	72.81	94.72	118.84
Trade Payables	758.21	635.32	658.28	688.85	792.5
Other Current Liabilities	515.21	478.72	553.52	547.06	577.29
Short Term Borrowings	57.99	33.54	271.55	596.86	404.79
Total Liabilities	4,985.37	4,107.95	3,822.43	3,540.06	3,147.00
Assets					
Total Non-Current Assets	3,143.40	2,614.74	1,902.33	1,744.46	1,691.97
Inventories	943.48	639.71	680.15	753.58	558.82
Sundry Debtors	613.8	593.51	704.95	754.53	662.85
Cash and Bank	35.92	63.03	123.63	167.87	112.08
Short Term Loans and Advances	179.99	140.02	77.02	91.51	104.55
Total Assets	4,985.37	4,107.95	3,822.43	3,540.06	3,147.00

- No dilution of **equity capital**. **Retained earnings** of the company has increased significantly in the past 2 years and they have been growing at a CAGR of 33.73% in the last 5 years.
- **Long-Term Debt** is rising continuously. The company is expecting more rise in debt levels of approx Rs. 700 Cr in the coming 2-3 years to facilitate the capex plan laid down by the company for capacity ramp-up.
- **Other Current Liabilities** is stable due to rise in capital expenditure payable and decrease in term loans.
- **Total fixed assets** are growing at a CAGR of 13.19%. and on an average YoY basis of ~ 17%. This is mostly due to establishing more plant and machinery.
- Raw Material and Finished Goods in the **inventory** has risen but that is to be expected with the increase in capacity.

Cash Flow Statement Consolidated (Rs in Cr.)

Description	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13
CFO	334.67	702.05	748.69	196.83	584.43
CFI	-543.43	-432.61	-253.29	-141.71	-52.92
CFE	219.12	-326.36	-194.02	-39.52	-464.28

- Cash flow has been significantly down since last year due to increase in inventories by approx. 300 Cr.
- The company has been purchasing significant assets for the past 2 years which goes in line with their expansion plan.
- Long-term borrowings have decreased since last year but they can increase as the company is planning to take up more debt for capacity ramp-up.

Key Ratios

Particulars	2017	2016	2015	2014	2013
PATM (%)	5.14	6.50	4.95	4.44	2.18
ROA (%)	7.28	10.08	8.53	8.10	3.85
Fixed Asset Turnover (x)	2.66	2.68	2.66	2.67	2.49
Receivable Days	34.21	38.56	41.99	42.43	43.01
Inventory Days	44.86	38.19	41.25	39.29	38.40
Payable Days	49.89	51.25	49.78	42.98	35.10
Cash Conversion Cycle (days)	29.18	26.5	33.46	38.74	46.31
Interest Cover (x)	5.88	6.79	4.31	3.16	1.85
Debt/Equity (x)	0.39	0.33	0.46	1.15	1.34
P/E (x)	14.83	10.02	10.26	5.84	2.67
Dividend Payout Ratio (%)	12.88	10.63	12.75	13.26	11.40
Current Ratio (x)	1.31	1.21	1.20	0.94	0.79
EPS (Rs.)	89.28	108.17	78.41	75.44	35.09
Average ROE (last 5 years)			21.298		
Average ROCE (for last 5 years)			23.786		
Average P/E (for last 5 Years)			8.724		

ROE (Du Pont Analysis)

Description	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13
PATM (%)	5.14	6.5	4.95	4.44	2.18
Sales / Total Assets(x)	1.42	1.55	1.72	1.82	1.77
Assets to Equity (x)	2.03	2.13	2.73	3.73	4.34
ROE (%)	14.8	21.43	23.32	30.22	16.72

Note: PAT margins are stable on an average. Sales/Total Assets ratio is low because the company has increased their assets considerably since last year. Leverage is decreasing but it is still very high.

Quarter Results

- Revenue from operations have increased by 3.35% since September quarter.
- Cost of Raw Materials consumed has increased (by 17.95%) along with purchases (by 45.14%) and operating & manufacturing expenses (by 14.25%) for the current quarter as compared to last quarter.
- Exceptional items comprises of claims of VRS (Voluntary Retirement Scheme).
- Finance costs have increased by ~15% from last quarter owing to increase in debt.
- PAT has increased by 7.86% from last quarter.

Final View!

- Achievements: 1) Ranked Number 1 in J.D. Power 2017 India Original Equipment Tyre Customer Satisfaction Index (TCSI).
2) 'Sword of Honor' and 5 Star rating from British Safety Council awarded to Halol plant.
- On valuations basis the company may seem overvalued but with the upcoming capacity expansion, an increase of at least 25-30% in the coming 2-3 years.
- The raw material prices of crude oil and rubber are stable at this point and the company is expected to reap its benefits in the coming quarters.
- The company also has a cost advantage because of lower raw material prices, whereby PAT growth is more than the revenue growth.
- The benefits of capacity ramp-up may take some time to be passed down to bottom line but after full capex is over, margin improvement is expected.



Apollo Tyres Ltd.

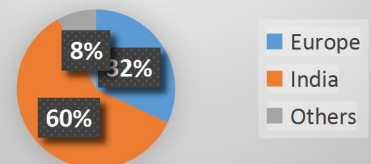
Company Information!

- The company was incorporated in the year 1972 and has leading brands: Apollo & Vredestein.
- The company has achieved growth through inorganic and organic means.
- The Vredestein brand faces direct competition from global players like Michelin & Bridgestone.
- The company has recently started its first overseas Greenfield plant in Hungary. Commercial production is expected to reach full capacity in 2 years time.
- The company has a Vision 2020, whereby the company aspires to become the market leader in India as well as Europe and to explore strategic markets where they are currently not represented.
- Europe is second biggest revenue generating market for Apollo.
- The company has a robust dealer network
 - India: 5300 second party dealer
 - Europe: 5800 third party dealer
 - Others: 140 third party dealer
 - 49 distributors in Middle East & Africa
- Apollo gets over 30% of its sales from branded retail network.
- The management of the company is highly experienced with nearly 4 decades of experience.
- The current capacity of the company is 1684 MT per day.
- The company's major customer base is Replacement market from which company generates about 77% of revenue and the rest, through OEMs.

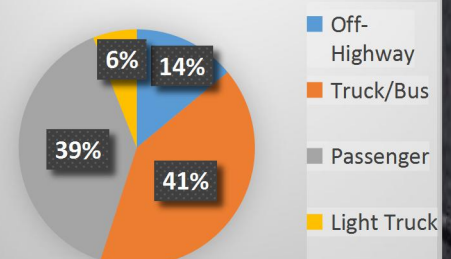
Overview

Face Value (Rs.)	1.00
Industry P/E (x)	22.40
TTM P/E (x)	21.6
P/BV (x)	1.62
EV/TTM EBITDA (x)	11.21
MCap/TTM Sales (x)	1.05
MCap (Rs in Cr.)	15162.18
Promoter Holding (%)	39.43
PATM (%)	7.76
ROCE(%)	16.46
ROE(%)	15.83
CFO/PAT (x)	0.82
CMP. (Rs.)	265.05

