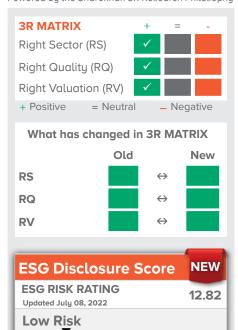
Powered by the Sharekhan 3R Research Philosophy



Source: Morningstar Company details

LOW

10-20

NEGL

Market cap:	Rs. 48,319 cr
52-week high/low:	Rs. 19,245/12,940
NSE volume: (No of shares)	27,995
BSE code:	500530
NSE code:	BOSCHLTD
Free float: (No of shares)	0.9 cr

MED

20-30

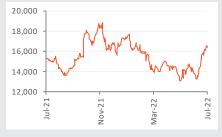
HIGH

30-40

Shareholding (%)

Promoters	70.5
FII	3.5
DII	16.4
Others	9.6

Price chart



Price performance

(%)	1m	3m	6m	12m
Absolute	18.2	9.5	-5.0	7.3
Relative to Sensex	16.9	18.8	5.6	5.5
Sharekhan Research, Bloomberg				

Bosch Ltd

Set for drive on long growth runway

Automobiles			Shar	ekh	an code: BOSCHLTD	
Reco/View: Buy	\leftrightarrow	CMP: Rs. 16,383		383	Price Target: Rs. 19,135	1
↑	Upgrade	\leftrightarrow	Maintain	\downarrow	Downgrade	

Summary

- Bosch Limited (Bosch) continues to lay emphasis on future technologies, including electric vehicles, foraying into new markets and expanding its retail reach.
- Support from parent company and investment in R&D would be key drivers to tap emerging opportunities in EVs and connected vehicles in India.
- We expect Bosch's earnings to clock a 26.4% CAGR during FY22-FY24E, driven by a 20% revenue CAGR and a 240-bps rise in EBITDA margin expansion to 14.8% in FY24E from 12.4% in FY22.
- We retain Buy with a revised PT of Rs. 19,135, factoring in a recovery in automotive demand across segments, access to robust e-mobility technology, and improving content per vehicle. The stock trades below its historical average at a P/E of 24.8x and EV/EBITDA of 16.8x its FY24E estimates.

Bosch Limited (Bosch) continues to lay emphasis on future technologies, including electrification in the automotive segment, foraying into new markets and expanding its retail network, as per its FY22 annual report Management is cautiously positive and expects growth across segments, with the e-mobility business driving overall growth. Further, the management expects 30% EV penetration in India by 2030. The capex for FY23E is estimated to be Rs. 550-600 crore, largely focused on R&D for new businesses. Further, the company plans to invest more than Rs. 200 crore in India in the next five years in advanced automotive technologies and the digital mobility space. We expect Bosch to continue to see an increase in content per vehicle with the advent of BS-VI emission norms as vehicles require significant changes in combustion, powertrain systems, and exhaust gas treatment. Content per vehicle would be driven by improvement in safety features and conveniences with the advent of electric vehicles and increasing awareness among the customers. Supply of fuel injection systems to two-wheeler players would be an incremental growth opportunity. Expansion of the power tool business' distribution network in Tier-3 and Tier-4 cities, export of BS-VI automotive components to neighbouring countries and greater adoption of connected and electric vehicles would be key growth drivers for the company. Bosch has a strong technological parentage and operates in a high-entry barrier industry with a strong balance sheet, zero debt, and healthy returns ratios. Bosch is well-prepared to tap on emerging opportunities in electrification and connected vehicles with strong technological support from its parent, Robert Bosch GmbH. Hence, we retain a Buy rating on the stock.

Transition and transformation a key theme: Bosch Ltd. (India) continues to work towards accelerating India's transition to smart and sustainable country. Inspired by its parent, Bosch Global, the company's India portfolio continues to focus on strengthening products, services and solutions in mobility, industrial technology, consumer goods, and energy and building technology.

Focus on improvement content per vehicle: Bosch's content per vehicle would increase with change from BS4 to BS-VI emission norms, commencing supplies in the fast-growing EV segment and emerging technologies such as connected vehicles. Bosch is witnessing increased offtake in the engine and exhaust gas treatment systems as automotive OEM customers have started rolling BS-VI emission norm-compliant vehicles. Moreover, supplies of fuelingection systems to two-wheeler players provide an incremental opportunity.

