

ICICI Securities Limited
is the author and
distributor of this report

Company update and TP
revision

Metals

Target price Rs385

Target price revision

Rs385 from Rs300

Shareholding pattern

	Sep '22	Dec '22	Mar '23
Promoters	70.1	70.1	57.9
Institutional investors	19.1	20.4	29.0
MFs and others	2.9	6.3	3.3
Insurance Cos.	0.1	0.1	0.1
FII	16.1	14.0	25.6
Others	10.8	9.4	13.1

Source: BSE

ESG disclosure score

Year	2021	2022	Chg
ESG score	33.8	33.8	0.0
Environment	7.0	7.0	0.0
Social	15.7	15.7	0.0
Governance	78.6	78.6	0.0

Note - Score ranges from 0 - 100 with a higher score indicating higher ESG disclosures.
Source: Bloomberg, I-sec research

Research Analysts:

Amit Dixit

amit.dixit@icicisecurities.com
+91 22 6807 7289

Mohit Lohia

mohit.lohia@icicisecurities.com
+91 22 6807 7510

Pritish Urumkar

prish.urumkar@icicisecurities.com
+91 22 6807 7314

INDIA



Jindal Stainless

BUY

Maintain

Rs277

Transient decline provides fresh opportunity

Despite tumbling 13% in past one month, the Jindal Stainless (JSL) stock has delivered 112% return in past six months. We believe the stock deserves a fresh look as the fundamentals post-merger remain robust and we see a semblance of regulatory support emerging. Key points: 1) company is on track to deliver 2.1mnt/2.7mnt in FY24/FY25 as capacity expansion at Jajpur is complete; 2) EBITDA/te is likely to sustain at Rs20,000 over next two years; 3) recent backward integration initiatives are likely to reduce external vulnerabilities; 4) Directorate General of Trade Remedies (DGTR) has recommended re-imposition of countervailing duty of 18.95% post the sunset review on import of 200 series from China; 5) new applications such as in railways and roads increase the opportunity size.

In our view, JSL is at the cusp of profitability/volume improvement largely on the back of commissioning of new capacity (1.0mtpa) and favourable regulatory shift. We value the merged entity at 6x EBITDA. Furthermore, the acquisition of JUSL is likely to improve margins by ~Rs4,000/te in our view. We introduce proforma merged entity numbers and roll over to FY25E. Our revised target price works out to Rs385 (earlier: Rs300) on 6x FY25E EBITDA.

- **Best placed to capitalise on growth.** In our view, JSL is best placed to take advantage of the growth opportunities in the near term in India, being the only domestic player to ramp up capacity. Key points: 1) potential use of stainless steel in railway coaches and wagons, and infrastructure projects such as bridges and flyovers, present an attractive growth opportunity; 2) we see no issue in ramping up the newly commissioned 1mtpa Jajpur facility as demand in the sectors with 300/400 series of products is likely to increase; 3) we expect EBITDA/te to sustain at >Rs20,000/te through to FY25E with potential acquisition of JUSL likely to improve margins further; and 4) recent backward integration of nickel pig iron JV in Indonesia de-risks raw material sourcing. Overall, we believe JSL is placed in a vantage position to increase both volumes and margins, and to consolidate its leadership in the domestic stainless steel industry.
- **Regulatory overhang receding.** We find developments in past six months pertaining to removal of export duty, imposition of anti-dumping duty on stainless steel tubes/pipes, and recommendation by DGTR for imposing 18.95% duty on imports of 200 series steel from China, as arguably positive. Though it is not directly positive for JSL since it is into flat products, we believe it signifies a favourable shift in government stance. Besides, the ministry of roads and highways has hinted at using stainless steel in the construction industry in coastal regions – another potential catalyst for demand
- **Outlook – Volume-led growth in sight:** The removal of export duty is likely to redeem JSL's volumes and margins. Besides, we expect the commissioning of 1mtpa brownfield capacity to result in volume CAGR of 20% (proforma basis). We introduce provisional merged numbers for JSL with JSHL and roll-over to FY25E. Our revised target price works out to Rs385 (earlier: Rs300) on 6.0x FY25E EBITDA.

Market Cap	Rs228bn/US\$2.8bn	Year to Mar	FY22	FY23E	FY24E	FY25E
Reuters/Bloomberg	JIST.BO/JDSL IN	Revenue (Rs mn)	3,62,348	4,02,725	3,89,537	4,39,581
Shares Outstanding (mn)	823.4	EBITDA (Rs mn)	51,404	35,936	42,131	51,972
52-week Range (Rs)	329/95	Net Income (Rs mn)	38,189	22,540	26,750	34,345
Free Float (%)	29.9	EPS (Rs)	38.61	26.30	31.07	46.45
FII (%)	16.1	P/E (x)	4.5	7.6	6.4	5.0
Daily Volume (US\$'000)	4,857	CEPS (Rs)	3.8	5.9	5.0	4.0
Absolute Return 3m (%)	8.4	EV/E (x)	4.0	5.7	4.6	3.4
Absolute Return 12m (%)	95.1	Dividend Yield	-	0.5	1.0	1.0
Sensex Return 3m (%)	2.3	RoCE (%)	43.1	23.1	23.7	26.7
Sensex Return 12m (%)	18.5	RoE (%)	54.0	22.9	21.9	22.6

Please refer to important disclosures at the end of this report

Four reasons we like the JSL stock

#1. Immense opportunities in railways and infrastructure

In India, use of stainless steel in construction & infrastructure, and auto, railways & transportation segments, is limited to a mere 12% and 13% of overall demand respectively. However, the use of stainless steel in capital goods / process industries is 30%. We see numerous opportunities over next 5-7 years in railways and infrastructure, where carbon steel has traditionally been used but stainless steel penetration is increasing.