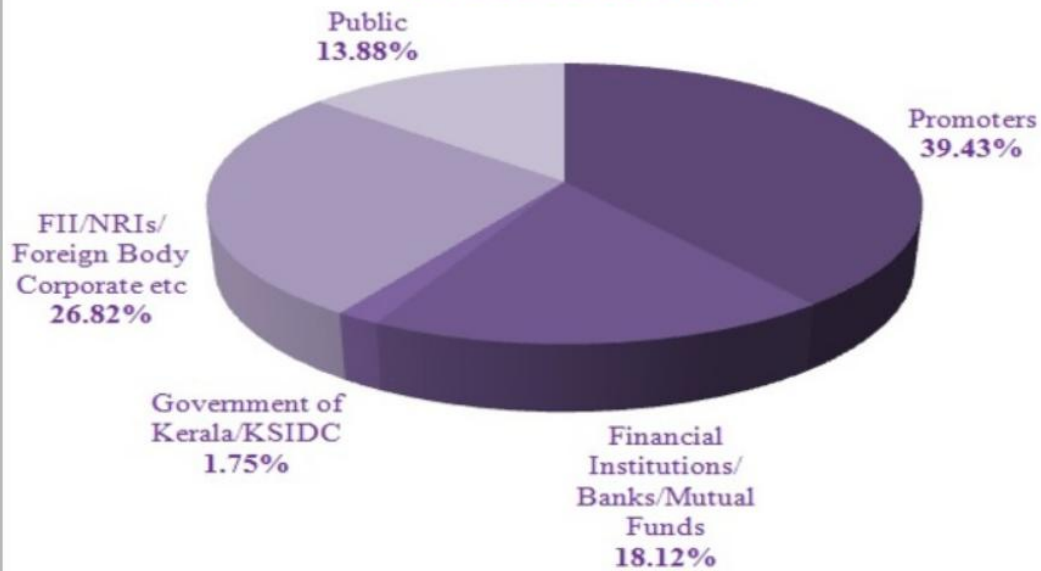
Revenue Segment by Geography



Revenue by Product



Shareholding Pattern (As of 31st Dec 2017)



3 EXTENSIVE GLOBAL FOOTPRINT...

apollo



Key Customers

Audi	Daimler AG	Hyundai	Mahindra & Mahindra	Fiat	Skoda
Chrysler	Ford	General Motors	Volkswagen	Ashok Leyland	John Deere
Tata Motors	Volvo Eicher	Maruti Suzuki	Toyota	MAN	Nissan
					Porsche

Raw Material Suppliers

Birla Carbon	Cabot	Lanxess	ExxonMobil
Kiswire	Trinseo	Bekaert	Performance Fibers

7 SEASONED MANAGEMENT AND EXPERIENCED BOARD (1/2)



Board of Directors

Onkar S Kanwar – Chairman & Managing Director



- Accomplished business professional with over four decades of experience
- Served as the President of FICCI and Chairman of the Automotive Tyre Manufacturers' Association in the past
- Presently the Chairman of BRICS Business Council, India

Neeraj Kanwar – Vice Chairman & Managing Director



- Responsible for driving Apollo Tyres' growth over the years
- Instrumental in successfully pursuing operational efficiency and expanding the business across multiple geographies
- Served as Chairman of the Automotive Tyre Manufacturers' Association in the past



Sunam Sarkar
Non-Executive
Non-Independent
Director



Francesco Gori
Non-Executive
Non-Independent
Director



Robert Steinmetz
Non-Executive
Non-Independent
Director



Dr. S Narayan
Non-Executive
Independent
Director



Vinod Rai
Non-Executive
Independent
Director



Nimesh N Kampani
Non-Executive
Independent
Director



Arun K Purwar
Non-Executive
Independent
Director



Pallavi Shroff
Non-Executive
Independent
Director



Akshay Chudasama
Non-Executive
Independent
Director



Vikram S Mehta
Non-Executive
Independent
Director



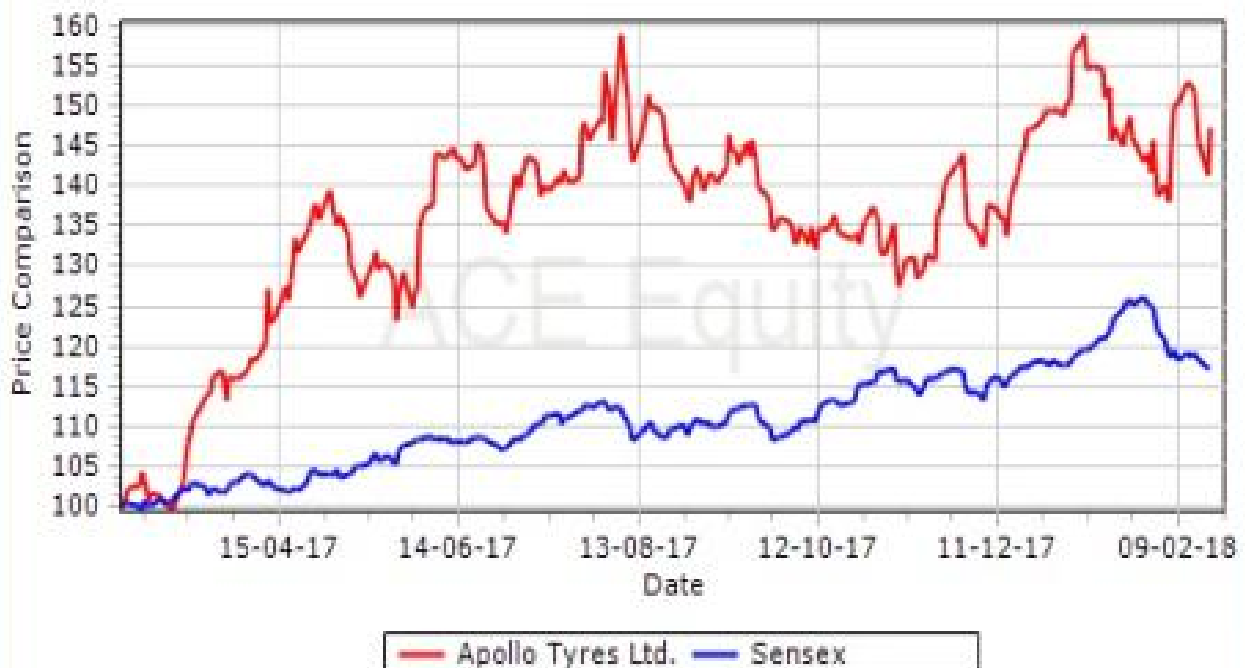
Gen Bikram Singh (Retd.)
Non-Executive
Independent
Director



Paul Antony
Nominee Director
(Govt. of Kerala)

Price Vs Sensex Chart

Period: 21-02-2017 - 20-02-2018



Investment Rationale!

1) Investment

The company is planning to do a capex of Rs. 2700Cr. This capex is done for the Chennai Plant to increase TBR capacity. Phase 1 of ramp-up is finished and phase 2 of ramp-up is already underway.

2) Premiumization In Europe

Apollo has been constantly working towards fulfilling its Vision 2020. It's recent acquisition of a tyre distributor in Germany named Reifencom is a proof of that. Apollo also set up its first overseas Greenfield plant in Hungary. Due to this, Apollo has achieved deeper market penetration in Europe. The company also aspires to launch TBR tyres in Europe.

3) Future Prospects In India

Apollo plans to set up a manufacturing plant in Andhra Pradesh to increase capacity for 2 wheeler segment.

RISKS!

1) Chinese Tyres in Europe

Europe has also seen a great influx of Chinese tyres in the past years. India has already imposed an anti-dumping duty on Chinese tyres. EU is still looking into dumping of Chinese tyres but no decision has been made final. Apollo's brand Vredestein faces competition from these Chinese tyres in the after market.

2) Promoter Holding

In the Q3 of FY 18, the promoters have reduced their holding from 43% to 39.43%. Institution holding has gone up by the same reduced percent.

3) Indian Currency

Weak Indian currency can also affect margin as the company is a net importer.

