Jefferies

India | Transport & Logistics

Allcargo Logistics

Equity Research
January 3, 2023

Logistics Powerhouse – Demerger Icing on Cake; Initiate at Buy

Allcargo Logistics (ALL) is a play on global trade (87% of rev.) and a leader in Less-than-Container-Load (LCL). FY23E-24E should see some normalization of gains made in FY21-22. Trading at 7 yr avg of 13x, should see re-rating on the back of PTL turnaround and demerger which would help it tide through the next 12 months till trade and EPS growth return. 14% FY24E-26E EPS CAGR, 18% ROE, and demerger should drive 24% upside. Initiate coverage with Buy.

Gaining share consistently in global trade: ALL has strategically grown through acquisitions. It is the world's LCL market leader with a 14% share from less than 9% a decade ago. The 2021 Nordicon acquisition gave it a leadership position in the Nordic region, and it has not looked back since. Global GDP growth is expected to recover in 2024 to 2.5%+ after a dip in 2023 to 1.8-2% (CY22 2.9%), which should reflect in ALL's global (MTO) segment growth.

India PTL turning around (7% rev.) – right space right time: ALL forayed in the express PTL business through the 2020 Gati acquisition. Organised players are just 10% of the market and gaining share as GST drives sector formalisation. Management is streamlining costs at Gati and EBIT margins should be -0.5% in FY23E vs -3.8% in FY21. Industry players make 9%+ margins, showing the scope for profitability improvement.

CFS and Logistics Parks – the demerger value creators: CFS (3% of rev.) and Logistics Parks (incl. equipment rental) are being demerged into 2 companies. Gateway Distriparks, a CFS/ICD peer, trades at 15.3x PE FY23E vs ALL's 13.2x PE. Logistics Park (1% of rev.) has 100 acres of development potential at Jhajjar with Rs2.5-3 bn (3% of mkt cap.) equity invested. This is apart from the 5-6 mn sq. ft built being sold to Blackstone.

Good franchise available at 13.2x FY23E PE: We believe ALL's value creation proposition is being underestimated as the business is yet to be understood. We see 14% EPS CAGR in FY24E-26E between PTL turnaround and MTO volume growth. Demerger adds further value. We initiate coverage with Buy, PT Rs500, valuing it at 15x PE Sept 24E, slight premium to the 7-yr avg of 13x as India PTL and demerger drive a re-rating. Downside risks: 1) MTO margin dip more than expected 2) Incremental write-offs in Gati.

Exhibit 1 - Financial Summary

(Rs mn)	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E	FY26E
Net Sales	68,949	73,462	104,981	200,721	187,022	168,746	181,888	195,898
Growth (%)	14	7	43	91	(7)	(10)	8	8
EBITDA	4,485	5,035	6,338	15,156	15,396	14,812	16,334	18,234
EBITDA (%)	6.5	6.9	6.0	7.6	8.2	8.8	9.0	9.3
Adjusted PAT	2,478	1,915	3,011	8,748	7,522	7,649	8,742	10,026
EPS (Rs)	10.1	7.8	12.3	35.6	30.6	31.1	35.6	40.8
EPS Growth (%)	40.3	(22.7)	57.2	190.5	(14.0)	1.7	14.3	14.7
ROCE (%)	14.0	12.4	6.8	24.4	21.0	19.1	20.4	21.1
RONW (%)	12.5	9.2	13.6	32.1	21.4	18.1	17.7	17.4
PE (x)	39.9	51.7	32.9	11.3	13.2	12.9	11.3	9.9
PBV (x)	5.0	4.6	4.3	3.1	2.6	2.2	1.9	1.6
EV/EBITDA (x)	22.6	21.9	18.2	7.5	7.1	7.1	6.2	5.2

Source: Jefferies, Company Data

(FY Mar)	2022A	2023E	2024E	2025E
FY P/E	11.4x	13.3x	13.1x	11.4x
EV/Rev	0.6x	0.6x	0.7x	0.6x
Cons. EPS	43.40	43.70	44.69	38.40
Cons. EBITDA	15,156.0	16,719.0	17,125.0	15,170.0

INITIATING COVERAGE

RATING	BUY
PRICE	INR406.10^
PRICE TARGET | % TO PT	INR500 | +23%
52W HIGH-LOW	INR494.85 - INR249.50
FLOAT (%) | ADV MM (USD)	28.8% | 273.91
MARKET CAP	INR99.8B | INR99.8B
TICKER	AGLL IN

^Prior trading day's closing price unless otherwise noted.

	CHANGE TO JEFe		JEF vs CONS	
	2023	2024	2023	2024
REV*	NA	NA	-15%	-26%
EPS	NA	NA	-30%	-30%

2023 (INR)	Q1	Q2	Q3	Q4	FY
EPS	-	-	-	-	30.60
PREV					

*Rev. (MM)

Recent Research:

TCIExpress: Weak quarter; story intact

Delhivery: Best Logistics Play; Initiate at Buy

India Logistics: Play on Growth; Initiate on TCIE at Buy

2022: DFC, the Year for Numbers to Show

Lavina Quadros * | Equity Analyst
+91 22 4224 6116 | lquadros@jefferies.com

Please see analyst certifications, important disclosure information, and information regarding the status of non-US analysts on pages 20 - 23 of this report.
* Jefferies India Private Limited

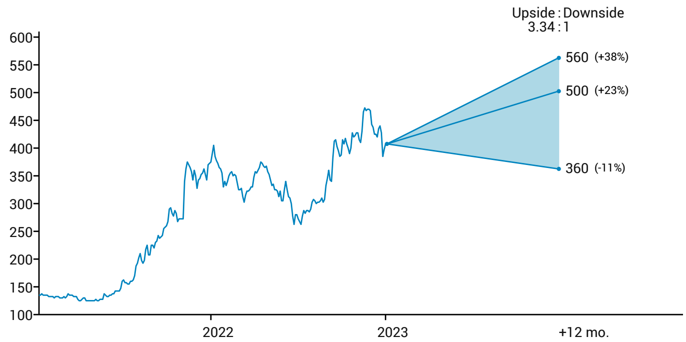
Jefferies

The Long View: Allcargo Logistics

Investment Thesis / Where We Differ

- 17% of ALL's EBIT contribution will be domestic express logistics by FY26E, with step-jumps after as margins further improve with rising volumes
- Confidence in the MTO business as it shows margins above 6% sustainably

Risk/Reward - 12 Month View



Base Case,
INR500, +23%

- 10% EPS CAGR in FY23-26E
- MTO - 7% EBITDA margins and high cash flow generation
- Express- Double-digit revenue growth, EBITDA to grow 4.3x by FY26E
- 15x Sept'24E PE target multiple
- PT of Rs500

Upside Scenario,
INR560, +38%

- 10%+ EPS CAGR in FY23-26E
- MTO - Market share gains higher than expected
- Express - 11-12% EBITDA margins by FY26E
- 16x Sept'24E PE target multiple
- PT of Rs560

Downside Scenario,
INR360, -11%

- <10% EPS CAGR in FY23-26E
- MTO - Margins seeing sharper fall
- Express- Write-offs in Gati
- 11x Sept'24E PE target multiple
- PT of Rs360

Sustainability Matters

Top Material Issues: 1) Ecological Impact- Logistics companies' operations can lead to environmental impact on land, air, and water. Land particularly is of importance between mangroves, plantations that might have to be displaced. Water also could be impacted particularly for the sea life and flora in the area. 2) Employee Health & Safety - Logistics companies have to be particularly careful on the cargo loading and unloading side, where there is injury risk to employees.

Company Targets: 1) Reduce pollutants through the use of better trucks and equipment. 2) Maintaining safety standards with a constant lookout for improvement.

Qs to Mgmt: 1) What are your plans to preserve the environment when the new projects are undertaken? 2) Any thoughts on Vehicle and equipment emission norms to ensure lesser air pollution?

ESG Sector Integration: India Logistics

Catalysts

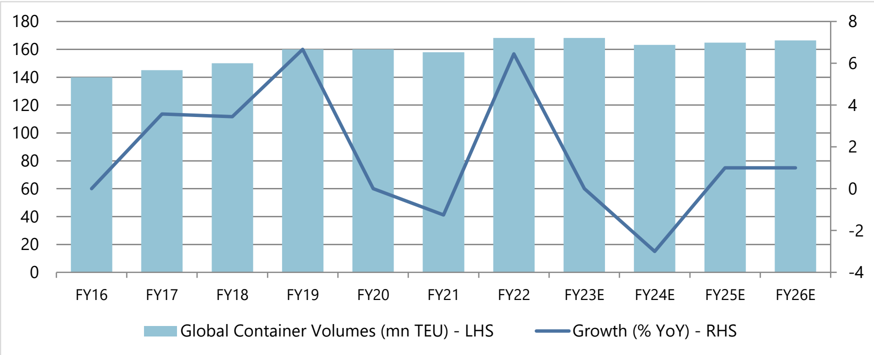
- Express - GST driving sustainable growth for organised players.
- MTO - Market share gains and digitisation benefits

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

Executive summary

MTO - A global leader: MTO involves NVOCC (Non-Vessel Owning Common Carrier) operations related to LCL consolidation and FCL forwarding. ECU Worldwide (i.e. ALL), Vanguard Logistics, Shipco, and CWT Globelink combined have a market share of over 40%. Led by acquisitions in the US, Europe, and Asia, ALL emerged as a global leader in LCL consolidation with a 14% share from less than 9% a decade ago. LCL leadership provides a strong base for FCL expansion. LCL is more profitable than FCL as it has the value-added service of being a cargo consolidator. LCL market has a pass-through in freight rates while in FCL there is some linkage between freight rates and margins. FY22 witnessed a sharp rise in container freight rates and container shortages, which helped the top 4 further consolidate their share and increase profitability

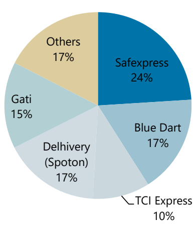
Exhibit 2 - ALL gained share to become the largest player in LCL in FY22



Source: Company, Jefferies estimates

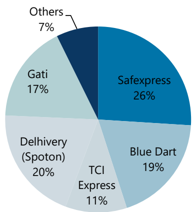
PTL- Turnaround on the back of double-digit revenue growth: ALL forayed in the express PTL business through the 2020 Gati acquisition. Organised players are just 10% of the market and gaining share as GST drives sector formalisation. We believe the logistics theme revolves around formalisation of the Indian economy, with GST being a big driver of this. Our estimates factor in the organised road transportation market growing at 23% CAGR in FY22-26E. ALL hired a third-party consulting firm (Alvarez and Marsal) to help it turn around Gati's fortunes. Making the business asset-light by selling CVs it owned, reducing exposure in non-core businesses like cold chain, and gaining customers through digital offerings are initiatives that are paying off.

Exhibit 3 - PTL (FY22) mkt share to see larger organised players...