Leveraging group's strengths give Bosch competitive edge: Leveraging a strong global portfolio, Bosch in India is rightly positioned to support Electric Vehicle (EV) adoption across segments. Bosch India would take leverage of technology and customize products for Indian markets that will continue to boost company's market share and maintain its leadership position.

Our Call

SEV/EDE

Valuation – Maintain Buy with a revised PT of Rs.19,135: Bosch's management is cautiously positive about the demand scenario, expecting it on the path to recovery. We expect the company to be a key beneficiary of the revival in automotive demand, driven by pent-up offtake and normalisation of economic activities. Bosch is a strong brand positioning, focus on technology, and electrification of vehicles will enable its high growth visibility. The company's order book of Rs. 18,500 crore for BS-VI grade products is likely to be executed in the next 5-6 years, which provides healthy growth visibility. We expect Bosch's earnings to report a 26.4% CAGR during FY22-FY24E, driven by a 20% revenue CAGR and a 240-bps rise in EBITDA margin expansion to 14.8% in FY24E from 12.4% in FY22. Thus, we retain Buy with a revised PT of Rs. 19,135, factoring recovery in automotive demand across segments, access to robust e-mobility technology, and improving content per vehicle. The stock trades below its historical average at P/E of 24.8x and EV/EBITDA of 16.8x its FY24E estimates.

Key Risks

The company's performance would be hit if commodity prices continue to rise at the current pace. In addition, prolonged shortage of semi-conductors can materially affect our revenue and margin projections.

Valuation (Consolidated)				Rs cr
Particulars	FY21	FY22	FY23E	FY24E
Revenues	9,716	11,782	14,374	16,961
Growth (%)	(1.3)	21.3	22.0	18.0
EBIDTA	1,161	1,457	2,012	2,510
OPM (%)	11.9	12.4	14.0	14.8
Net Profit	1,226	1,218	1,605	1,946
Growth (%)	(5.8)	(0.6)	31.7	21.2
EPS	415.7	413.1	544.2	659.8
P/E	39.4	39.7	30.1	24.8
P/BV	5.0	4.5	4.1	3.6
EV/EBIDTA	37.3	29.8	21.4	16.8
ROE (%)	12.7	11.5	13.5	14.5
ROCE (%)	13.2	13.9	17.1	18.3

Source: Company; Sharekhan estimates



Transition and transformation is the key theme for the year

Inspired by its parent company, Bosch Global, Bosch India's portfolio continues to focus on strengthening products, services and solutions in mobility, industrial technology, consumer goods, and energy and building technology. The company operates Bosch Group's largest development center outside Germany, for end-to-end engineering and technology solutions. The Bosch Group's ecosystem in India strong, with twelve companies operating in India, Bosch India being the flagship company. In India, Bosch set up its manufacturing operation in 1951, which has grown over the years to include eighteen manufacturing sites and seven development and application centers. The Bosch Group in India employs close to 30,500 associates and generated consolidated sales of "Rs. 26,827 crore (3.1 billion euros) in FY22, of which Rs. 24,406 crore (2.8 billion euros) are from total sales to third parties. The company's strategic priorities remain seizing opportunities especially in connectivity, electrification, energy efficiency, automation, and emerging markets.

FY22 marked 100 years of Bosch's India Journey

FY2022 marked 100 years of Bosch in India and to celebrate this, the company announced a special dividend of Rs. 100 per share in addition to a dividend of Rs. 110 per share, with a dividend payout ratio of 51%. In FY2020 and FY2021, the company had distributed a dividend of Rs. 105/share and Rs. 115/share.

210 INR 70% 100 INR Special 48% **115 INR** 51% Dividend 105 INR 110 INR Dividend FY19-20 FY20-21 FY21-22 Dividend per share & Dividend Payout Ratio

Rewarding shareholders

Source: Company's Annual Report; Sharekhan Research

Localising business proposition

Bosch has been expanding its network in India, through increasing its geographical penetration, foraying into new business segments, and localization of advanced automotive technologies. The key outcome of FY22, was the company's strong sales and earnings growth, despite a challenging environment. Mobility Solutions comprises powertrain solutions, automotive aftermarket and 2-wheeler business. The growth of the mobility segment depends upon vehicles offtake by OEMs and mobility on roads. The consumer goods division comprises power tools and sales are dependent on dealer network expansion and performance in e-Commerce sales. The energy and building division comprises of security technology and energy solutions.