Profit & Loss Consolidated (Rs. Cr.)

Description	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13
Net Sales	13,180.04	11,848.56	12,815.43	13,411.98	12,798.87
Expenditure					
Increase/Decrease in Stock	-235.64	-5.18	63.36	-31.14	-44.11
Raw Material Consumed	7,125.70	5,959.97	7,012.06	7,825.52	8,069.36
Power & Fuel Cost	325.18	329	299.04	378.52	361.09
Employee Cost	1,742.07	1,570.79	1,610.62	1,581.19	1,471.38
Other Manufacturing Expenses	711.91	586.07	592.89	650.3	573.53
General and Administration Expenses	552.43	485.02	477.96	320.85	254.35
Selling and Distribution Expenses	930.66	781.75	752.03	681.58	577.3
Miscellaneous Expenses	166.89	138.42	70.92	144.59	93.83
<i>Less: Expenses Capitalised</i>					
Total Expenditure	11,319.19	9,845.84	10,878.87	11,551.43	11,356.72
Operating Profit (Excl OI)	1,860.85	2,002.72	1,936.55	1,860.56	1,442.15
Other Income	154.13	67.98	53.94	122.02	118.71
Operating Profit	2,014.98	2,070.70	1,990.50	1,982.58	1,560.86
Interest	117.62	101.04	188.89	293.01	322.52
PBDT	1,897.36	1,969.67	1,801.61	1,689.57	1,238.34
Depreciation	461.81	426.79	388.29	410.85	396.56
Profit Before Taxation & Exceptional Items	1,435.55	1,542.88	1,413.32	1,278.71	841.78
Exceptional Income / Expenses		47.77	-82.49	-46.79	16.86
Profit Before Tax	1,435.55	1,590.65	1,330.83	1,231.93	858.64
Provision for Tax	336.55	467.69	353.22	226.87	244.84
Profit After Tax	1,099.00	1,122.96	977.61	1,005.06	613.8

- Net sales has been growing at a CAGR of 0.59% for the last 5 years.
- Raw material consumed has a CAGR of -2.46% for the last 5 years.
- Direct purchases has increased significantly by 78% YoY basis.
- Power & fuel cost has reduced by marginal ~1% YoY basis.
- Director's remuneration is just 0.05% of Net sales for the year 2017.
- Total expenditure has a CAGR of -0.07% for the last 5 years.
- Operating Profit has a CAGR of 5.24% for the last 5 years.
- Interest expense has increased by ~31% YoY basis.
- Depreciation has also increased significantly in the last 2 years.
- Current income Tax dropped significantly this year along with MAT credit entitlement, the provision for tax saw a big drop by ~28%.
- PAT has been growing at a CAGR of 12.36% for the last 5 years.
- The company is enjoying a cost benefit due to low cost of raw materials.

Balance Sheet Consolidated Excerpt (Rs. Cr.)

Description	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13
Equity & Liabilities					
Shareholder's Funds	7,289.95	6,604.62	5,042.30	4,574.62	3,400.86
Secured Loans	2,155.90	649.27	333.94	713.73	1,353.15
Unsecured Loans					300
Trade Payables	1,731.76	1,543.17	893.37	1,253.76	1,007.29
Other Current Liabilities	1,149.89	688.23	692.71	1,039.78	756.07
Short Term Borrowings	1,088.63	739.9	466.64	275.12	628.49
Total Liabilities	16,799.18	12,993.96	9,676.33	9,986.16	9,280.35
Assets					
Total Non-Current Assets	10,228.06	6,991.48	4,827.73	4,862.08	4,868.25
Inventories	2,645.53	1,939.09	1,778.21	2,066.42	2,031.08
Sundry Debtors	1,127.50	1,084.35	958.94	1,042.67	1,019.65
Cash and Bank	336.92	594.2	594.59	654.05	334.78
Short Term Loans and Advances	1,651.00	1,540.56	1,199.46	1,182.08	902.94
Total Assets	16,799.18	12,993.96	9,676.33	9,986.16	9,280.35

- Apollo Tyre's P/L account balance in **Total Reserves** is around Rs. 5498.51 Cr in 2017. There has been a huge build up in this account over the years constantly. This can be construed as a good sign as the company has enough reserves to pay of debt and any emergency cash crunch that a company might face.
- Secured loans have increased considerably. The company has taken foreign currency loan and has issued non-convertible debentures. The company does a lot of business overseas especially Europe also the company is planning capacity expansion, Phase I of which is already fulfilled.
- Apollo Tyres has increased their Plant & Machinery tremendously since last year.
- Finished goods has piled up due to change in the emission norms from BS-III to BS-IV.
- Total Assets overall has increased by 29.28% YoY basis.

Cash Flow Statement Consolidated (Rs. Cr.)

Description	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13
CFO	902.45	2,122.50	1,411.97	1,645.46	1,275.35
CFI	-2,941.90	-2,282.76	-750.02	-119.26	-594.48
CFF	1,894.63	-254.66	-683.59	-1,207.51	-505.25

- Inventory has increased sharply in Working Capital which has lead to steep decline in CFO.
- The company has purchased a lot of fixed assets this year to facilitate their expansion plans.
- CFF has increased due to rise in debt.

Key Ratios

Particulars	2017	2016	2015	2014	2013
PATM (%)	7.76	8.74	7.08	6.98	4.47
ROA (%)	7.38	9.91	9.94	10.43	6.71
Fixed Asset Turnover (x)	1.20	1.27	1.47	1.58	1.63
Receivable Days	28.49	29.02	26.44	26.15	28.75
Inventory Days	59.05	52.79	50.79	51.96	53.47
Payable Days	46.06	42.64	34.19	33.24	32.61
Cash Conversion Cycle (days)	41.48	39.17	43.04	44.87	49.61
Interest Cover	13.21	16.74	8.05	5.20	3.66
Debt/Equity (x)	0.47	0.23	0.22	0.35	0.78
P/E (x)	9.66	7.93	8.76	7.99	6.86
Dividend Payout Ratio (%)	13.90	9.07	10.41	3.76	4.11
Current Ratio (x)	1.09	1.24	1.32	1.27	1.23
EPS (Rs.)	21.59	22.06	19.21	19.94	12.15
Average ROE (last 5 years)			20.106		
Average ROCE (for last 5 years)			21.962		
Average P/E (for last 5 Years)			8.24		

ROE (Du Pont Analysis)

Description	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13
PATM (%)	7.76	8.74	7.08	6.98	4.47
Sales / Total Assets(x)	0.95	1.13	1.41	1.49	1.5
Assets to Equity (x)	2.15	1.95	2.05	2.42	2.94
ROE (%)	15.83	19.29	20.37	25.29	19.75

Note: Leverage is high and Sales/Total Assets is decreasing due to rise in fixed assets.

Quarter Results

- Revenue from operations have increased by ~17% QoQ basis.
- Cost of materials consumed has increased by ~10% and depreciation has increased by ~9%.
- Other income increased by 135.19% QoQ basis.
- Operating Profit increased by ~41% QoQ basis.
- PAT has increased by ~75% QoQ basis.
- PAT margin is up by ~50% QoQ basis.

Final View!

- On P/E valuation, the company seems slightly undervalued. The company is also coming up with capacity expansion into the TBR space where there is more value.
- The promoters of the company have sold off roughly 4% of their stake. The promoters are known to do this to facilitate expansion. No. of pledged shares have also reduced in this quarter.
- The company recently acquired 40% stake in KT Telematic Solution PVT Ltd. This company is a wholesaler of commercial truck, car and bike tracking device. The company is clearly venturing into vertical integration.
- The management of the company has 40 years of experience in this field.
- An upside of 15-20% can be expected in the top line in the coming 1-2 years.