Source: Company annual reports, Jefferies estimates

Exhibit 4 - ...gain share even in the organised pie by FY26E



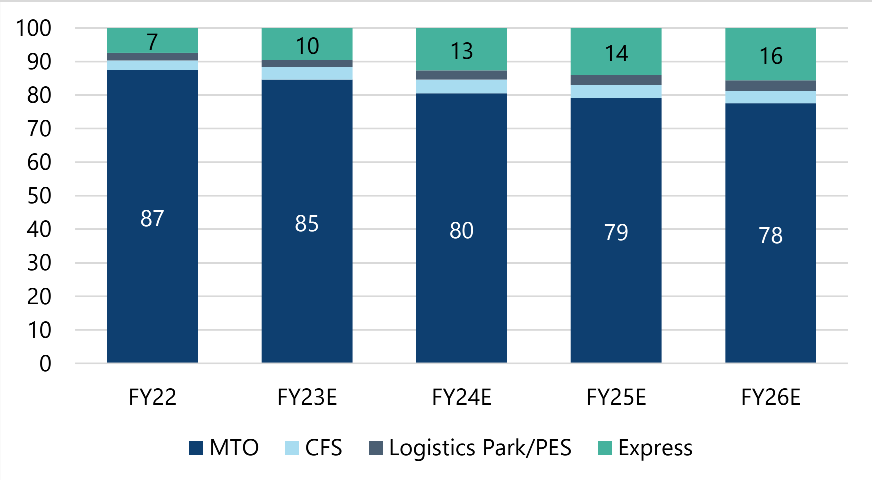
Source: Company annual reports, Jefferies estimates

ALL - a value pick: ALL is a top logistics company in India and a one-stop supply-chain management solution that provides logistics solutions across more than 180 countries. 14% EPS CAGR in FY24E-26E between PTL turnaround and MTO volume growth should drive upside. 17% of ALL's EBIT contribution will be domestic express logistics by FY26E, with step-jumps after as margins further improve with rising volumes. Additionally, confidence in the MTO business as it shows margins above 6% sustainably will also help. Our PT of Rs500 is based on 15x PE Sept. 24E, which we believe could see further upside if express does better than expectations. Downside risks: 1) Sharp margin correction in MTO 2) Gati taking longer to turn around.

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

5-year incremental revenue growth to be driven by India PTL (Express): Management's focus is to replicate the success of the global MTO business in its Express business in India. We believe organised players should comfortably grow in high double-digits in the next decade as they gain share from the unorganised players. Gati is in the top 5 organised players with approx. 15% share of the organised pie. ALL currently owns a 50.3% stake with plans to scale it up to 65% through a purchase from an existing holder Kintetsu World Express (KWE). MTO business will continue to benefit from its leadership status and remain the cash flow driver as its working capital requirements, at less than 10% of sales, are limited.

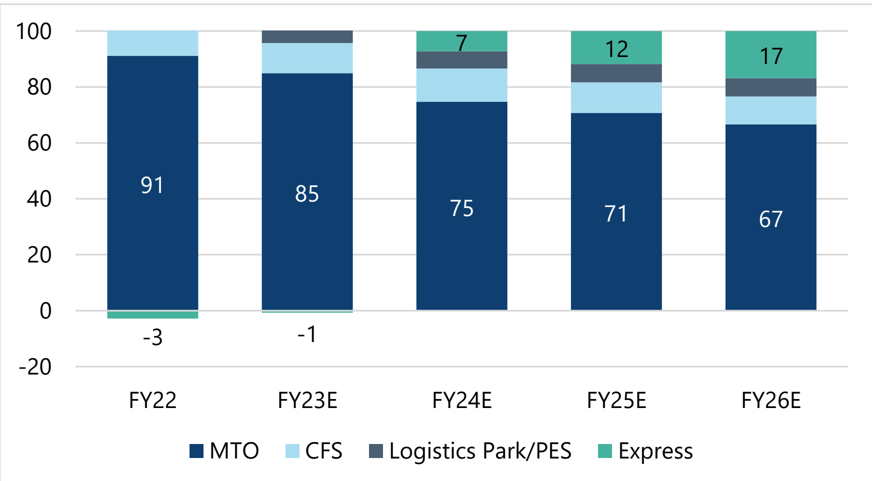
Exhibit 5 - Express revenue share to increase to 16% in FY26E ...



Source: Company, Jefferies estimates

Express profitability turnaround - a low-hanging fruit: ALL hired a third-party consulting firm (Alvarez and Marsal) to help it turn around Gati's fortunes. Express EBIT margins were -3.8% in FY21 vs peers like Spoton and TCI Express who are making 9%+ margins. Making the business asset-light by selling CVs it owned, reducing exposure in non-core businesses like cold chain, and gaining customers through digital offerings are initiatives that are paying off. MTO we are expecting some margin normalisation from the 7.5% quarterly peak seen in FY22 to 6.4-6.5%. This compares with the 4-5% range seen in the last 10 years.

Exhibit 6 - ... and contibute 17% to overall EBIT by FY26E

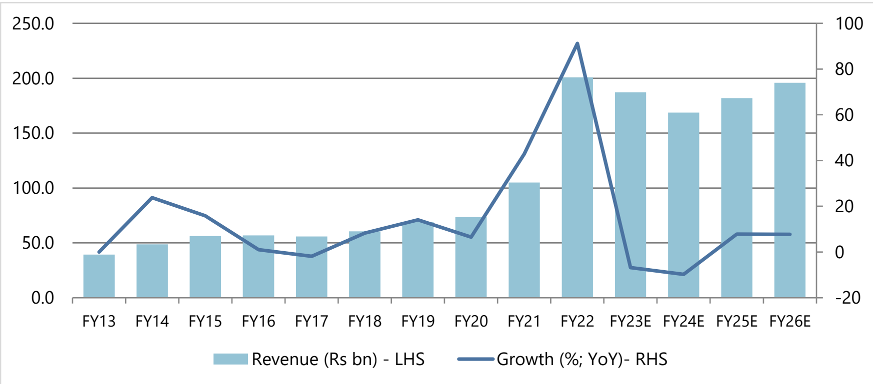


Source: Company, Jefferies estimates

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

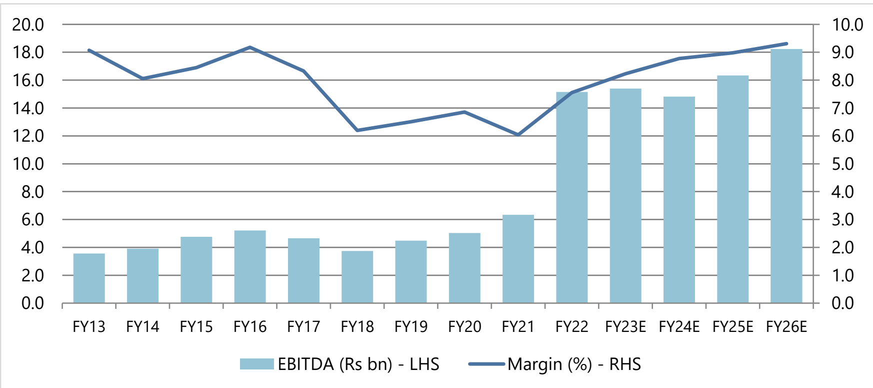
20% EPS CAGR in FY13-22: ALL Management's vision is to be a material global and domestic player in logistics. The company systematically gained market share in a global environment to become the largest LCL player. In India, it waited patiently to acquire Gati and enter the fast-growing PTL Express space. The beauty of the business has been the company's focus on growing cash flow from operations and not letting growth compromise the same. Going ahead, it should be net debt free by FY25E-26E which should also help its dividend payout ratio in the medium term.

Exhibit 7 - Overall revenue to see 13% CAGR over FY21-FY26E ...



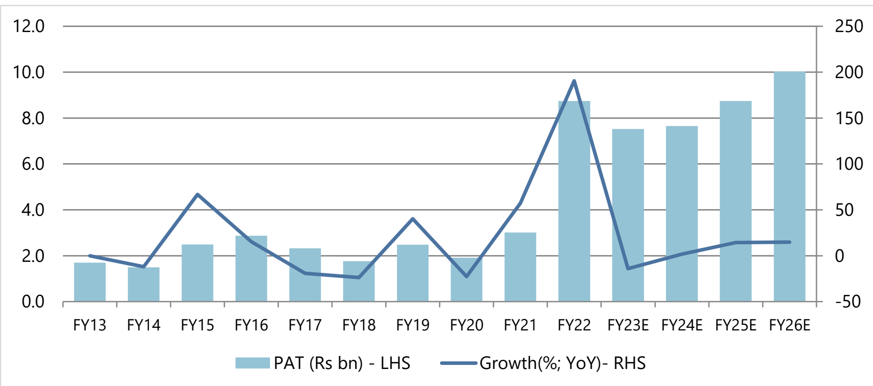
Source: Company, Jefferies estimates

Exhibit 8 - ... EBITDA margins to improve on the back of express business ...



Source: Company, Jefferies estimates

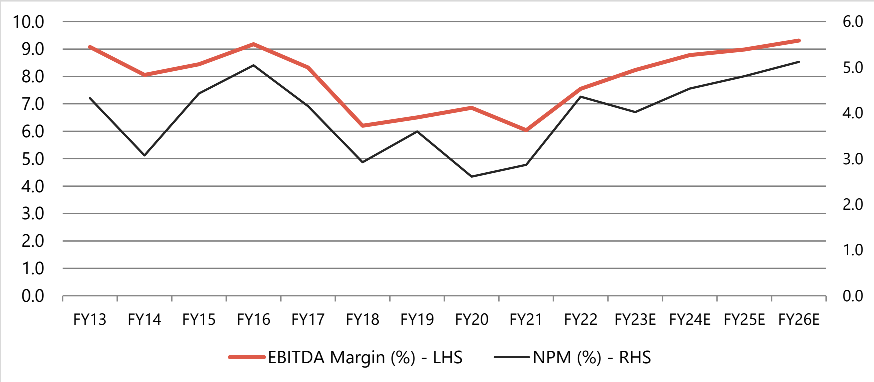
Exhibit 9 - ... PAT to see 27% CAGR over FY21-26E



Source: Company, Jefferies estimates

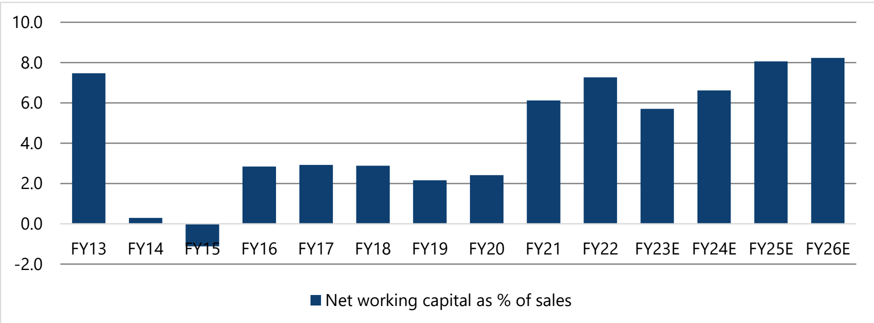
This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