2 July 13, 2022



Focus on smart and sustainable technology

Key business segments	Contribution to revenue (%)	Business growth in FY22 (%)	Clients	Segments
Mobility Solutions	80.0	22.2	Mobility providers, enablers and users and OEMs	Powertrain and ElectrifiedAutomotive AftermarketTwo-Wheeler and Powersports
Consumer Goods	10.7	30.4	Tradesmen in construction and industrial professions, contractors and other institutional buyers	• Power Tools
Energy and building technology	2.4	32.2	Enterprise and utility clients	Turnkey Solar PV ServicesEnergy Efficiency SolutionsSecurity Systems"

Source: Company's Annual Report; Sharekhan Research

Staying the leader in 'Beyond Mobility' space

In the Beyond Mobility space, e-Commerce has witnessed a significant driver of growth in the Power Tools and Automotive Aftermarket space, which accelerated its business and helped further growth in the market during the year. The company has established itself in a leadership position in the domestic power tool markets with a 30% market share. This turnover is at an all-time high for the power tool business, and it plans to further integrate advanced technologies, to increase market share and expand new markets within the segment.

Outlook for Building Technology remain robust

In the Building Technology segment, Bosch has witnessed a high double-digit growth over a low base, driven by major wins in infrastructure projects in the public and private sectors. The company has plans to capitalize on the business potential available on the infrastructure drive over the next five years across domains like metro-rail, airports, ports, industrial parks, and smart cities.

Automotive aftermarket business to drive profitability

The automotive aftermarket business made a strong recovery the latter quarters of FY22 to achieve an all-time high turnover with very healthy profitability. The company's focus remains on increasing active retailers and workshops in line with the company's moto "Har Shop Mein Bosch strategy." Bosch's automotive aftermarket in India is the largest aftermarket chain that acts as a multi-brand car service center. The company is working to expand its service centers and unit repair centers by 1,000 and 2,000, respectively by 2025 to support customers across India. Also, Bosch Limited acquired a minority stake of 26% in Autozilla Solutions to foray in the digital B2B marketplace. Bosch plans to integrate Autozilla's e-Commerce platform with its digital platforms to improve the quality of catalog search, streamline the ordering of spare parts and address the availability of spares with shorter lead times.

Leveraging group strengths give Bosch a competitive edge

The markets are continuously adapting changes, led by global driver for climate action, electrification, automation, and connectivity. Bosch's focus on electrification provides it a competitive edge due to its parent's, Robert Bosch GmbH, substantial investments in electric vehicles (EV) technology. The parent has been investing in EVs for the past 10 years. Bosch Global has prepared to tackle tough situations and has a strong product portfolio in electro mobility with strong order books. In India, Bosch Limited will support



OEMs through system expertise and participate in ecosystem partnerships to become a major player in the electrification ecosystem. Leveraging a strong global portfolio, Bosch in India is rightly positioned to support Electric Vehicle (EV) adoption across segments. Bosch India would leverage technology and customise products for Indian market. Management expects electrification in India will take time. Two-wheeler and three-wheeler industries would witness faster adoption in India. Bosch is well-prepared to tap on emerging opportunities in electrification and connected vehicles with strong technological support from its parent company. The EV market size is currently at nascent stage currently in India, but expects electrification to be around 25-30% by FY2030. The company will be involved in the hydrogen ecosystem with complete powertrain modules, which is already present in parent company's product portfolio. The company is well prepared to tap on emerging opportunities in electrification and connected vehicles with strong technological support from its parent, Robert Bosch GmbH.

Investments in technologies to remain focus

Bosch Limited will invest more than Rs. 200 crore in India over the next five years (till 2026) in advanced automotive technologies and digital mobility space. The capex for FY23E is estimated to be Rs. 550-600 crore, largely focussed on R&D for new businesses.

Focus on strengthening the brand

The Company is putting greater emphasis on brand building and identity in India. It is conceiving platform-agnostic campaigns that are impactful across locations as well as on digital. Bosch India's brand campaign and Insignia are part of this agenda.