JK Tyres & Industries Ltd.

Company Information!

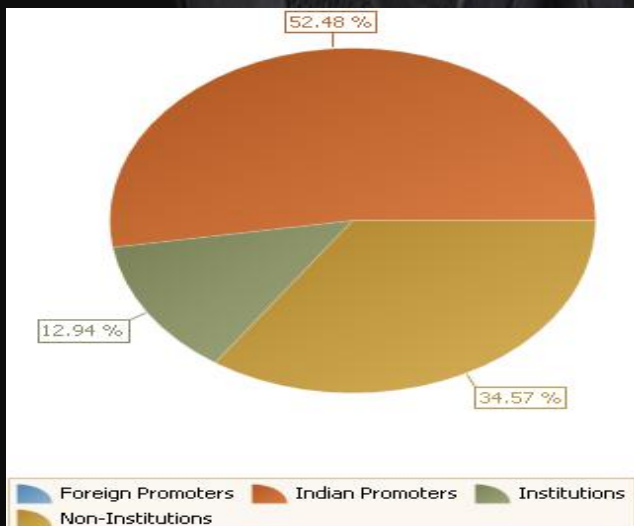
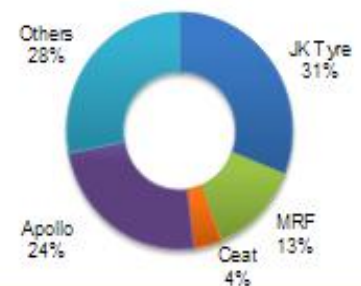
- The company is a market leader in TBR tyre.
- The company has 3 brands: Vikrant/ Tornel/ JK Tyre.
- The company has an annual capacity of 32 million tyres with 12 manufacturing plants.
- The company has its presence in 105 countries.
- The company has been achieving growth through inorganic means.
- The company acquired Vikrant Tyres in 1997. JK Tyres acquired Tornel in 2008, a Mexican brand which gave them deeper penetration in Mexico. Revenues from Mexico stand around Rs. 1200 Cr. and in 2016, the company acquired Cavendish which was earlier a part of Kesoram Industries).
- The company has 141 selling points, 4000 dealers (1000 exclusive), 30+ tyre truck wheel service centre, 230+ tyre steel wheels retail centre and over 1000 fleet management (direct partnership with fleet owners).
- The company has made considerable efforts to lower down power and fuel costs.
- Global Footprint:
 - Own Plants: 12 (India/Mexico)
 - Outsourcing: 1 (China)
 - Marketing Hub: 8

Overview

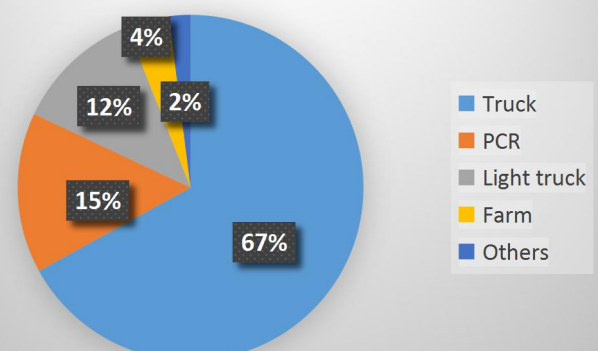
Face Value (Rs.)	2.00
Industry P/E (x)	22.42
TTM P/E (x)	385.25
P/BV (x)	2
EV/TTM EBITDA (x)	13.10
MCap/Sales	0.43
MCap (Rs in Cr.)	3648.29
Promoter Holding (%)	52.48
PATM (%)	4.57
ROCE(%)	15.9
ROE(%)	20.44
CFO/PAT (x)	0.278
CMP. (Rs.)	157.95

Domestic Competitive Landscape

Truck and Bus Radial (TBR) Market Share¹ – FY17



Revenue by Product



Name	Designation	Reported Designation	Annual Remuneration
Raghupati Singhania	Chairman	Chairman & Managing Director	17.03
Bharat Hari Singhania	Managing Director	Managing Director	12.28
Anshuman Singhania	Whole Time Director	Whole Time Director	7.56
Bakul Jain	Non Executive Independent Director	Non Executive Independent Director	0.20
Vimal Bhandari	Non Executive Independent Director	Non Executive Independent Director	0.19
Shreekant Somany	Non Executive Independent Director	Non Executive Independent Director	0.22
Wolfgang Holzbach	Non Executive Independent Director	Non Executive Independent Director	0.18
Arvind Singh Mewar	Non Executive Independent Director	Non Executive Independent Director	0.20
Kalpataru Tripathy	Non Executive Independent Director	Non Executive Independent Director	0.20
Sunanda Singhania	Non Executive Director	Non Executive Director	0.17
Arun K Bajoria	Executive Director	Executive Director & President – International Operations	4.23
Pawan Kumar Rustagi	Company Secretary	Vice President (Legal) & Company Secretary	

Price Vs Sensex Chart

Period: 21-02-2017 - 20-02-2018



Achievements

- 1st Indian tyre Company to have verified Carbon Footprint as per IS-14064
- 1st in India for Steel Belted Rear Tractor tyre (puncture proof).
- 31st in India for Truck radial tyres. (60% of the revenue comes from Radial tyres).
- First Indian Tyre company to manufacture and market radial tyres in India.
- JK Tyre has been elected as the 'Super Brand' by the Super Brand Council of India. It continues to be the first and only Tyre superbrand in India having being selected 6 times consecutively.
- JK Tyre acquired Formula BMW series.
- First Indian company to launch an eco-friendly "green" tyre. (to replace rubber with a synthetic blend, using Silica).

R&D

- 'HASTERI (in-house) (Hari Shankar Singhanian Elastomer & Tyre Research Institute)': A one of its kind State of the Art R&D center, promoted by JK Tyres, recognized by Government of India, engaged in basic and applied research on Tyres.
- "Raghupati Singhanian Centre of Excellence for Tyre and Vehicle Mechanics":
 - A Joint Venture R&D Center at IIT Madras, Chennai
 - One of the India's leading Academia
 - Industry Partnership for Advanced Research
 - R&D Expenditure around 1% of Turnover p.a.

Investment Rationale!

1) Cavendish

The company got 3 new manufacturing plants from their acquisition of Cavendish. This will give them a strategic entry into 2/3 wheeler segment. This acquisition expanded their product basket with access to 1.2 million units of truck radials apart from farm and other bias capacities.

2) 12 retreading centre were set up this year by the company to ensure a tyre's longevity.

3) Because of Tornel, the company has a greater access to North America and Latin American Markets.

RISKS!

1) Cavendish had 3 manufacturing plants in Laksar, Haridwar. The plants are in an excise exemption zone, the benefits of it will last till 2020. Since GST came into play the government has thought of making a provision for reimbursement in excise duty free zones. The reimbursement would be up to 58% of Centre's share of GST. But no further clarity is available.

Profit & Loss Consolidated (Rs. Cr.)