Exhibit 10 - Margins to improve from FY24E onwards



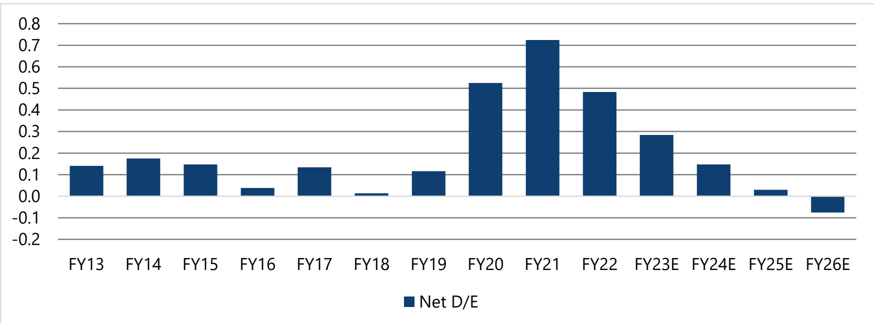
Source: Company, Jefferies estimates

Exhibit 11 - Net working capital as % of sales to remain below 10%



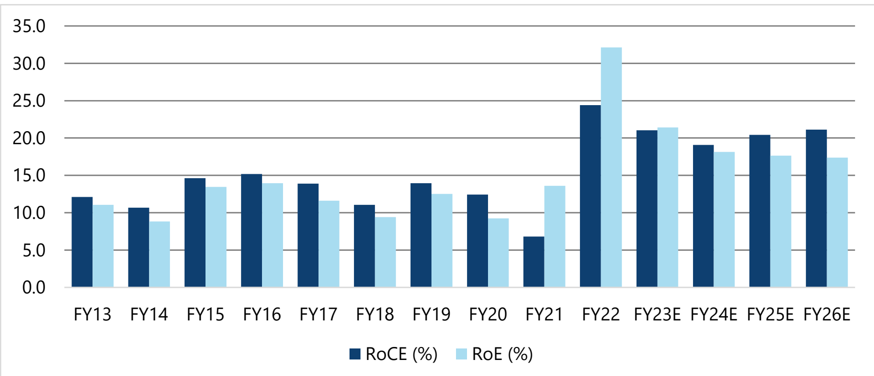
Source: Company, Jefferies estimates

Exhibit 12 - Company to turn net debt free by FY25E



Source: Company, Jefferies estimates

Exhibit 13 - ROE to remain in the range of 17-18%



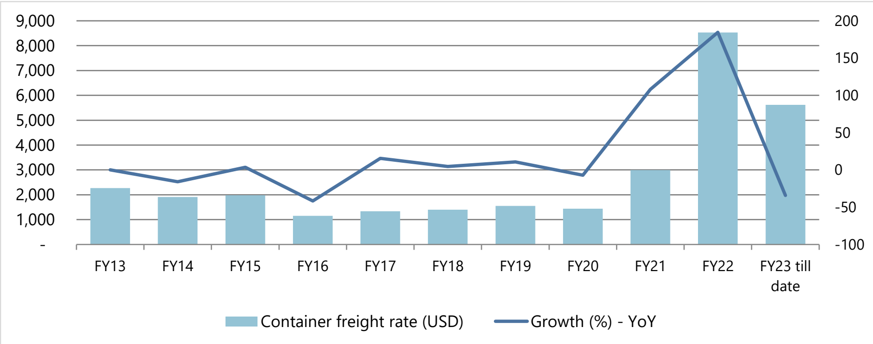
Source: Company, Jefferies estimates

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

MTO - Building on the Leadership Position

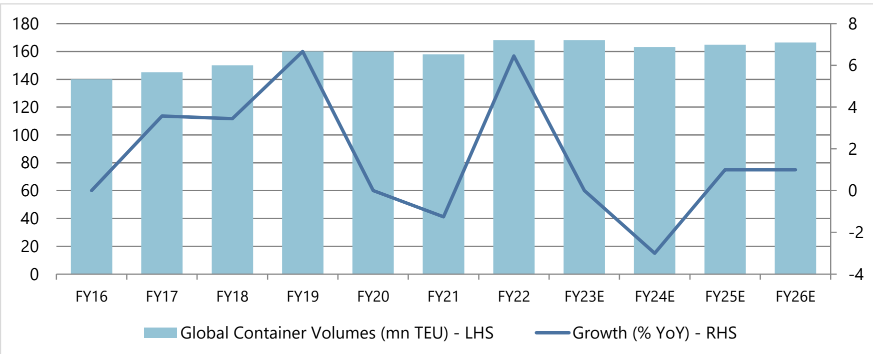
Global LCL – dominated by 4 players: Global Container Cargo has risen at 3% CAGR in FY16-22 to 168 mn TEUs, and the LCL market is approx. 1.5-2% of the same. LCL is more profitable than Full Container load (FCL) as it has the value-added service of being a cargo consolidator. ECU Worldwide (i.e. ALL), Vanguard Logistics, Shipco, and CWT Globelink combined have a market share of over 40%. ALL has become a market leader through acquisitions and seen its share rising to 14% from less than 9% a decade ago. FY22 witnessed a sharp rise in container freight rates and container shortages, which helped the top 4 further consolidate their share and increase profitability. ALL saw 21% YoY volume growth. LCL market has a pass through in freight rates while in FCL there is some linkage between freight rates and margins.

Exhibit 14 - FY22 container shortage and higher freight rates supported a sharp jump in MTO profitability



Source: Bloomberg, Jefferies

Exhibit 15 - ALL gained share to become the largest player in LCL in FY22

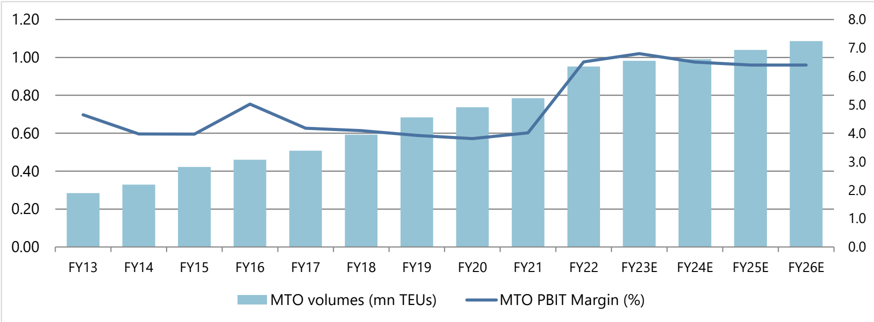


Source: Company, Jefferies estimates

FY22 – the sharp profitability jump in Global margins: ALL's Global LCL and FCL businesses reflect in Multi-Modal Transport (MTO) segment. FY22 segment margins improved more than 200 bps YoY to 6.5% from the normal run-rate of 4-5%. Management indicated that there were 3 reasons responsible for the same 1) Sharp 21% YoY volume growth due to market share gains. Rise in freight and container shortage saw larger LCL players seeing higher demand for their services as cargo transportation was not easy 2) Digitisation benefits, EQ360 platform, as nearly 60% of transactions were booked online eliminating some of the middlemen and helped margins 3) some benefit of higher freight rates for FCL. The first 2 are sustainable benefits as market share should improve further, while the third should fade away as container freight rates are dropping. Our assumptions have margins stabilising mid-way between 4-6.5% at 6.4-6.5%.

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

Exhibit 16 - MTO should retain most of the margin benefits as mkt share benefits remain



Source: Company, Jefferies estimates

Strategic acquisitions drove MTO growth: MTO involves NVOCC (Non-Vessel Owning Common Carrier) operations related to LCL consolidation and FCL forwarding. Led by acquisitions in the US, Europe, and Asia, ALL emerged as global leader in LCL consolidation with a 14% share. LCL leadership provides a strong base for FCL expansion.

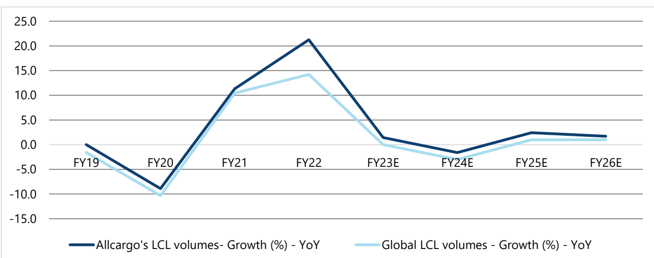
In June 2006, Allcargo acquired Belgium#based ECU Line, a global multinational and a world leader in consolidation, after which it acquired two operators in China in 2010 for helping Asia LCL volumes. In 2013, its US presence was strengthened by the Econocaribe Consolidators acquisition. In 2014, ALL acquired a majority stake in FCL Marine Agencies, which operated in Europe, USA, and Canada. Recently in 2021, the company acquired a controlling stake in Nordicon, the market leader in LCL consolidation in the Nordic region.

Exhibit 17 - Key acquisitions in MTO business

Source: Company, Jefferies

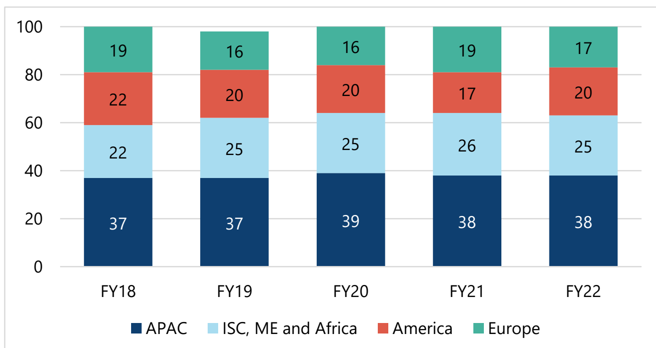
ALL uniquely positioned in MTO business over competition: With over 25 years of global expertise and experience, ALL operates in 180 countries and offers LCL services over 2,400 direct trade lanes across the world. A wide geographical presence helps to generate higher volumes and improve utilisation and profitability. Global scale and volume leadership give an edge to negotiating better with shipping companies and offer better rates to customers versus competition.

Exhibit 18 - ALL's LCL business to grow faster than industry



Source: Company, Jefferies estimates

Exhibit 19 - MTO region-wise volume split

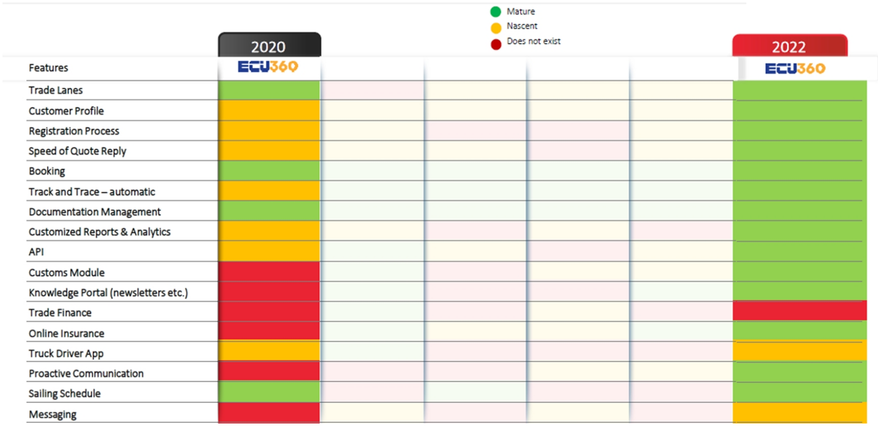


Source: Company, Jefferies

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

Win-Win situation over conventional players and digital start-ups: Conventional players have operating networks but lack digital capabilities and Digital start-ups lack operational footprint and scale. ALL has developed a technological platform (ECU360), which eliminates middlemen and allows customers to directly book their cargo for consolidation with ALL at their convenience 24x7. Features like instant quotes, quick cargo bookings, sailing schedules, and access to all important information at one go enable independent transactions and business continuity for customers. ECU360 now accounts for nearly 60% of export booking across all key markets

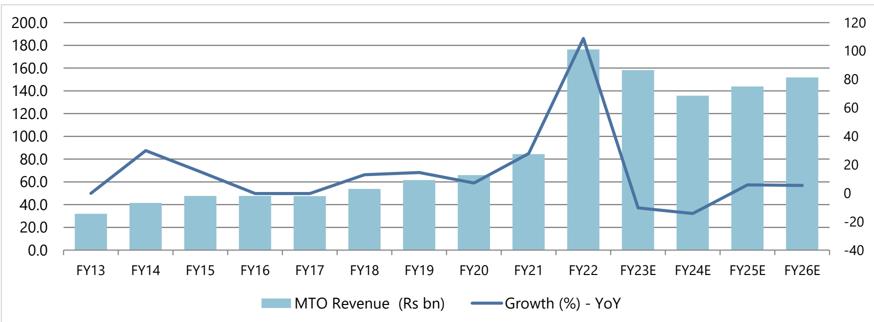
Exhibit 20 - Moving forward with digital first approach - ECU 360



Source: Company, Jefferies

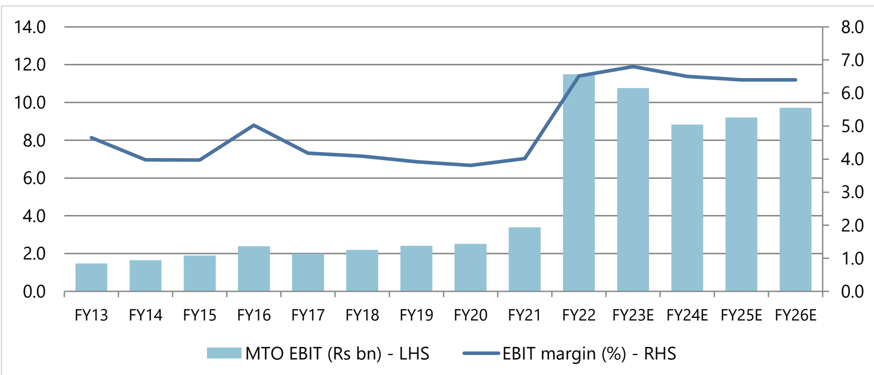
MTO revenue to see some normalisation in FY23E-24E: FY21-22 saw disproportionate gains in MTO on the back of container shortage and a sharp rise in freight rates. As freight rates soften, we see revenue growth resuming FY24E onwards. EBIT margins should settle somewhere in between the 4-6.5% range as some of the higher freight rate benefits normalise.