Management cautiously optimistic

Management is cautiously positive and expects growth across segments, with the e-mobility business driving the overall growth. Further, the management expects 30% EV penetration in India by 2030. The capex for FY23E is estimated to be Rs. 550-600 crore, largely focused on R&D for new businesses. The management highlighted Supply Chain crisis including the continued chip shortages, China Lockdown in particular Shanghai, Ukraine-Russia War, and geopolitical shifts. Despite the challenges, the company clear objective to transform and adapt in FY23. The management is cautiously optimistic in FY23 and expects a double-digit growth. The company clear plans to improve on profitability through favourable product mix and taking price hikes to recover increasing raw material costs and freight charges. In the consumer goods segment, the company plans to leverage digital ecosystem. The company has a strong order book of Rs. 18,500 crore for BS-VI products is likely to be executed in the next 5-6 years, which provides healthy growth visibility. Increasing localisation of BS-VI components benefits from investments in and transformation and restructuring projects coupled with operating leverage (due to strong recovery in volumes) would drive up margins. Management expects margins to improve going forward because of a higher level of localisation and cost-reduction measures.

Bosch to witness increased content/vehicle

The automotive industry saw a sharp improvement in demand with rising production. Our channel checks suggest underlying strong demand in two-wheeler and four-wheeler segments once the economy normalises with higher vaccination levels in the country. Moreover, with the implementation of BS-VI emission norms, Bosch is witnessing increased content per vehicle in the engine and exhaust gas treatment systems. In addition, the supply of fuel injection systems to the two-wheeler segment provides an additional opportunity for Bosch, as the company was not present in engine systems for the two-wheeler segment in the BS-IV era.



Margins to improve as localisation increases, transformational projects and operating leverage bring in savings

Bosch is focussing on improving localisation levels for BS-VI components. As BS-VI vehicle proliferation improves, Bosch would look at parts that could be manufactured in-house. Bosch stated that it would achieve a significant increase in localisation levels over the next 2-3 years, which would enable margin improvement. Improvement in volumes would lead to benefits of operating leverage, which would enable margin improvement.

Expect Bosch to continue to outpace industry

- Overall, the automotive industry saw a marginal increase of 1.3% y-o-y in automotive production during FY22 on a low base, led by subdued by supply challenges faced during the year. After achieving its peak in FY 19, the domestic auto industry has seen two years of decline before recovering in FY22. Passenger Vehicles (20% growth) and CVs (29% growth) bounced back compared to a low base in FY21. At the same time, the tractor segment remained stable after peaking in FY21. The Two-Wheeler sector (3% de-growth) declined for the third year.
- Bosch outperformed the Passenger Cars industry by growing better than the market, primarily due to market share gains. The fuel mix effect adversely impacted Bosch's performance in the Commercial Vehicle market due to the loss of diesel share in overall market volumes. While in the Tractor segment, Bosch outperformed the industry by achieving higher content per vehicle.
- The contribution of exports to total sales increased to 11.08% in FY22 as compared to 10.35% in FY21. The
 company's exports, bulk of which is to Germany increased by 22% in FY22, driven by robust performance
 in powertrain solutions and automotive aftermarket divisions
- Driven by company's strong brand positioning, focus on technology, and electrification of auto vehicles enable high-growth visibility, we expect Bosch to continue to grow faster than the industry. We expect Bosch's earnings to report a 26.4% CAGR during FY22-FY24E, driven by a 20% revenue CAGR and a 240-bps rise in EBITDA margin expansion to 14.8% in FY24E from 12.4% in FY22.

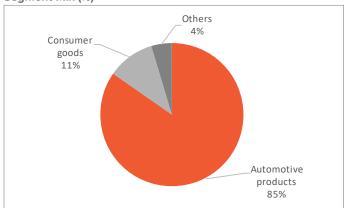
Bosch grows faster than the industry in most automotive segments during FY22

Segment	Automotive Mark	et Production	Bosch Domesti	Bosch Domestic OE Sales		
	Jan-Mar'22 Vs. Jan-Mar'21	FY'22 Vs. FY'21	Jan-Mar'22 Vs. Jan-Mar'21	FY'22 Vs. FY'21	Crisis recedes	
00	-36%	0%	-31%	11%	Not Applicable	
60	2%	19%	18%	24%	Opportunity	
900	17%	20%	10.70	2470	орронанну	
70-4	10%	48%	8%	44%	Marginal Opportunity lost	

Source: Company's Annual Report; Sharekhan Research

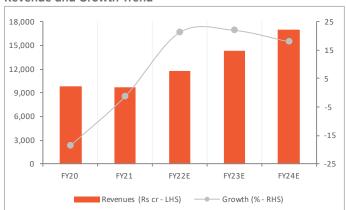
Financials in charts

Segment Mix (%)