Description	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13
Net Sales	7,689.37	6,898.23	7,383.71	7,651.76	6,985.23
Expenditure					
Increase/Decrease in Stock	-192.24	6.13	83.23	-38.45	-52.76
Raw Material Consumed	4,535.30	3,863.30	4,488.35	4,930.33	4,884.33
Power & Fuel Cost	326.96	263.86	277.51	292.74	274.3
Employee Cost	854.30	770.12	728.85	754.97	590.28
Other Manufacturing Expenses	445.9	359.74	495.35	477.89	362.94
General and Administration Expenses	0.42	0.32	47.9	47.25	40.8
Selling and Distribution Expenses	114.52	103.49	160.48	148.74	119.79
Miscellaneous Expenses	471.8	414.66	171.28	166.98	147.54
<i>Less: Expenses Capitalised</i>					
Total Expenditure	6,556.96	5,781.62	6,452.95	6,780.45	6,367.22
Operating Profit (Excl OI)	1,132.41	1,116.61	930.76	871.31	618.01
Other Income	65.43	24.24	16.88	18.32	13.72
Operating Profit	1,197.84	1,140.85	947.64	889.63	631.73
Interest	440.36	252.43	257.41	276.2	232.75
PBDT	757.48	888.42	690.23	613.43	398.98
Depreciation	291.32	216.13	157.77	179.47	132.82
Profit Before Taxation & Exceptional Items	466.16	672.29	532.46	433.96	266.16
Exceptional Income / Expenses	69.08	-12.78	-46.91	-59.52	-1.87
Profit Before Tax	535.24	659.51	485.55	374.44	264.29
Provision for Tax	155.42	202.72	161.66	118.82	67.47
Profit After Tax	379.82	456.79	323.89	255.62	196.82

- Net Sales grew at a CAGR of 1.94% in last 5 years.
- Raw material consumed has seen a CAGR of -1.47% in the last 5 years.
- Power & Fuel Costs grew at a CAGR of 3.57% in last 5 years.
- General and administration expense rapidly declined in the last 5 years at a CAGR of -59.96%. This is mainly due to complete removal of rent payment.
- The company has spent 30.15% of its PAT in 2017 on Advertising and Sales Promotion to establish its brand name.
- Total expenditure has marginally increased at a CAGR of 0.59% in last 5 years.
- Other income has increased significantly this year due to sale of investments.
- Rise in interest expense goes hand-in-hand with rise in debt taken.
- PAT has increased at a CAGR of 14.05% in the last 5 years.

Balance Sheet Consolidated Excerpt (Rs. Cr.)

Description	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13
Equity & Liabilities					
Shareholder's Funds	1,964.78	1,751.43	1,401.01	1,097.12	906.45
Secured Loans	3,298.55	1,457.38	1,397.69	1,128.05	1,118.37
Unsecured Loans	271.77	91.35	105.91	102.72	123.45
Trade Payables	1,213.74	955.37	1,054.53	1,053.23	899.92
Other Current Liabilities	811.35	748.88	751.53	531.72	431.5
Short Term Borrowings	1,805.74	1,111.27	1,205.82	1,275.22	1,292.88
Total Liabilities	10,624.40	7,052.05	6,903.82	6,042.61	5,562.55
Assets					
Total Non-Current Assets	6,564.07	4,282.08	3,934.25	3,200.15	3,081.06
Inventories	1,320.42	872.52	875.03	936.79	933.75
Sundry Debtors	1,794.64	1,402.71	1,434.58	1,335.08	1,049.94
Cash and Bank	295.3	139.43	190.58	236.25	140.1
Short Term Loans and Advances	588.71	293.22	443	304.3	336.6
Total Assets	10,624.40	7,052.05	6,903.82	6,042.61	5,562.55

- Total debt has increased in the company. This is to facilitate the acquisition of Cavendish.
- Fixed Assets have increased significantly this year due to increase in land, building and plant & machinery. The company is reaping the benefits of its acquisition with Cavendish.

Cash Flow Statement Consolidated (Rs. Cr.)

Description	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13
CFO	105.69	903.00	734.15	654.81	-15.47
CFI	-835.27	-506.04	-799.93	-227.62	-203.38
CFF	829.95	-422.38	-1.22	-335.19	251.75

- CFO has decreased due to huge pile up in inventory and trade receivables.
- CFI is negative due investment in subsidiaries.
- Company has gained a lot of new debt and short term loans this year which is seen due to rise in CFF.

Key Ratios

Particulars	2017	2016	2015	2014	2013
PATM (%)	4.57	6.02	4.03	3.09	2.60
ROA (%)	4.30	6.55	5.00	4.41	3.68
Fixed Asset Turnover (x)	1.16	1.39	1.69	1.81	1.90
Receivable Days	70.15	68.29	62.85	52.69	49.74
Inventory Days	48.11	42.06	41.11	41.32	41.43
Payable Days	60.45	65.76	60.82	52.42	62.63
Cash Conversion Cycle (days)	57.81	44.59	43.14	41.59	28.54
Interest Cover	2.22	3.61	2.89	2.36	2.14
Debt/Equity (x)	2.88	1.66	2.12	2.51	3.06
P/E (x)	7.94	4.09	7.26	2.79	2.05
Dividend Payout Ratio (%)	15.10	12.13	10.32	7.81	7.07
Current Ratio (x)	1.05	0.97	0.91	0.94	0.88
EPS (Rs.)	16.55	20.60	14.54	64.06	49.51
Average ROE (last 5 years)			25.44		
Average ROCE (for last 5 years)			17.466		
Average P/E (for last 5 Years)			4.826		

ROE (Du Pont Analysis)

Description	Mar-17	Mar-16	Mar-15	Mar-14	Mar-13
PATM (%)	4.57	6.02	4.03	3.09	2.6
Sales / Total Assets(x)	0.94	1.09	1.24	1.42	1.41
Assets to Equity (x)	4.76	4.43	5.22	5.91	6.69
ROE (%)	20.44	28.98	26.12	26.04	24.62

Note: Leverage has decreased in the last 5 years and PATM has increased. Sales/Total Assets have decreased due to higher increase in fixed assets in the recent year.

Quarter Results

- Net Sales has increased by 3.16% QoQ basis.
- Consolidated Net profit is down by -37.06% QoQ basis.
- PATM (%) down by -12.96% QoQ basis.

Final View!

- Right now the company is reaping the benefits of ADD on Chinese TBR tyres as it has a huge chunk of market share in this segment. As TBR tyres are produced less in terms of volume but has high value the company stands to see an increase in its topline.
- The financials of the company may be shaky for the near term due to its acquisition of Cavendish. Cavendish with its available factories and plant & machinery, gives JK Tyre a deeper penetration into PV and 2&3 wheeler segment.
- The P/E valuation is highly overvalued compared to Industry P/E.



MRF Ltd.

Company Details!

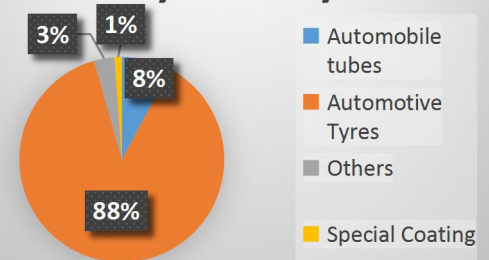
- MRF (Madras Rubber Factory) initially started as a manufacturer of toy balloon in 1946. By 1949, the company was into making cast toys, gloves, contraceptives.
- In 1952, MRF ventured into manufacturing tread rubber and within 4 years became a market leader in tread rubber with 50% market share. In 1961, the company became a public company and established a technical collaboration with Mansfield Tire & Rubber Co. of USA.
- In 1989, MRF collaborated with US based Hasbro International, the world's largest toy maker and launched 'Funskool'.
- MRF also collaborated with Vapocure Australia to manufacture Polyurethane paint and also collaborated with Pirelli for MUSCLEFLEX Conveyor & elevator belting.
- Main product pipeline of MRF is rubber products viz. tyres, tubes, flaps and conveyor belts.
- The company also has interest in diverse businesses like pre-treads, paints & coatings, toys 'Funskool', sports goods.
- Today the company has 9 factories across India. Main manufacturing units are placed in Kerela, Tamil Nadu, Andhra Pradesh.
- 4 Subsidiaries:

MRF SG Pte	100% Owned
MRF Lanka (p) Ltd.	100% Owned
MRF International	94.66% Owned
MRF Corp.	100% Owned
- By 2016, MRF had won the JD Power Award for the 12th time in 16 years.
- In 2017, the company was listed on Forbes Super 50 companies in India and gained a spot in Top 30.
- MRF climbed higher in global rankings to make it to the list of Top 15 tyre companies.
- MRF featured in the Brandz list of Top 50 Valuable India Brands.
- MRF was also listed on Business World's list of Fastest Growing Companies.