Exhibit 21 - MTO revenue growth should come back from FY24E onwards ...



Source: Company, Jefferies estimates

Exhibit 22 - ... and EBIT margins should settle somewhere near 6.4-6.5%



Source: Company, Jefferies estimates

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

Express PTL - High double-digit revenue growth to help profitability turnaround

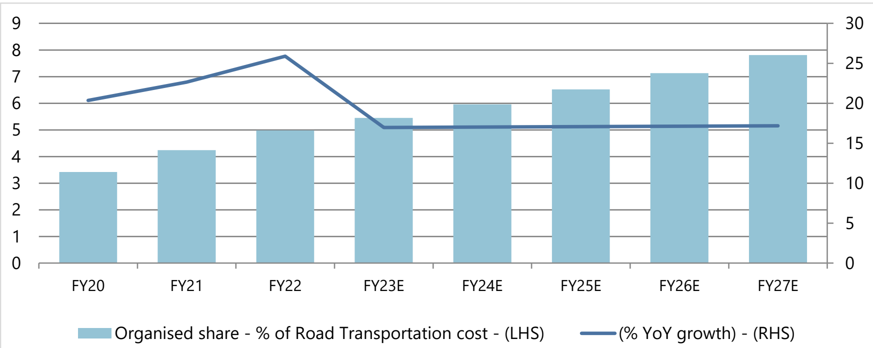
Lowering logistics cost on mind, organized share to rise: Minister of Commerce and Industry Piyush Goyal stated India targets dropping logistics costs to less than 10% of GDP from the current 14-15% in the next five years. We believe lowering indirect costs through making the network and infrastructure efficient, aided by GST, should see a move in that direction by FY26-27E. Our estimates factor in indirect costs falling to 3-4% of GDP and direct costs remaining flattish by FY26-27E. Road transportation would remain the dominant share, after factoring in DFC commissioning leading to traffic shift. However, road should remain at least 50% of India's direct logistics cost even by FY26-27, as only the Western and Eastern Freight Corridors are likely to be commissioned.

Exhibit 23 - Global comparison of logistics market

USD bn	US	China	India
GDP	21,000	14,700	2,700
Logistics spend (USD bn)	1,600	2,200	390
Logistics spend as a % of GDP	8	15	14
Direct spend as % of GDP	7	10	8
Indirect spend as % of GDP	1	5	6
Per Capita Logistics spend	4,860	1,540	280
Per Capita - Direct	4,460	1,050	150
Per Capita - Indirect	400	490	130
Share of top 10 organised players	15%	7-10%	0.5-1.5%
Avg warehouse size (sq. ft)	100-200k	20-50k	7-20k
Avg. truck size (ft)	48	45	20-35
Avg. distance daily travelled by trucks (km)	500+	423	150+

Source: IBEF (Department of Commerce), Delhivery DRHP, Jefferies estimates

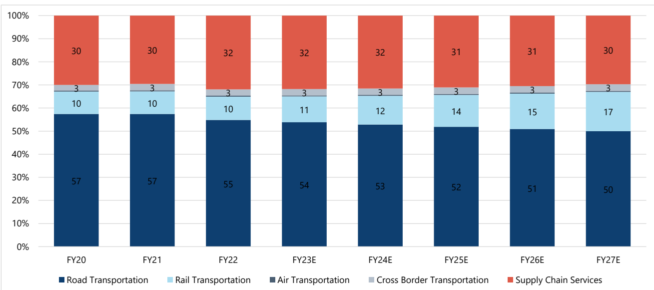
Exhibit 24 - Organised share in India road transport to increase gradually



Source: IBEF (Department of Commerce), Delhivery DRHP, Jefferies estimates

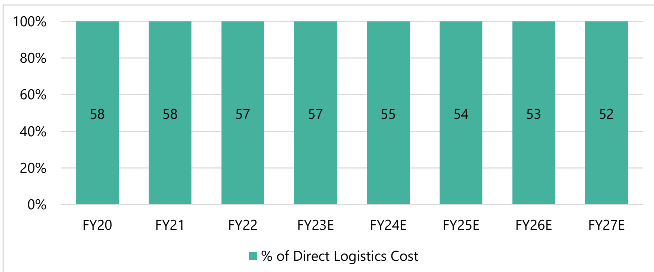
Road to still control India's cargo movement: We believe road should remain at least 50% of India's direct logistics cost by FY26-27 even post factoring in the Dedicated Freight Corridor commissioning, as there are only two legs - Western and Eastern. Air should see only moderate growth, considering cost dynamics.

Exhibit 25 - India cargo movement split ...



Source: IBEF (Department of Commerce), Delhivery DRHP, Jefferies estimates

Exhibit 26 - ... road transport to contribute 50%+ to direct logistics cost

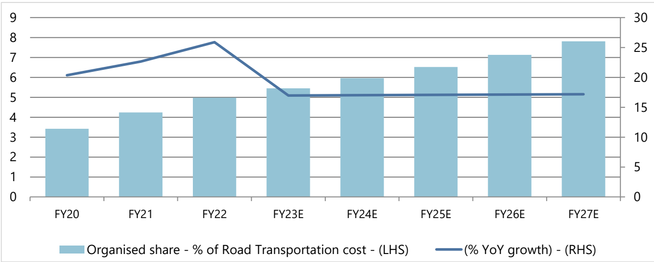


Source: IBEF (Department of Commerce), Delhivery DRHP, Jefferies estimates

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

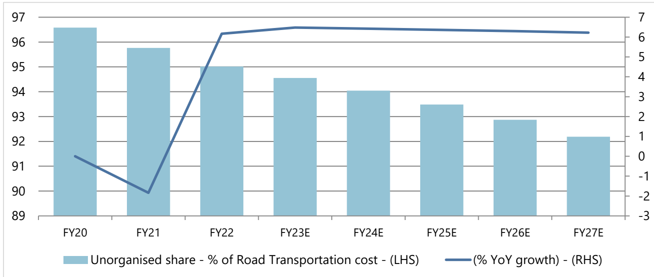
Organised road sector - long way to go : According to our industry channel checks, India's trucking industry is highly fragmented with 75% of trucking inventory being with those who own fewer than five trucks. Also, barely 10% have 20 trucks or more, and single truck owners account for the remainder. We believe the logistics theme revolves around formalisation of the Indian economy, with GST being a big driver of this. . Our estimates factor in the organised road transportation market growing at 23% CAGR in FY22-26E.

Exhibit 27 - Organised share in India road transport to increase gradually ...



Source: IBEF (Department of Commerce), Delhivery DRHP, Jefferies estimates

Exhibit 28 - ... vs declining trend in unorganised



Source: IBEF (Department of Commerce), Delhivery DRHP, Jefferies estimates

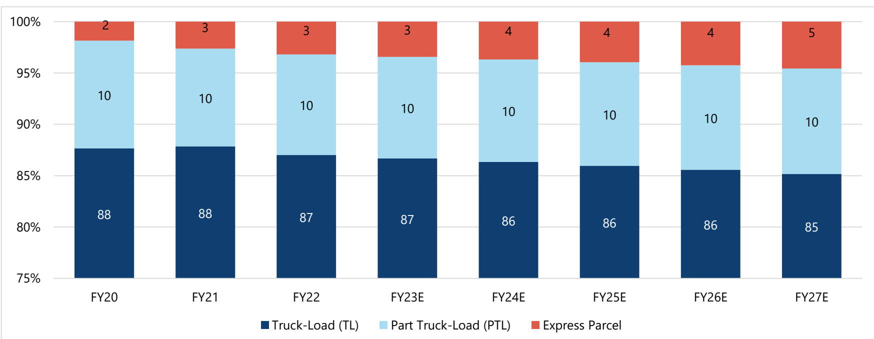
Organised players challenging traditional logistics chain: Traditional logistics chain involved customers approaching transporters who would coordinate with truckers through brokers to transport goods and services. Brokerage charges tend to be 3-8% of rates booked for the cargo. Typically, a broker would have connected with 10-200 truckers across 10-40 fleet owners and arrange for transportation. Truck *mandis* (marketplaces for trucks) are the main source for truckers in smaller towns in particular. Organised players like Gati, TCIE, and Delhivery among others, have eliminated the broker and are now directly reaching out to truckers. Margins have improved as they do not pay broker fees and the cargo scale helps them to have return carry. Our estimates factor in the organised road transportation market growing at 20%+ CAGR in FY21-27E, as it has in the past five years

Exhibit 29 - Traditional Logistics chain - organised players are eliminating brokers

Source: IBEF (Department of Commerce), Delhivery DRHP, Jefferies

Full truck-load (FTL) has major chunk of India's road transport followed by PTL and express parcel (EP): As of FY20, 88% of the road transportation market is FTL, 10% PTL and 2% Express Parcel (EP). PTL has been rising at 8-10% CAGR in the past five years, of which express PTL is nearly one-fourth. We estimate 20%+ CAGR over FY20- FY27E, which could see upside as GST implementation is driving economy formalisation and plugging leakages in road logistics. EP is the fastest growing among all given strong growth in e-commerce, which is 60%. We believe this should eventually be 70-75% of EP by FY26-27E.

Exhibit 30 - Share of PTL to be steady and EP should rise ahead

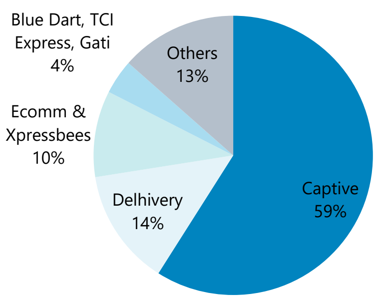


Source: Jefferies estimates

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

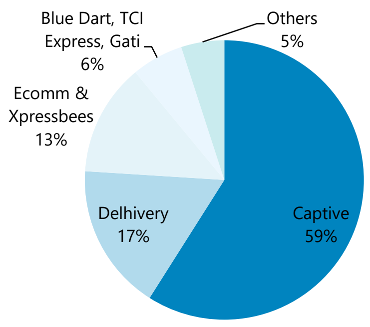
EP - 95% organised; PTL - 89% unorganised: We believe the EP market in India should grow at 30% CAGR in the medium term, driven by e-commerce. Our estimates factor captive to retain a dominant share, but larger organised players gaining from the smaller ones given scale. We are possibly being conservative as with the passage of time a larger number of players are selling their products on the e-commerce platform through their brands vs the dominant Amazon and Flipkart. This could lead to a drop in the share of the captive logistics chain in favor of third-party logistics (3PL) players like Gati, TCIE, and Delhivery. We believe larger organised players in PTL are in a sweet spot, as they will benefit from organised gaining share and also gaining share from smaller players within the organised space.