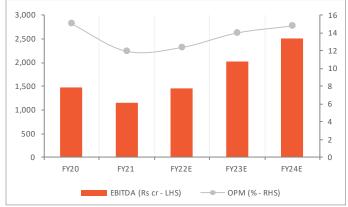
Source: Company, Sharekhan Research

Revenue and Growth Trend



Source: Company, Sharekhan Research

EBITDA and OPM Trends



Source: Company, Sharekhan Research

PAT and Growth Trends



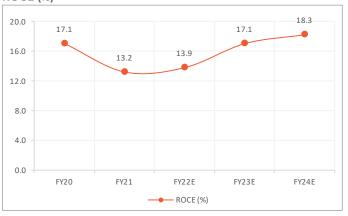
Source: Company, Sharekhan Research

ROE Trend



Source: Company, Sharekhan Research

ROCE (%)



Source: Company, Sharekhan Research



Outlook and Valuation

■ Sector View – Structural demand drivers in place

We remain positive about the automobile sector driven by pent-up demand across the segment. The PV segment, both for two-wheelers and four-wheelers, is expected to remain strong amid COVID-19, as a preference for personal transport. However, chip shortage remains a key concern in the near term. Rural demand is expected to recover strongly in southern and western India, given the timely arrival of the monsoon season, higher reservoir levels, and higher Kharif sowing last year. We expect sequential improvement in M&HCV sales to continue, driven by rising e-commerce, agriculture, infrastructure, and mining activities. We expect the strongest recovery in the commercial vehicle (CV) segment in FY2022 and FY2023, driven by improvement in economic activities, low-interest rate regime, and better financing availability. We expect M&HCVs to outpace other automobile segments over the next few years, followed by growth in the passenger vehicle (PV), two-wheeler, and tractor segments. Moreover, exports provide a huge growth potential, given India's cost-effective manufacturing, being geographically closer to key markets of the Middle East and Europe, and being the second-largest producer of key raw material, steel. Auto component exports are expected to grow from \$15 billion to \$80 billion by FY2027.

Company Outlook – Shifting growth gears

Bosch's content per vehicle would increase with the change from BS-IV to BS-VI emission norms, commencing supplies in the fast-growing EV segment, and emerging technologies such as connected vehicles. Bosch is witnessing increased offtake for engine and exhaust gas treatment systems as automotive OEM customers have started rolling BS-VI compliant vehicles. Moreover, supplies of fuel-injection systems to two-wheeler players provide an incremental opportunity. Bosch has tied up with leading original equipment manufacturers (OEM) players for the supply of BS-VI products. The current order book stands at Rs. 18,500 crore, which is to be executed over 5-6 years. Moreover, Bosch has commenced supplies to the EV segment, with the supply of the entire drive systems for Bajaj Chetak scooter, in-house hub systems for the TVS iQube scooter, and components for the Tata Nexon Electric SUV. Bosch is making itself ready to provide solutions for emerging trends of connected vehicles (various cars with voice commands) and increasing digitisation in the Indian automotive industry. We maintain our positive stance on the company.

■ Valuation – Maintain Buy with a revised PT of Rs. 19,135

Bosch's management is cautiously positive about the demand scenario, expecting it on the path to recovery. We expect the company to be a key beneficiary of the revival in automotive demand, driven by pent-up offtake and normalisation of economic activities. Bosch is a strong technological company with a robust balance sheet, zero debt, and healthy return ratios. The company's strong brand positioning, focus on technology, and electrification of vehicles will enable its high growth visibility. The company's order book of Rs. 18,500 crore for BS-VI grade products is likely to be executed in the next 5-6 years, which provides healthy growth visibility. We expect Bosch's earnings to report a 26.4% CAGR during FY22-FY24E, driven by a 20% revenue CAGR and a 240-bps rise in EBITDA margin expansion to 14.8% in FY24E from 12.4% in FY22. Thus, we retain Buy with a revised PT of Rs. 19,135, factoring recovery in automotive demand across segments, access to robust e-mobility technology, and improving content per vehicle. The stock trades below its historical average at P/E of 24.8x and EV/EBITDA of 16.8x its FY24E estimates.