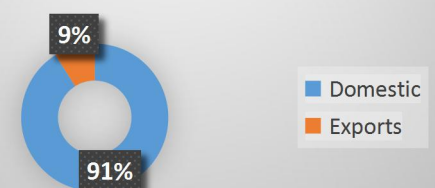
Overview

Face Value (Rs.)	10.00
Industry P/E (x)	23.76
TTM P/E (x)	20.19
P/BV (x)	3.47
EV/TTM EBITDA (x)	10.75
MCap/TTM Sales (x)	2.24
MCap (Rs. in Cr.)	30000.95
Promoter Holding (%)	27.51
PATM (%)	9.96
ROCE(%)	22.9
ROE(%)	18.74
CFO/PAT (x)	1.315
CMP. (Rs.)	70737.90

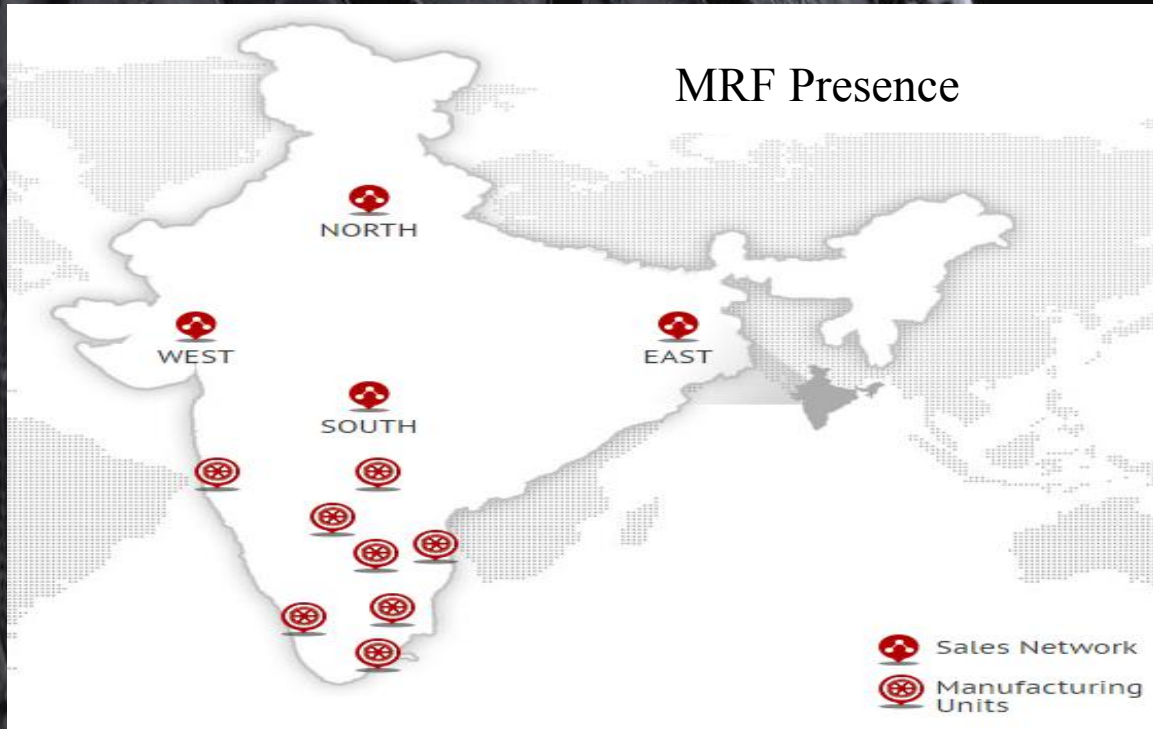
Revenue Bifurcation by Activity



Revenue Bifurcation by Geography



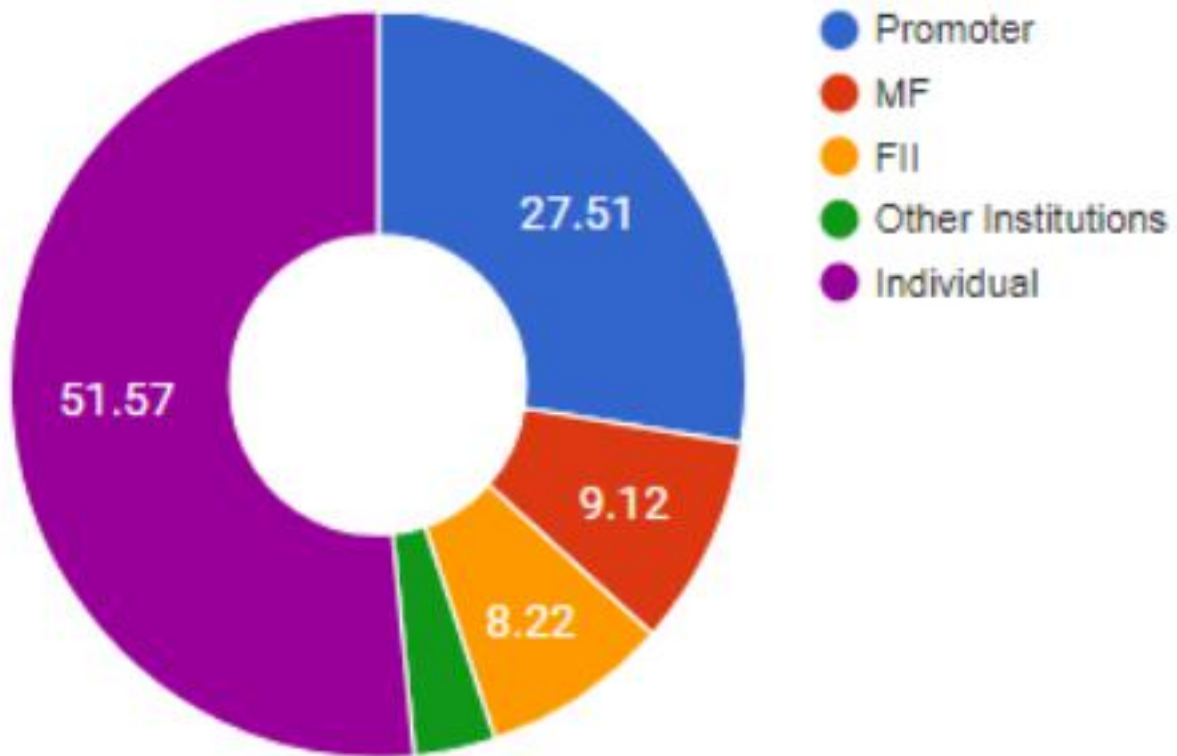
MRF Presence



Management of the Company

201703			
Name	Designation	Reported Designation	Annual Remuneration
K M Mammen	Chairman	Chairman & Managing Director	21.56
Rahul Mammen Mappillai	Managing Director	Managing Director	13.95
Varun Mammen	Whole Time Director	Whole Time Director	
Samir Thariyan Mappillai	Whole Time Director	Whole Time Director	
N Kumar	Non Executive Independent Director	Non Executive Independent Director	0.01
V Sridhar	Non Executive Independent Director	Non Executive Independent Director	0.02
M Meyyappan	Non Executive Independent Director	Non Executive Independent Director	0.01
Ashok Jacob	Non Executive Independent Director	Non Executive Independent Director	0.00
Jacob Kurian	Non Executive Independent Director	Non Executive Independent Director	0.02
Vijay R Kirloskar	Non Executive Independent Director	Non Executive Independent Director	0.00
Ranjit I Jesudasen	Non Executive Independent Director	Non Executive Independent Director	0.02
Salim Joseph Thomas	Non Executive Independent Director	Non Executive Independent Director	0.01
Arun Mammen	Vice Chairman & Managing Director	Vice Chairman & Managing Director	16.84
K C Mammen	Promoter & Non-Executive Director	Promoter & Non-Executive Director	0.01
Cibi Mammen	Promoter & Non-Executive Director	Promoter & Non-Executive Director	0.01
Ambika Mammen	Promoter & Non-Executive Director	Promoter & Non-Executive Director	0.01
Ravi Mannath	Company Secretary	Company Secretary	

Shareholding Summary for MRF Limited



Price Vs Sensex Chart

Period: 21-02-2017 - 20-02-2018



Various segments besides Tyre manufacturing

Sports Goods:

Products available are Bats, Junior cricket kits, protective equipment and others (bags for storing equipment, gloves, socks etc.).

Toy Manufacturing:

The company manufactures toys under the brand name 'Funskool'. The company has a JV with US based firm Hasbro and operates under the name Funskool India. Funskool has a wide presence with over 16 warehouses and 4000 retail outlets to serve. MRF set up 1st retail store in Chennai for major partner 'Lego'.

Paints & Coats:

MRF Ltd. has a wholly owned subsidiary named MRF Corp Ltd. which has a tie-up with Vapocure Australia to manufacture polyurethane paints. It is a surface finish paint. It is used in industries such as automotive, decorative and industrial. The company has 2 state-of-art manufacturing facilities in Chennai. The R&D unit is within the production unit.

Pre-Treads:

The tread rubber is procured from MRF factory. These pre-treads are for radial tyres of truck, bus, LCV & PV.

Aircraft Tyres:

MRF became the first company to supply tyres to the Indian Air Force. In 2013, MRF was chosen to supply tyre to the legendary fighter jet - Sukhoi 30 MKI.

Conveyor Belts:

The company has a collaboration with Pirelli for MUSCLEFLEX Conveyor & elevator belting.

CONCERNS

- Industrial relations at the manufacturing unit in Chennai, Tamil Nadu are a little dicey as there is a pending long-term wage settlement but production levels are still maintained.

Profit & Loss Consolidated (Rs. Cr.)

Description	Mar-17	Mar-16	SEPT-2014	SEPT-2013	SEPT-2012
Net Sales	13,405.82	20,180.24	13,330.39	12,248.22	11,967.32
Expenditure					