Exhibit 31 - FY22 EPL mkt share - Captive to remain dominant...



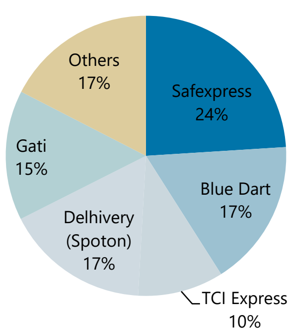
Source: Delhivery, Jefferies estimates

Exhibit 32 - ...even in FY26E



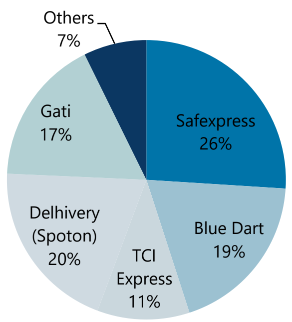
Source: Delhivery, Jefferies estimates

Exhibit 33 - PTL (FY22) mkt share to see larger organised players...



Source: Company annual reports, Jefferies estimates

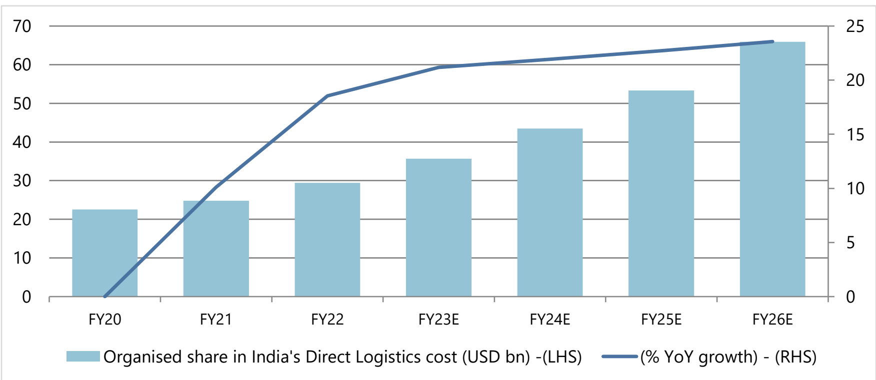
Exhibit 34 - ...gain share even in the organised pie by FY26E



Source: Company annual reports, Jefferies estimates

Organised share to nearly double from FY20-27E: Overall direct logistics cost should see the organised share rise to 19% from 10%, implying a 20% CAGR similar to the past five-year trend. We believe there is potential for this to surprise on the upside, particularly as listing of players in surface transportation gives the sector further access to capital

Exhibit 35 - Organised share in India's direct logistics cost to grow at a much faster pace ...



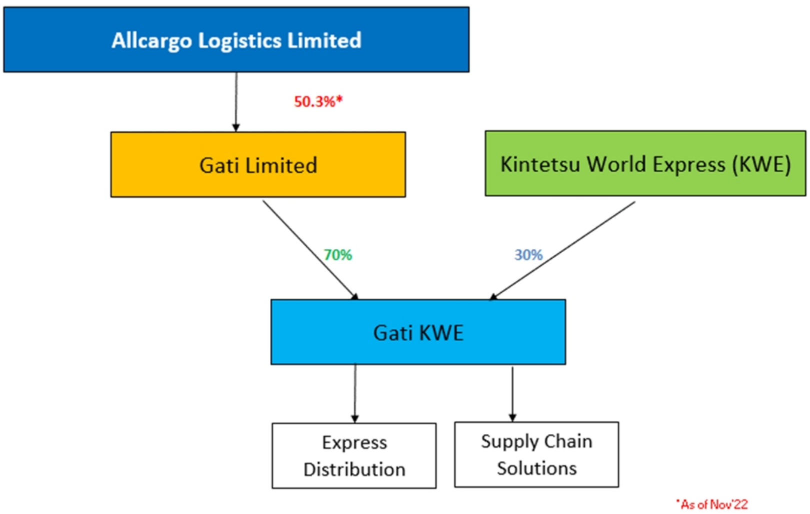
Source: IBEF (Department of Commerce), Delhivery DRHP, Jefferies estimates

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

About GATI: Gati Ltd is India's pioneer in express distribution. It has transformed itself from an express distribution service provider to multiple services and solution provider in logistics and distribution business. Gati's pan-India warehousing facilities also play an important role in offering customised Supply chain solutions to customers. With a strong presence through its nationwide extensive network across India, Gati offers express services to 99% of the Government approved pincodes in India i.e more than 19,800 pincodes covering 735 out of 739 districts in India

2020 – Acquired strategic stake in GATI: In December 2019, ALL initiated a strategic decision to acquire Gati. After acquiring Gati in 2020, ALL is the promoter and the single largest shareholder of Gati with 50.3% ownership, followed by Kintetsu World Express (KWE) with about 3.3% shares in the company. Gati-Kintetsu Express Private Ltd (Gati-KWE) is a JV between Gati and KWE where KWE holds a 30% stake in Gati-KWE and Gati holds the remaining 70%. KWE's 30% stake will be acquired by ALL, taking its shareholding in Gati to 65%. The Gati acquisition will enable ALL to offer express distribution and first and last-mile delivery services, thus creating unique synergies that would help offer a range of international and domestic logistics services to customers globally.

Exhibit 36 - Corporate structure of GATI



Source: Company, Jefferies

GATI 2.0- Next leg of growth: Under GATI 2.0, Management has highlighted 5 key pillars, 1) Digitisation 2) Sales acceleration 3) Infrastructure 4) Operations, and 5) Talent to boost revenue and improve margins. Management has guided for Rs30 bn revenue (2x of FY22) and 11-12% EBITDA margin (2.3% in FY22) by FY26E. We believe "Sales acceleration", "Infrastructure" and "Operations" would play a major role in transforming Gati's profitable journey.

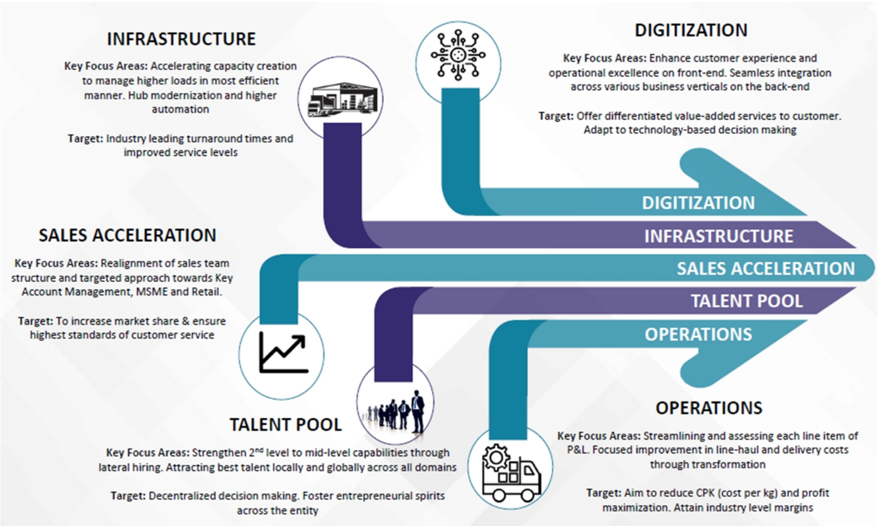
Under "Sales acceleration", the company has implemented territorial mapping and has identified 30 new territories across 3 zones for market entry with a view to increasing overall market share and eventually revenue. Also, the focus shifts towards MSME and retail accounts, by redesigning SME incentive policy for faster onboarding. Introduction of a customer loyalty program with the aim of reducing customer attrition and higher wallet share.

Under 'Infrastructure,' the core focus remains on accelerating capacity addition to manage higher loads efficiently. Recently the Nagpur and Guwahati distribution hubs were added in 2QFY23. There are three upcoming hubs (Mumbai, Indore, and Pune) in the west zone and three (Bengaluru, Hyderabad, and Cochin) in the south, which will be commissioned between 3QFY23-2QFY24.

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

Under "Operations", the focus is to reduce Cost per kg through improvement in line-haul and delivery costs. This would help them improve margins and move towards attaining industry-level margins.

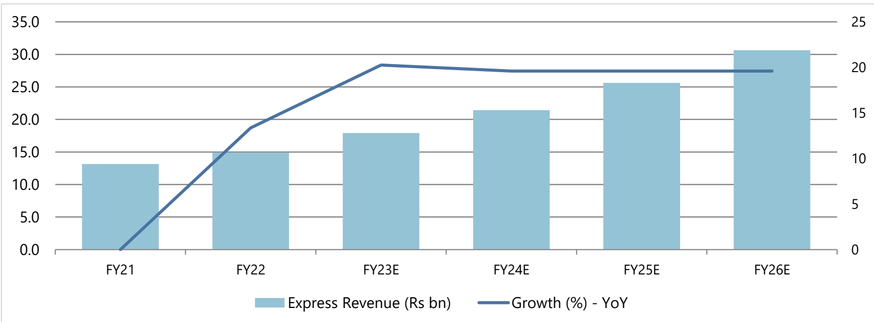
Exhibit 37 - Rs30 bn Revenue target by FY26E under GATI 2.0



Source: Company,Jefferies

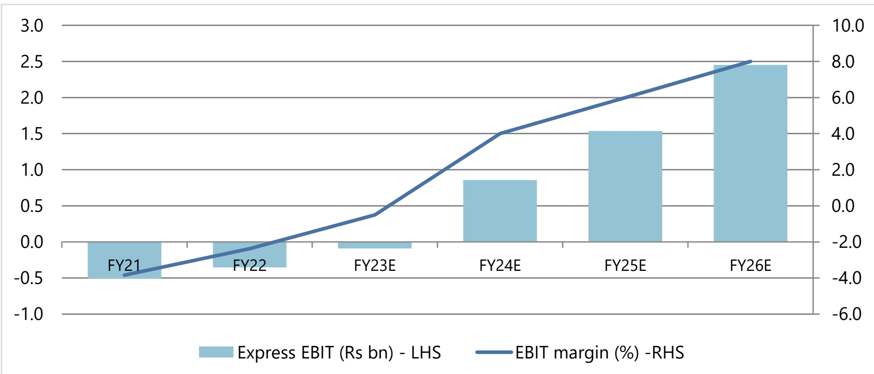
Express distribution revenue to see 20% CAGR: Our FY26E revenue of Rs30 bn is in-line with management guidance and with our view of double-digit PTL growth. Our 8% EBIT margin assumption is lower and could see upside surprise if guidance is met. We believe 2 factors should contribute to improvement 1) increasing revenue base through entering newer markets, 2) operational efficiency through higher utilisation.

Exhibit 38 - Express distribution to see 20% revenue CAGR over FY22-26E ...