Sharekhan by BNP PARIBAS

One-year forward P/E (x) band



Source: Sharekhan Research

Peer Comparison

- CMP			P/E (x)			EV/EBITDA (x)			ROCE (%)		
Companies	(Rs cr)	FY22	FY23E	FY24E	FY22	FY23E	FY24E	FY22	FY23E	FY24E	
Bosch Ltd	16,383	39.7	30.1	24.8	29.8	21.4	16.8	13.9	17.1	18.3	
Schaeffler India*	2,289	56.9	40.8	32.0	36.5	26.1	20.3	30.7	32.2	31.3	
Sundram Fasteners	791	36.0	23.6	18.9	21.0	15.2	12.0	21.4	22.0	24.0	

Source: Company; Sharekhan Research * Financial are for CY20, CY21E and CY22E

About company

The Bosch Group is a leading automotive global supplier of technology and services. In India, Bosch is a leading supplier of technology and services in the areas of mobility solutions, industrial technology, consumer goods, and energy and building technology. Additionally, in India, Bosch has the largest development centre outside Germany for end-to-end engineering and technology solutions. In India, Bosch had set up its manufacturing operations in 1951, which have grown over the years to include 18 manufacturing sites and seven development and application centres.

Investment theme

Bosch is one of the leading automobile suppliers in India, with strong technology in its mobility businesses. We expect Bosch to witness a significant increase in content per vehicle with the advent of BS-VI emission norms as vehicles require significant changes in combustion, powertrain systems, and exhaust gas treatment. Supply of fuel injection to two-wheeler players would be an incremental growth opportunity for the company. Expansion of power tool business' distribution networks in tier 3 and 4 cities, export of BS-VI automotive components to neighbouring countries, and increased adoption of connected and EVs would be key growth drivers for the company. Bosch has a strong technological parentage and operates in a high entry barrier industry with a strong balance sheet, zero debt, and healthy returns ratios. The company's order book of Rs. 18,500 crore for BS-VI products is likely to be executed over the next five to six years, which provides strong growth visibility going ahead. Increasing localisation of BS-VI components benefits from investments in transformation, and restructuring projects coupled with operating leverage (due to strong recovery in volumes) are expected to result in margin improvement.

Key Risks

- The company's performance can be impacted adversely if commodity prices continue to rise at the current pace.
- In addition, a prolonged shortage of semi-conductors can materially affect our revenue and margin projections.

Additional Data

Key management personnel

VK Vishwanathan	Chairman
Soumitra Bhattacharya	Managing Director
SC Srinivasan	Chief Financial Officer and Joint Managing Director
Guruprasad Mudlapur	Chief Technical Officer
Source: Company Website	

Top 10 shareholders

Sr. No.	Holder Name	Holding (%)
1	Robert Bosch Internationale Betiligungen Ag	67.8
2	General Insurance Corporation of India	3.3
3	Life Insurance Corporation	3.3
4	Robert Bosch Engineering and Business Solution	2.8
5	New India Assurance company Ltd	2.5
6	United India Insurance company	1.1
7	Blackrock Inc	0.7
8	Aditya Birla Sun life AMC	0.7
9	Vanguard Group Inc	0.6
10	Standard Life Aberdeen PLC	0.4

Source: Bloomberg

Sharekhan Limited, its analyst or dependant(s) of the analyst might be holding or having a position in the companies mentioned in the article.

Understanding the Sharekhan 3R Matrix

Right Sector	
Positive	Strong industry fundamentals (favorable demand-supply scenario, consistent industry growth), increasing investments, higher entry barrier, and favorable government policies
Neutral	Stagnancy in the industry growth due to macro factors and lower incremental investments by Government/private companies
Negative	Unable to recover from low in the stable economic environment, adverse government policies affecting the business fundamentals and global challenges (currency headwinds and unfavorable policies implemented by global industrial institutions) and any significant increase in commodity prices affecting profitability.
Right Quality	
Positive	Sector leader, Strong management bandwidth, Strong financial track-record, Healthy Balance sheet/cash flows, differentiated product/service portfolio and Good corporate governance.
Neutral	Macro slowdown affecting near term growth profile, Untoward events such as natural calamities resulting in near term uncertainty, Company specific events such as factory shutdown, lack of positive triggers/events in near term, raw material price movement turning unfavourable
Negative	Weakening growth trend led by led by external/internal factors, reshuffling of key management personal, questionable corporate governance, high commodity prices/weak realisation environment resulting in margin pressure and detoriating balance sheet
Right Valuation	
Positive	Strong earnings growth expectation and improving return ratios but valuations are trading at discount to industry leaders/historical average multiples, Expansion in valuation multiple due to expected outperformance amongst its peers and Industry up-cycle with conducive business environment.
Neutral	Trading at par to historical valuations and having limited scope of expansion in valuation multiples.
Negative	Trading at premium valuations but earnings outlook are weak; Emergence of roadblocks such as corporate governance issue, adverse government policies and bleak global macro environment etc warranting for lower than historical valuation multiple.