Increase/Decrease in Stock	-227.71	-14.48	14.41	-27.58	-28.01
Raw Material Consumed	7,722.80	11,288.89	8,442.09	7,995.21	8,438.21
Power & Fuel Cost	580.94	843.37	665.57	601.01	619.24
Employee Cost	1,000.36	1,285.22	742.39	611.74	521.43
Other Manufacturing Expenses	639.8	906.11	524.71	439.68	398.16
General and Administration Expenses	152.62	197.63	114.58	96.13	82.87
Selling and Distribution Expenses	716.56	1,009.92	790.54	669.22	592.19
Miscellaneous Expenses	181.3	233.55	93.23	82.7	71.23
<i>Less: Expenses Capitalised</i>					
Total Expenditure	10,766.67	15,750.21	11,387.52	10,468.11	10,695.32
Operating Profit (Excl OI)	2,639.15	4,430.03	1,942.87	1,780.11	1,272.00
Other Income	337.38	323.59	65.8	25.07	31.9
Operating Profit	2,976.53	4,753.62	2,008.67	1,805.18	1,303.90
Interest	256.58	360.6	231.7	196.07	158.84
PBDT	2,719.95	4,393.02	1,776.97	1,609.11	1,145.06
Depreciation	610.58	737.12	423.88	373.7	301.81
Profit Before Taxation & Exceptional Items	2,109.37	3,655.90	1,353.09	1,235.41	843.25
Exceptional Income / Expenses	-	-	-	-	-
Profit Before Tax	2,109.37	3,655.90	1,353.09	1,235.41	843.25
Provision for Tax	623.15	1,146.47	444.76	426.8	263.84
Profit After Tax	1,486.22	2,509.43	908.33	808.61	579.41

- **Net Sales** grew at a CAGR of 2.3% (for last 5 years). The hike seen in 2016 is due to the company taking data of 18 months as the company shifted their financial year from September to March.
- **Raw Materials** consumed have a negative CAGR of -1.76% (for last 5 years).
- **Power & Fuel Costs** has a CAGR of -1.27% (for last 5 years).
- MRF has a cost advantage both from raw materials and power&fuel cost.
- **Other expenses** have increased considerably, mainly expenses like employee cost and manufacturing expense which is to be expected with rise in Plant & Machinery.
- **Total Expenditure** has been growing at a CAGR of 0.13% (for the last 5 years).
- **Operating Profit** has been growing at a CAGR of 17.95% (for the last 5 years).
- **Interest cost** for 2016 was high as the company had a taken a loan.
- **PAT** had been growing at a CAGR of 20.73% (for the last 5 years).

Balance Sheet Consolidated Excerpt (Rs. Cr.)

Description	Mar-17	Mar-16	SEPT-2014	SEPT-2013	SEPT-2012
Equity & Liabilities					
Shareholder's Funds	8,640.76	7,224.34	4,539.55	3,655.44	2,861.08
Secured Loans	513.65	569.58	774.62	839.62	904.62
Unsecured Loans	724.67	916.87	424.13	112.81	197.95
Trade Payables	1,408.37	1,126.15	1,150.30	1,028.75	945.16
Other Current Liabilities	2,072.47	1,917.46	542.68	554.66	459.21
Short Term Borrowings	834.13	885.59	616.25	476.23	528.72
Total Liabilities	15,082.66	13,253.81	9,833.05	8,277.74	7,227.78
Assets					
Total Non-Current Assets	7,769.02	6,934.82	4,454.20	3,567.58	3,473.99
Inventories	2,425.27	1,899.81	1,826.25	1,816.92	1,664.75
Sundry Debtors	1,969.00	1,838.72	1,715.36	1,558.85	1,454.11
Cash and Bank	342.61	124.23	727.61	336.97	64.8
Short Term Loans and Advances	25.86	24.47	29.6	23.61	8.46
Total Assets	15,082.66	13,253.81	9,833.05	8,277.74	7,227.78

- Shareholders Funds is rapidly increasing due to increase in General Reserve.
- In 2016, the company took a term loan from bank. The company has not yet started to repay them.
- Other current liabilities have increased significantly in the past 2 years due to trade & trade deposits.
- Short term borrowings have increased considerably in the last 2 years due to bank loans.
- Total Non-current Assets have been growing at a CAGR of 17.46% over the last 5 years mainly due to increase in Buildings & Premises and Plant & Machinery.
- Inventory has piled up considerably since the last year owing to pile up in raw material inventory.
- Cash & Bank has increased since last year owing to increase in bank balance.