Source: Company, Jefferies estimates

Exhibit 39 - ... EBIT to turn positive from FY24E onwards



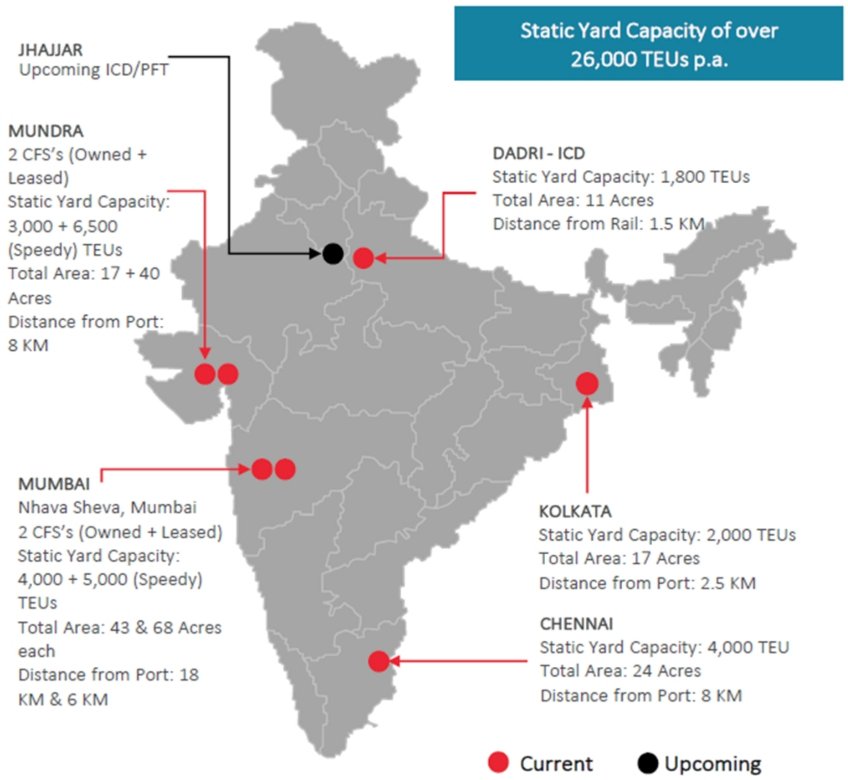
Source: Company, Jefferies estimates

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

Digitalisation through Gati Genie: The WhatsApp chatbot provides instant services such as PIN Code serviceability check, track and trace, rate and transit time calculator, pick up registration, response to queries and concerns, etc., so that getting information on shipments is as easy as sending a WhatsApp message.

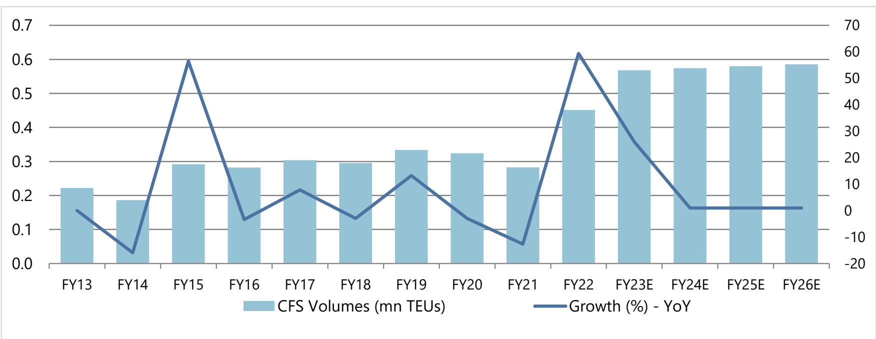
CFS and Logistics parks (~5% of revenue / 18% of EBITDA): ALL operates a total of 7 CFS/ICDs (capacity of 8,50,000 TEUs.) across key locations namely JNPT, Mundra, Chennai, Kolkata, and Dadri. This segment's operations involve import/export cargo stuffing and de-stuffing, customs clearance, and other related ancillary services to both importers and exporters. The company is building a greenfield ICD in Jhajjar, Haryana, to capitalise on the hinterland container traffic in the NCR region. In CFS segment, ALL's stations are present in ports that handle over 80% of India's containerisation giving them a strategic location advantage. We believe ALL's CFS business should benefit from overall port volume growth, increasing use of containerised cargo, leveraging the leadership position in MTO business. It is also well-positioned to capture the DFC-driven ICD opportunity.

Exhibit 40 - Market leader in JNPT and Mundra CFS



Source: Company, Jefferies

Exhibit 41 - CFS volume to see 16% CAGR over FY21-26E

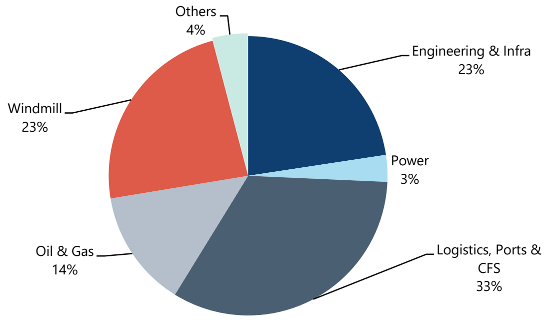


Source: Company, Jefferies estimates

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

In the PES segment, the company completed the sale of its Project transport business in FY22, in-line with the strategy to divest non-core business. Currently, this segment involves equipment hiring business which includes crane and container handling equipment rental. The company caters to sectors like Power, Oil & Gas, Refineries, Cement, Steel, Ports, and Infrastructure.

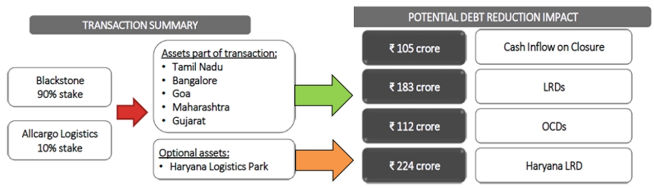
Exhibit 42 - P&E segment revenue driven by infra-related segments (FY21)



Source: Company, Jefferies

ALL has developed 6 mn sq ft of Grade-A warehouses across Delhi, Maharashtra, Gujarat, Goa, Bangalore, Haryana, and Tamil Nadu. It has entered into an agreement with Blackstone in Jan'2020 to sell a 90% stake in various SPVs. The deal is expected to close in a month's time, post which Rs3-4 bn debt should go off the books, and revenues/profits go to Blackstone. Additionally, there would be an actual additional cash inflow of Rs1.1 bn.

Exhibit 43 - Blackstone transaction summary

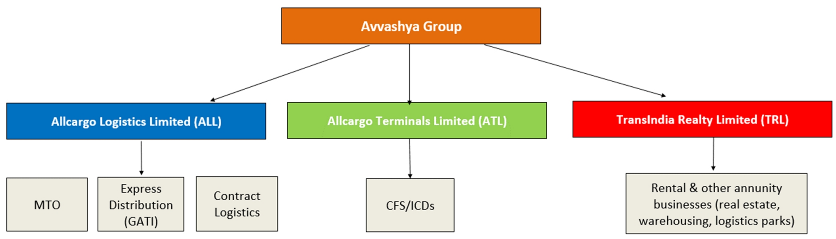


Source: Company, Jefferies

Demerger - to enhance shareholder value: In Dec. 2021, ALL's board approved the proposed scheme of demerger, which would lead to the demerger of CFS/ICD business into Allcargo Terminals (ATL), and real estate, including warehousing, logistics parks, and other rental businesses into TransIndia Realty & Logistics Parks Limited (TRL). ALL will focus on MTO and Gati.

As per the proposed scheme, shareholders of ALL will get one share each of the two new companies for every one share held in ALL. This strategic move will enable businesses to accelerate their sustainable growth by exploring opportunities to tap into new markets and innovative products and services, individually or inorganically, through partners. The scheme has received approval from the exchanges. NCLT filing remains on track to obtain approvals. The demerger is expected to close by Apr-May 2023.

Exhibit 44 - Proposed scheme of demerger



Source: Company, Jefferies

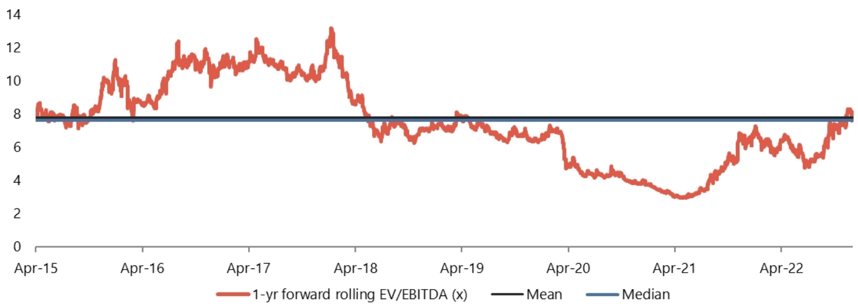
This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

Business mix changing with a domestic bias in the medium-term: 17% of ALL's EBIT contribution will be domestic express logistics by FY26E, with step-jumps after as margins further improve with rising volumes. ALL traded at an avg 13x PE in the last 7 years, with our current estimates reflecting some margin correction in MTO. We believe the company will trade at some premium to this average as domestic express, where peers are trading at upwards of 25x PE 1-yr forward, sees its share rising. Additionally, confidence in the MTO business as it shows margins above 6% sustainably will also help. Our PT of Rs500 is based on 15x PE Sept. 24E, which we believe could see further upside if express does better than expectations. The demerger is the icing on the cake as the real estate is likely to get better valuations as a standalone entity. Our PT implies Rs40/sh for Gati vs Rs40 based on the current mkt cap. Downside risks: 1) Sharp margin correction in MTO 2) Gati taking longer to turn around.

Exhibit 45 - PE should re-rate as the domestic express business share rises

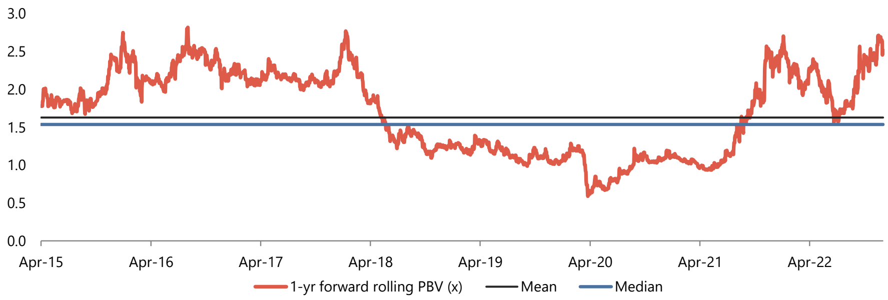
Source: Jefferies, Company data

Exhibit 46 - EV/EBITDA should also re-rate...



Source: Jefferies, Company data

Exhibit 47 - ...and also the PB



Source: Bloomberg, Jefferies

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

Exhibit 48 - Income statement

Rs mn	FY20	FY21	FY22	FY23E	FY24E	FY25E	FY26E
Income from operations	**73,462**	**104,981**	**200,721**	**187,022**	**168,746**	**181,888**	**195,898**
Cost of services rendered	53,579	80,431	162,048	145,764	125,486	134,261	143,242
as a % of sales	73	77	81	78	74	74	73
Personnel expenses	11,122	13,153	16,732	18,405	20,245	22,270	24,497
as a % of sales	15	13	8	10	12	12	13
Administrative and other expenses	3,727	5,026	6,779	7,457	8,203	9,023	9,925
as a % of sales	5	5	3	4	5	5	5
Total Expenditure	68,428	98,643	185,564	171,626	153,934	165,554	177,664
EBITDA	**5,035**	**6,338**	**15,156**	**15,396**	**14,812**	**16,334**	**18,234**
Other non-operational income	413	554	423	800	900	1,000	1,100
Interest income/expense	685	1,356	1,100	1,420	1,050	760	500
Depreciation & amortisation	2,316	3,061	3,434	3,674	3,968	4,285	4,628
Miscellaneous exp. Written off	0	0	0	0	0	0	0
Extraordinary income/expense	547	-1,053	644	0	0	0	0
PBT	**2,994**	**1,421**	**11,690**	**11,102**	**10,694**	**12,288**	**14,206**
Tax	711	640	2,856	3,331	2,695	3,097	3,580
Tax rate%	24	45	24	30	25	25	25
PAT (Reported)	**2,283**	**781**	**8,834**	**7,772**	**7,999**	**9,192**	**10,626**
PAT (Adjusted) post MI	**1,915**	**3,011**	**8,748**	**7,522**	**7,649**	**8,742**	**10,026**