Source: Sharekhan Research



Know more about our products and services

For Private Circulation only

Disclaimer: This document has been prepared by Sharekhan Ltd. (SHAREKHAN) and is intended for use only by the person or entity to which it is addressed to. This Document may contain confidential and/or privileged material and is not for any type of circulation and any review, retransmission, or any other use is strictly prohibited. This Document is subject to changes without prior notice. This document does not constitute an offer to sell or solicitation for the purchase or sale of any financial instrument or as an official confirmation of any transaction. Though disseminated to all customers who are due to receive the same, not all customers may receive this report at the same time. SHAREKHAN will not treat recipients as customers by virtue of their receiving this report.

The information contained herein is obtained from publicly available data or other sources believed to be reliable and SHAREKHAN has not independently verified the accuracy and completeness of the said data and hence it should not be relied upon as such. While we would endeavour to update the information herein on reasonable basis, SHAREKHAN, its subsidiaries and associated companies, their directors and employees ("SHAREKHAN and affiliates") are under no obligation to update or keep the information current. Also, there may be regulatory, compliance, or other reasons that may prevent SHAREKHAN and affiliates from doing so. This document is prepared for assistance only and is not intended to be and must not alone be taken as the basis for an investment decision. Recipients of this report should also be aware that past performance is not necessarily a guide to future performance and value of investments can go down as well. The user assumes the entire risk of any use made of this information. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. We do not undertake to advise you as to any change of our views. Affiliates of Sharekhan may have issued other reports that are inconsistent with and reach different conclusions from the information presented in this report.

This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject SHAREKHAN and affiliates to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction.

The analyst certifies that the analyst has not dealt or traded directly or indirectly in securities of the company and that all of the views expressed in this document accurately reflect his or her personal views about the subject company or companies and its or their securities and do not necessarily reflect those of SHAREKHAN. The analyst further certifies that neither he or its associates or his relatives has any direct or indirect financial interest nor have actual or beneficial ownership of 1% or more in the securities of the company at the end of the month immediately preceding the date of publication of the research report nor have any material conflict of interest nor has served as officer, director or employee or engaged in market making activity of the company. Further, the analyst has also not been a part of the team which has managed or co-managed the public offerings of the company and no part of the analyst's compensation was, is or will be, directly or indirectly related to specific recommendations or views expressed in this document. Sharekhan Limited or its associates or analysts have not received any compensation for investment banking, merchant banking, brokerage services or any compensation or other benefits from the subject company or from third party in the past twelve months in connection with the research report.

Either SHAREKHAN or its affiliates or its directors or employees / representatives / clients or their relatives may have position(s), make market, act as principal or engage in transactions of purchase or sell of securities, from time to time or may be materially interested in any of the securities or related securities referred to in this report and they may have used the information set forth herein before publication. SHAREKHAN may from time to time solicit from, or perform investment banking, or other services for, any company mentioned herein. Without limiting any of the foregoing, in no event shall SHAREKHAN, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind.

Compliance Officer: Ms. Priya Sonavane; Tel: 022-61150000; email id: compliance@sharekhan.com; For any queries or grievances kindly email igc@sharekhan.com or contact: myaccount@sharekhan.com

Registered Office: Sharekhan Limited, The Ruby, 18th Floor, 29 Senapati Bapat Marg, Dadar (West), Mumbai – 400 028, Maharashtra, INDIA, Tel: 022 - 67502000/ Fax: 022 - 24327343. Sharekhan Ltd.: SEBI Regn. Nos.: BSE / NSE / MSEI (CASH / F&O / CD) / MCX - Commodity: INZ000171337; DP: NSDL/CDSL-IN-DP-365-2018; PMS: INP000005786; Mutual Fund: ARN 20669; Research Analyst: INH000006183.

Disclaimer: Client should read the Risk Disclosure Document issued by SEBI & relevant exchanges and the T&C on www.sharekhan.com; Investment in securities market are subject to market risks, read all the related documents carefully before investing.