Cash Flow Statement Consolidated (Rs. Cr.)

Description	Mar-17	Mar-16	SEPT-2014	SEPT-2013	SEPT-2012
CFO	1,954.91	3,043.47	1,699.48	1,499.41	1,034.40
CFI	-1,391.88	-3,407.81	-1,790.64	-958.63	-976.93
CFE	-437.63	212.31	67.16	-313.02	-51.44

- CFO is stable and slowly increasing at a CAGR of 13.58%.
- Major contribution to CFI is of fixed asset purchase.
- Negative CFF is mainly due to decrease in Loan funds, payment of equity dividend and interest.

Key Ratios

Particulars	Mar-17	Mar-16	SEPT-2014	SEPT-2013	SEPT-2012
PATM (%)	9.96	11.16	6.14	5.95	4.40
ROA (%)	10.49	21.74	10.03	10.43	8.55
Fixed Asset Turnover (x)	2.49	3.88	2.50	2.57	2.96
Receivable Days	46.57	28.84	40.38	40.48	38.21
Inventory Days	52.89	30.23	44.93	46.78	44.26
Payable Days	31.53	19.07	23.80	22.67	20.14
Cash Conversion Cycle (days)	67.93	40	61.51	64.59	62.33
Interest Cover	9.22	11.14	6.84	7.30	6.31
Debt/Equity (x)	0.27	0.34	0.42	0.44	0.60
P/E (x)	17.32	6.48	15.23	7.00	7.52
Dividend Payout Ratio (%)	1.71	1.69	2.33	1.57	1.83
Current Ratio (x)	1.62	1.57	2.05	2.02	1.80
EPS (Rs.)	3505.24	5918.44	2142.26	1907.08	1366.51
Average ROE (last 5 years)			26.174		
Average ROCE (for last 5 years)			30.524		
Average P/E (for last 5 Years)			10.71		

ROE (Du Pont Analysis)

Description	Mar-17	Mar-16	SEPT-2014	SEPT-2013	SEPT-2012
PATM (%)	9.96	11.16	6.14	5.95	4.4
Sales / Total Assets(x)	1.05	1.95	1.63	1.75	1.94
Assets to Equity (x)	1.79	1.96	2.21	2.38	2.63
ROE (%)	18.74	42.66	22.17	24.82	22.48

Note: Leverage is constantly decreasing in the last 5 years. PATM has constantly increased. Sales/Total Assets have been declining over the years as sales are somewhat stable and Fixed Assets are rising.

Quarter Results

Consolidated quarter results are unavailable.

Standalone Results

- Revenue has increased by 5.78% QoQ basis.
- Total Expenditure has increased 3.69% QoQ basis.
- PAT has increased by ~13.5% QoQ basis.
- PATM (%) has increased by ~7% QoQ basis.

Final View!

- The company saw an increase in total tyre production of 10% across all segments. 3% growth in HCV, 11% growth in Truck radial, 11% growth in LCV, 5% growth in PV&SU, 12% growth in 2 wheeler, 22% growth in scooter, 5% growth in Farm and 9% growth in OTR.
- The company is also predicting a growth in the export segment of 6-8% in the coming 2-3 years due to Indian tyres being more acceptable at global level.

Comparison of 6 companies

Particulars	CEAT	Apollo	JK Tyre	MRF	TVS Srichakra	Balkrishna Industries
Incorporation year	1958	1972	1951	1960	1982	1961
House	RPG Enterprises	Raunaq Singh	Hari Shankar Singhania	-	TVS Iyengar	Siyaram Poddar
Face Value (Rs.)	10	1	2	10	10	2
CMP (as on 20/02/2018)	1670.20	265.05	157.95	70737.90	3746.35	1105.05
TTM P/E (x)	28.61	21.6	385.25	20.19	19.16	29.8
Average P/E (last 5 years)	8.724	8.24	4.826	10.71	9.642	12.56
Price/BV (x)	2.59	1.62	2	3.47	5.11	6
EV/TTM EBITDA (x)	12.86	11.21	13.1	10.75	10.97	16.42
EV/TTM Sales (x)	1.17	1.26	1.07	2.39	1.62	6.1
Dividend Yield (%)	0.72	1.13	1.55	0.08	1.35	0.36
Mcap/ TTM Sales (x)	1.02	1.05	0.43	2.24	1.46	5.73
Market Cap (Rs. in Cr.)	6501.14	15162.18	3648.29	30000.95	2868.60	21362.52
Latest no. of shares (in Cr.)	4.05	57.2	22.68	0.42	0.77	19.33
Promoter Holding (%)	50.76	39.43	52.48	27.51	45.36	58.30
Pledged Shares (%) (promoter)	0	14.35	0	0.47	0	0
Net Sales (Rs. in Cr.)	1574.15	4015.531	7689.37	13405.82	1960.52	3727.03
Advertising Expense (% of PAT)	38.27	36.97	30.15	17.83	28.61	13.45
Advertising Expense (% of Net Sales)	2.20	3.08	1.49	1.98	2.18	2.59
PAT (Rs. in Cr.)	74.46	245.296	379.82	1486.22	149.69	716.85
Cash Conversion Cycle (days)	29.18	41.48	57.81	67.93	51.6	33.77
Net Debt Level (Rs. in Cr.)	773.26	3966.67	5217.69	1990.23	298.40	1366.06
ROE (%)	14.8	15.83	20.44	18.74	30.76	22.69
Average ROE (last 5 years)	21.298	20.106	25.44	26.174	36.358	23.77
ROCE (%)	17.32	16.46	15.9	22.9	32.49	22.5
Average ROCE (last 5 years)	23.786	21.962	17.466	30.524	32.546	18.154
Adj. EPS (Rs. in Cr.)	20.43	4.29	16.55	3505.24	195.42	37.08
CFO/PAT (x)	1.011	0.8211	0.278	1.315	0.425	1.181

- TVS Srichakra and Balkrishna Industries are not included in the report but a comparison table is given.
- TVS Srichakra mainly deals in 2&3 Wheeler and Passenger Vehicle tyres.
- Balkrishna Industries mainly deals in OFF THE ROAD tyres.

Final View!

From the qualitative and quantitative study covered in the report (except TVS Srichakra and Balkrishna Industries) we rank the companies for investment purpose as follows:

- 1) CEAT LTD
- 2) MRF LTD.
- 3) APOLLO TYRES LTD.
- 4) JK TYRE & INDUSTRIES LTD.

CEAT: The company has expansion plans in the TBR segment so a huge growth prospect over there. The Anti-Dumping Duty on Chinese tyres for the next 5 years would also be beneficial for the company.

MRF: The company has a proven management quality. The tie-up with U.S. based Hasbro has been beneficial to the company. Funskool brand is one of the leading brands in toy manufacturing.

APOLLO TYRES: The expansion plans of the company are already underway, phase 1 of which is already completed. The management of the company is very aggressive with its expansion plans. Promoter's shares are also in pledge.

JK TYRE & INDUSTRIES: The company has continuously progressed through inorganic growth, its acquisition of TORNEL, VIKRANT and CAVENDISH are proof of that. The company is well established in the TBR segment with major market share and is reaping the benefits of anti-dumping duty on Chinese TBR. The company is slowly increasing its production in 2 wheeler and passenger vehicle segment.

Bibliography

- Data from individual Company website, annual report, investor presentation, conference call (as and when available).
- Research based software like Ace-Analyser.
- IBEF website
- Websites of ATMA, ACMA, SIAM.
- Images used in the report are taken from company annual report, investor presentation, company website.

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