Source: Company data, Jefferies estimates

Exhibit 49 - Balance sheet

Rs mn	FY20	FY21	FY22	FY23E	FY24E	FY25E	FY26E
Share Capital	491	491	491	491	491	491	491
Reserves & surplus	20,966	22,344	31,126	38,161	45,177	52,895	61,555
Networth	**21,457**	**22,835**	**31,618**	**38,652**	**45,668**	**53,386**	**62,046**
Preference capital	266	3,314	3,837	3,837	3,837	3,837	3,837
Total loan funds	**14,416**	**20,654**	**23,173**	**18,173**	**13,173**	**8,173**	**8,173**
Amt. recd. Und. Long term infra	0	0	0	0	0	0	0
Deferred tax	-1,092	-451	-111	-111	-111	-111	-111
Sources of funds	**35,047**	**46,352**	**58,517**	**60,551**	**62,567**	**65,285**	**73,946**
Fixed assets	27,354	39,747	43,122	48,122	53,122	58,122	63,122
Less: Depreciation/amortisation	11,035	13,763	15,061	18,735	22,703	26,988	31,616
CWIP	2,690	23	20	20	20	20	20
Net block	**19,008**	**26,007**	**28,081**	**29,407**	**30,440**	**31,154**	**31,526**
Investments	5,098	3,241	5,666	6,166	6,666	7,166	7,666
Liquid Investments	71	311	1,460	1,460	1,460	1,460	1,460
Current Assets	**24,447**	**37,768**	**55,294**	**48,856**	**46,336**	**49,999**	**60,091**
Inventories	78	97	57	0	0	0	0
Sundry debtors	11,501	25,988	37,856	30,743	27,739	29,899	32,202
Cash & bank balance	3,080	3,812	6,444	5,739	4,986	5,128	11,419
Loans and advances	4,295	4,819	6,835	7,860	8,646	9,511	10,462
Other current assets	5,494	3,052	4,103	4,513	4,965	5,461	6,007
Current liabilities & provisions	**16,870**	**26,329**	**37,390**	**30,743**	**27,739**	**29,899**	**32,202**
Advances from customers	46	0	0	0	0	0	0
Other Liabilities	16,824	26,329	37,390	30,743	27,739	29,899	32,202
Provision for tax	0	0	0	0	0	0	0
Provision for dividend	0	0	0	0	0	0	0
Net current assets	7,577	11,440	17,904	18,113	18,597	20,100	27,888
Miscellaneous Expenditure	0	0	0	0	0	0	0
Intangibles	3,365	5,664	6,865	6,865	6,865	6,865	6,865
Application of funds	**35,047**	**46,352**	**58,517**	**60,551**	**62,567**	**65,285**	**73,946**

Source: Company data, Jefferies estimates

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

Exhibit 50 - Cash flow statement

Rs mn	FY20	FY21	FY22	FY23E	FY24E	FY25E	FY26E
PBIT	3,678	2,777	12,790	12,522	11,744	13,048	14,706
Add: depreciation	2,316	3,061	3,434	3,674	3,968	4,285	4,628
Less other income	-413	-554	-423	-800	-900	-1,000	-1,100
Working capital changes	-2,833	-3,130	-3,833	-913	-1,237	-1,361	-1,497
Less: tax	-1,345	-1,268	-3,280	-3,331	-2,695	-3,097	-3,580
Others	1,222	2,411	-183	0	0	0	0
Net cash from operations (a)	**2,626**	**3,298**	**8,503**	**11,153**	**10,880**	**11,876**	**13,157**
Change in fixed assets	-5,517	-9,727	-3,372	-5,000	-5,000	-5,000	-5,000
Change in investments	-2,704	1,857	-2,426	-500	-500	-500	-500
Add: other income	413	554	423	800	900	1,000	1,100
Others	-1,053	7,332	-539	0	0	0	0
Cash flow from inv. (b)	**-8,862**	**16**	**-5,914**	**-4,700**	**-4,600**	**-4,500**	**-4,400**
Proceeds from issue of equity	0	0	0	0	0	0	0
Change in borrowings	9,446	6,238	2,520	-5,000	-5,000	-5,000	0
Dividends paid + dividend tax	-737	-491	-737	-737	-983	-1,474	-1,966
Interest paid	-685	-1,356	-1,100	-1,420	-1,050	-760	-500
Others	-1,115	-6,971	-640	0	0	0	0
Financial cash flow (c)	**6,909**	**-2,581**	**42**	**-7,157**	**-7,033**	**-7,234**	**-2,466**
Net inc/dec in cash (a+b+c)	673	733	2,631	-704	-753	142	6,291
Add: opening cash balance	2,406	3,080	3,812	6,444	5,739	4,986	5,128
Closing cash balance	3,080	3,812	6,444	5,739	4,986	5,128	11,419

Source: Company data, Jefferies estimates

Exhibit 51 - Key Ratios

Particulars	FY20	FY21	FY22	FY23E	FY24E	FY25E	FY26E
Net debt:equity	0.5	0.7	0.5	0.3	0.1	0.0	-0.1
Diluted EPS (Rs)	7.8	12.3	35.6	30.6	31.1	35.6	40.8
BVPS (Rs)	87.3	92.9	128.7	157.3	185.9	217.3	252.5
Dividend per share	3.00	2.00	3.00	3.00	4.00	6.00	8.00
Dividend payout	38.5	16.3	8.4	9.8	12.8	16.9	19.6
Valuation (x)							
Diluted PE	50.4	32.0	11.0	12.8	12.6	11.0	9.6
Diluted EV/EBITDA	21.4	17.8	7.4	7.0	7.0	6.0	5.0
Diluted PSR	1.3	0.9	0.5	0.5	0.6	0.5	0.5
PBV	4.5	4.2	3.1	2.5	2.1	1.8	1.6
Profitability Ratios							
ROCE %	12.4	6.8	24.4	21.0	19.1	20.4	21.1
ROE%	9.2	13.6	32.1	21.4	18.1	17.7	17.4
Turnover Ratios							
Inventory in days	0	0	0	0	0	0	0
Debtor days	52	65	58	60	60	60	60
Creditors turnover	76	75	58	60	60	60	60
Wkg. Capital cycle	-24	-10	0	0	0	0	0

Source: Company data, Jefferies estimates

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

We would like to thank Harsh Vijaykumar Shah, employee of Evalueserve Inc., for providing research support services to our preparation of this report.

Company Description

Allcargo Logistics

Allcargo Logistics is a top logistics company in India and a one-stop supply-chain management solution that provides logistics solutions across more than 180 countries.

Company Valuation/Risks

Allcargo Logistics

Buy with a PT Rs500, valuing the company at 15x PE Sept 24E. Downside risks: 1) MTO margins seeing sharper fall 2) Write-offs in Gati

Analyst Certification:

I, Lavina Quadros, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

Registration of non-US analysts: Lavina Quadros is employed by Jefferies India Private Limited, a non-US affiliate of Jefferies LLC and is not registered/ qualified as a research analyst with FINRA. This analyst(s) may not be an associated person of Jefferies LLC, a FINRA member firm, and therefore may not be subject to the FINRA Rule 2241 and restrictions on communications with a subject company, public appearances and trading securities held by a research analyst.

Registration of non-US analysts: Harsh Vijaykumar Shah is employed by Jefferies India Private Limited, a non-US affiliate of Jefferies LLC and is not registered/qualified as a research analyst with FINRA. This analyst(s) may not be an associated person of Jefferies LLC, a FINRA member firm, and therefore may not be subject to the FINRA Rule 2241 and restrictions on communications with a subject company, public appearances and trading securities held by a research analyst.

As is the case with all Jefferies employees, the analyst(s) responsible for the coverage of the financial instruments discussed in this report receives compensation based in part on the overall performance of the firm, including investment banking income. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Aside from certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgement.

Investment Recommendation Record

(Article 3(1)e and Article 7 of MAR)

Recommendation Published	January 3, 2023 , 09:21 ET.
Recommendation Distributed	January 3, 2023 , 11:30 ET.

Company Specific Disclosures

Explanation of Jefferies Ratings

Buy - Describes securities that we expect to provide a total return (price appreciation plus yield) of 15% or more within a 12-month period.

Hold - Describes securities that we expect to provide a total return (price appreciation plus yield) of plus 15% or minus 10% within a 12-month period.

Underperform - Describes securities that we expect to provide a total return (price appreciation plus yield) of minus 10% or less within a 12-month period.

The expected total return (price appreciation plus yield) for Buy rated securities with an average security price consistently below $10 is 20% or more within a 12-month period as these companies are typically more volatile than the overall stock market. For Hold rated securities with an average security price consistently below $10, the expected total return (price appreciation plus yield) is plus or minus 20% within a 12-month period. For Underperform rated securities with an average security price consistently below $10, the expected total return (price appreciation plus yield) is minus 20% or less within a 12-month period.

NR - The investment rating and price target have been temporarily suspended. Such suspensions are in compliance with applicable regulations and/or Jefferies policies.

CS - Coverage Suspended. Jefferies has suspended coverage of this company.

NC - Not covered. Jefferies does not cover this company.

Restricted - Describes issuers where, in conjunction with Jefferies engagement in certain transactions, company policy or applicable securities regulations prohibit certain types of communications, including investment recommendations.

Monitor - Describes securities whose company fundamentals and financials are being monitored, and for which no financial projections or opinions on the investment merits of the company are provided.

Valuation Methodology

Jefferies' methodology for assigning ratings may include the following: market capitalization, maturity, growth/value, volatility and expected total return over the next 12 months. The price targets are based on several methodologies, which may include, but are not restricted to, analyses of market risk, growth rate, revenue stream, discounted cash flow (DCF), EBITDA, EPS, cash flow (CF), free cash flow (FCF), EV/EBITDA, P/E, PE/growth, P/CF, P/FCF,

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

premium (discount)/average group EV/EBITDA, premium (discount)/average group P/E, sum of the parts, net asset value, dividend returns, and return on equity (ROE) over the next 12 months.

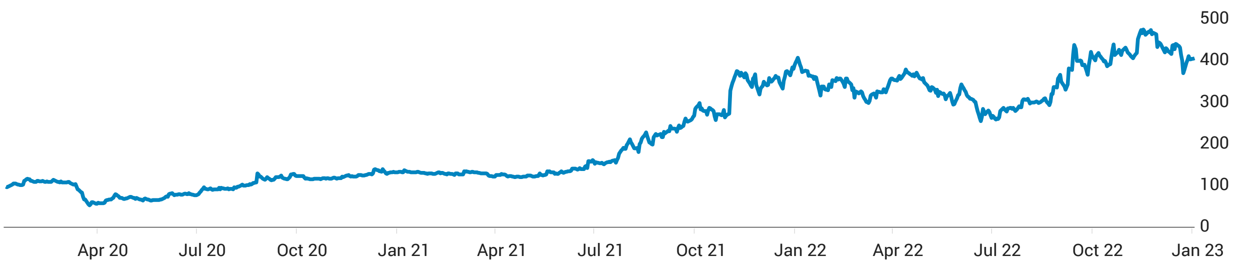
Jefferies Franchise Picks

Jefferies Franchise Picks include stock selections from among the best stock ideas from our equity analysts over a 12 month period. Stock selection is based on fundamental analysis and may take into account other factors such as analyst conviction, differentiated analysis, a favorable risk/reward ratio and investment themes that Jefferies analysts are recommending. Jefferies Franchise Picks will include only Buy rated stocks and the number can vary depending on analyst recommendations for inclusion. Stocks will be added as new opportunities arise and removed when the reason for inclusion changes, the stock has met its desired return, if it is no longer rated Buy and/or if it triggers a stop loss. Stocks having 120 day volatility in the bottom quartile of S&P stocks will continue to have a 15% stop loss, and the remainder will have a 20% stop. Franchise Picks are not intended to represent a recommended portfolio of stocks and is not sector based, but we may note where we believe a Pick falls within an investment style such as growth or value.

Risks which may impede the achievement of our Price Target

This report was prepared for general circulation and does not provide investment recommendations specific to individual investors. As such, the financial instruments discussed in this report may not be suitable for all investors and investors must make their own investment decisions based upon their specific investment objectives and financial situation utilizing their own financial advisors as they deem necessary. Past performance of the financial instruments recommended in this report should not be taken as an indication or guarantee of future results. The price, value of, and income from, any of the financial instruments mentioned in this report can rise as well as fall and may be affected by changes in economic, financial and political factors. If a financial instrument is denominated in a currency other than the investor's home currency, a change in exchange rates may adversely affect the price of, value of, or income derived from the financial instrument described in this report. In addition, investors in securities such as ADRs, whose values are affected by the currency of the underlying security, effectively assume currency risk.

Rating and Price Target History for: Allcargo Logistics (AGLL IN) as of 01-02-2023



Notes: Each box in the Rating and Price Target History chart above represents actions over the past three years in which an analyst initiated on a company, made a change to a rating or price target of a company or discontinued coverage of a company.

Legend:

I: Initiating Coverage

D: Dropped Coverage

B: Buy

H: Hold

UP: Underperform

Distribution of Ratings

			IB Serv./Past12 Mos.		JIL Mkt Serv./Past12 Mos.	
	Count	Percent	Count	Percent	Count	Percent
BUY	1975	59.85%	66	3.34%	14	0.71%
HOLD	1148	34.79%	9	0.78%	1	0.09%
UNDERPERFORM	177	5.36%	1	0.56%	0	0.00%

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

Other important disclosures

Other Important Disclosures

Jefferies does business and seeks to do business with companies covered in its research reports, and expects to receive or intends to seek compensation for investment banking services among other activities from such companies. As a result, investors should be aware that Jefferies may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Jefferies Equity Research refers to research reports produced by analysts employed by one of the following Jefferies Group LLC ("Jefferies") group companies:

United States: Jefferies LLC which is an SEC registered broker-dealer and a member of FINRA (and distributed by Jefferies Research Services, LLC, an SEC registered Investment Adviser, to clients paying separately for such research).

United Kingdom: Jefferies International Limited, which is authorized and regulated by the Financial Conduct Authority; registered in England and Wales No. 1978621; registered office: 100 Bishopsgate, London EC2N 4JL; telephone +44 (0)20 7029 8000; facsimile +44 (0)20 7029 8010.

Germany: Jefferies GmbH, which is authorized and regulated by the Bundesanstalt fuer Finanzdienstleistungsaufsicht, BaFin-ID: 10150151; registered office: Bockenheimer Landstr. 24, 60232 Frankfurt a.M., Germany; telephone: +49 (0) 69 719 1870

Hong Kong: Jefferies Hong Kong Limited, which is licensed by the Securities and Futures Commission of Hong Kong with CE number ATS546; located at Level 26, Two International Finance Center, 8 Finance Street, Central, Hong Kong; telephone: +852 3743 8000.

Singapore: Jefferies Singapore Limited, which is licensed by the Monetary Authority of Singapore; located at 80 Raffles Place #15-20, UOB Plaza 2, Singapore 048624, telephone: +65 6551 3950.

Japan: Jefferies (Japan) Limited, Tokyo Branch, which is a securities company registered by the Financial Services Agency of Japan and is a member of the Japan Securities Dealers Association; located at Tokyo Midtown Hibiya 30F Hibiya Mitsui Tower, 1-1-2 Yurakucho, Chiyoda-ku, Tokyo 100-0006; telephone +813 5251 6100; facsimile +813 5251 6101.

India: Jefferies India Private Limited (CIN - U74140MH2007PTC200509), licensed by the Securities and Exchange Board of India for: Stock Broker (NSE & BSE) INZ000243033, Research Analyst INH000000701 and Merchant Banker INM000011443, located at 42/43, 2 North Avenue, Maker Maxity, Bandra-Kurla Complex, Bandra (East), Mumbai 400 051, India; Tel +91 22 4356 6000.

Australia: Jefferies (Australia) Pty Limited (ACN 623 059 898), which holds an Australian financial services license (AFSL 504712) and is located at Level 22, 60 Martin Place, Sydney NSW 2000; telephone +61 2 9364 2800.

This report was prepared by personnel who are associated with Jefferies (Jefferies International Limited, Jefferies GmbH, Jefferies Hong Kong Limited, Jefferies Singapore Limited, Jefferies (Japan) Limited, Tokyo Branch, Jefferies India Private Limited), and Jefferies (Australia) Pty Ltd; or by personnel who are associated with both Jefferies LLC and Jefferies Research Services LLC ("JRS"). Jefferies LLC is a US registered broker-dealer and is affiliated with JRS, which is a US registered investment adviser. JRS does not create tailored or personalized research and all research provided by JRS is impersonal. If you are paying separately for this research, it is being provided to you by JRS. Otherwise, it is being provided by Jefferies LLC. Jefferies LLC, JRS, and their affiliates are collectively referred to below as "Jefferies". Jefferies may seek to do business with companies covered in this research report. As a result, investors should be aware that Jefferies may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only one of many factors in making their investment decisions. Specific conflict of interest and other disclosures that are required by FINRA and other rules are set forth in this disclosure section.

* * *

If you are receiving this report from a non-US Jefferies entity, please note the following: Unless prohibited by the provisions of Regulation S of the U.S. Securities Act of 1933, as amended, this material is distributed in the United States by Jefferies LLC, which accepts responsibility for its contents in accordance with the provisions of Rule 15a-6 under the US Securities Exchange Act of 1934, as amended. Transactions by or on behalf of any US person may only be effected through Jefferies LLC. In the United Kingdom and European Economic Area this report is issued and/or approved for distribution by Jefferies International Limited ("JIL") and/or Jefferies GmbH and is intended for use only by persons who have, or have been assessed as having, suitable professional experience and expertise, or by persons to whom it can be otherwise lawfully distributed.

JIL and Jefferies GmbH allows its analysts to undertake private consultancy work. JIL and Jefferies GmbH's conflicts management policy sets out the arrangements JIL and Jefferies GmbH employs to manage any potential conflicts of interest that may arise as a result of such consultancy work. Jefferies LLC, JIL, Jefferies GmbH and their affiliates, may make a market or provide liquidity in the financial instruments referred to in this report; and where they do make a market, such activity is disclosed specifically in this report under "company specific disclosures".

For Canadian investors, this material is intended for use only by professional or institutional investors. None of the investments or investment services mentioned or described herein is available to other persons or to anyone in Canada who is not a "Designated Institution" as defined by the Securities Act (Ontario). In Singapore, Jefferies Singapore Limited ("JSL") is regulated by the Monetary Authority of Singapore. For investors in the Republic of Singapore, where this material is prepared and issued by a Jefferies affiliate outside of Singapore, it is distributed by JSL pursuant to Regulation 32C of the Financial Advisers Regulations. The material contained in this document is intended solely for accredited, expert or institutional investors, as defined under the Securities and Futures Act 2001 (Singapore). If there are any matters arising from, or in connection with this material, please contact JSL, located at 80 Raffles Place #15-20, UOB Plaza 2, Singapore 048624, telephone: +65 6551 3950. In Japan, this material is issued and distributed by Jefferies (Japan) Limited to institutional investors only. In Hong Kong, this report is issued and approved by Jefferies Hong Kong Limited and is intended for use only by professional investors as defined in the Hong Kong Securities and Futures Ordinance and its subsidiary legislation. In the Republic of China (Taiwan), this report should not be distributed. The research in relation to this report is conducted outside the People's Republic of China ("PRC"). This report does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. In India, this report is made available by Jefferies India Private Limited. In Australia, this report is issued and/or approved for distribution by, or on behalf of, Jefferies (Australia) Securities Pty Ltd (ACN 610 977 074), which holes an Australian financial services license (AFSL 487263). It is directed solely at wholesale clients within the meaning of the Corporations Act 2001 (Cth) of Australia (the "Corporations Act"), in connection with their consideration of any investment or investment service that is the subject of this report. This report may contain general financial product advice.

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.

Where this report refers to a particular financial product, you should obtain a copy of the relevant product disclosure statement or offer document before making any decision in relation to the product. Recipients of this document in any other jurisdictions should inform themselves about and observe any applicable legal requirements in relation to the receipt of this document.

This report is not an offer or solicitation of an offer to buy or sell any security or derivative instrument, or to make any investment. Any opinion or estimate constitutes the preparer's best judgment as of the date of preparation, and is subject to change without notice. Jefferies assumes no obligation to maintain or update this report based on subsequent information and events. Jefferies, and their respective officers, directors, and employees, may have long or short positions in, or may buy or sell any of the securities, derivative instruments or other investments mentioned or described herein, either as agent or as principal for their own account. This material is provided solely for informational purposes and is not tailored to any recipient, and is not based on, and does not take into account, the particular investment objectives, portfolio holdings, strategy, financial situation, or needs of any recipient. As such, any advice or recommendation in this report may not be suitable for a particular recipient. Jefferies assumes recipients of this report are capable of evaluating the information contained herein and of exercising independent judgment. A recipient of this report should not make any investment decision without first considering whether any advice or recommendation in this report is suitable for the recipient based on the recipient's particular circumstances and, if appropriate or otherwise needed, seeking professional advice, including tax advice. Jefferies does not perform any suitability or other analysis to check whether an investment decision made by the recipient based on this report is consistent with a recipient's investment objectives, portfolio holdings, strategy, financial situation, or needs.

By providing this report, neither JRS nor any other Jefferies entity accepts any authority, discretion, or control over the management of the recipient's assets. Any action taken by the recipient of this report, based on the information in the report, is at the recipient's sole judgment and risk. The recipient must perform his or her own independent review of any prospective investment. If the recipient uses the services of Jefferies LLC (or other affiliated broker-dealers), in connection with a purchase or sale of a security that is a subject of these materials, such broker-dealer may act as principal for its own accounts or as agent for another person. Only JRS is registered with the SEC as an investment adviser; and therefore neither Jefferies LLC nor any other Jefferies affiliate has any fiduciary duty in connection with distribution of these reports.

The price and value of the investments referred to herein and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

This report may contain forward looking statements that may be affected by inaccurate assumptions or by known or unknown risks, uncertainties, and other important factors. As a result, the actual results, events, performance or achievements of the financial product may be materially different from those expressed or implied in such statements.

This report has been prepared independently of any issuer of securities mentioned herein and not as agent of any issuer of securities. No Equity Research personnel have authority whatsoever to make any representations or warranty on behalf of the issuer(s). Any comments or statements made herein are those of the Jefferies entity producing this report and may differ from the views of other Jefferies entities.

This report may contain information obtained from third parties, including ratings from credit ratings agencies such as Standard & Poor's. Reproduction and distribution of third party content in any form is prohibited except with the prior written permission of the related third party. Jefferies does not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and is not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. Third-party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Neither Jefferies nor any third-party content provider shall be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs) in connection with any use of their content, including ratings. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.

Jefferies research reports are disseminated and available electronically, and, in some cases, also in printed form. Electronic research is simultaneously made available to all clients. This report or any portion hereof may not be reprinted, sold or redistributed without the written consent of Jefferies. Neither Jefferies nor any of its respective directors, officers or employees, is responsible for guaranteeing the financial success of any investment, or accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this report or its contents. Nothing herein shall be construed to waive any liability Jefferies has under applicable U.S. federal or state securities laws.

For Important Disclosure information relating to JRS, please see https://adviserinfo.sec.gov/IAPD/Content/Common/crd_iapd_Brochure.aspx?BRCHR_VRSN_ID=483878 and https://adviserinfo.sec.gov/Firm/292142 or visit our website at https://javatar.bluematrix.com/sellside/Disclosures.action, or www.jefferies.com, or call 1.888.JEFFERIES.

© 2023 Jefferies Group LLC

This report is intended for Jefferies clients only. Unauthorized distribution is prohibited.