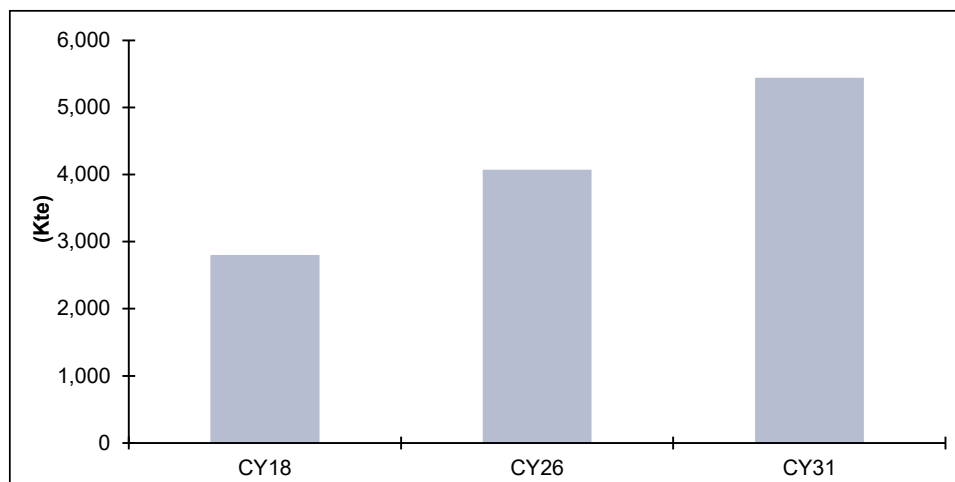
Table 1: Application trends of carbon steel and stainless steel in India

Particular	Steel	Stainless
Construction & Infra	62%	12%
Auto, Railways & Transport	12%	13%
Capital Goods / Process	15%	30%
Durables / Household	5%	44%
Others	6%	1%
	100%	100%

Source: CRISIL Research, I-Sec research

In infrastructure, globally, stainless steel is preferred for the construction of support structures, electrical enclosures, disaster-proof infrastructure and restoration of heritage sites due to its corrosion resistance, lower weight and enhanced safety. The Indian Bridge Management System Centre has estimated that at least 6,300 bridges are structurally damaged and need attention. In Uttar Pradesh alone, there are 226 distressed bridges on the highways. The average quantity of steel required per bridge is 800te. Hence, the opportunity is significant.

Indian Railways' target of achieving 40% of freight share by CY31 is expected to enhance the requirement of wagons for carrying bulk materials such as iron ore and coal, and containers for carrying cement and foodgrain, etc. As per the report of multi-disciplinary committee of Indian Railways, projected rail commodity demand will increase to 3,167mnte in CY31 vs 1,162mnte in CY19, registering a CAGR of 8.7%. As a result, the number of wagons in use is expected to increase to 544k by CY31 from 280k in CY18. The stainless steel consumption opportunity is 7.5te/coach.

Chart 1: Demand for wagons is expected to increase in India

Source: Ministry of railways, I-Sec research

Demand for stainless steel in *Vande Bharat* trainsets is set to increase. The government, in the FY23 Budget, has set a target for 400 *Vande Bharat* trainsets over the next 3 years. The total number of coaches required is expected to be 6,400 (16-coach configuration). The first tender of 200 trainsets (3,200 coaches) specifies that the coaches should be in stainless steel. Both car body and underframes are likely to be stainless steel. The expected stainless steel requirement for 3,200 coaches is 40kte spread over 5-7 years. In future, 6- and 8-coach configuration is also expected to be rolled out pan-India. Additionally, 100 stainless steel underframes have been installed in the coaches of *Tejas Express*. These coaches are running successfully in Western Railway and Northern Railway since Jun'21. As per the results of joint inspection carried by RDSO and Western Railway on the underframes, no instance of corrosion was observed on SS 201LN underframes even after 20 months of operations in one of the most corrosive regions in India. The potential market opportunity from 8,000 coaches is 52kte per annum.

Stainless steel is also material of choice in metro rail network throughout the country. As per CRISIL Research estimates, the majority of the total investment in the metro network is likely to be in the following projects: Mumbai Metro projects lines 2A, 2B, 3; Chennai Metro phase-II; Nagpur Metro and Pune Metro projects. Besides, metro lines are currently under construction in Agra, Nagpur, Ahmedabad, Kanpur, Navi Mumbai and Patna. The incremental demand for coaches from these projects in the country is expected to be 1,150. Globally, each metro coach consumes up to 10te of stainless steel. Apart from coaches, stainless steel usage is also growing in station infrastructure such as claddings, handrails, ticket vending machines, canopies, etc. Furthermore, the government has announced Metro-Neo and Metro-Lite versions of Metro projects in the cities with lower populations. While the technical specifications of these are yet to be finalised, we believe these will further add to the demand for stainless steel.

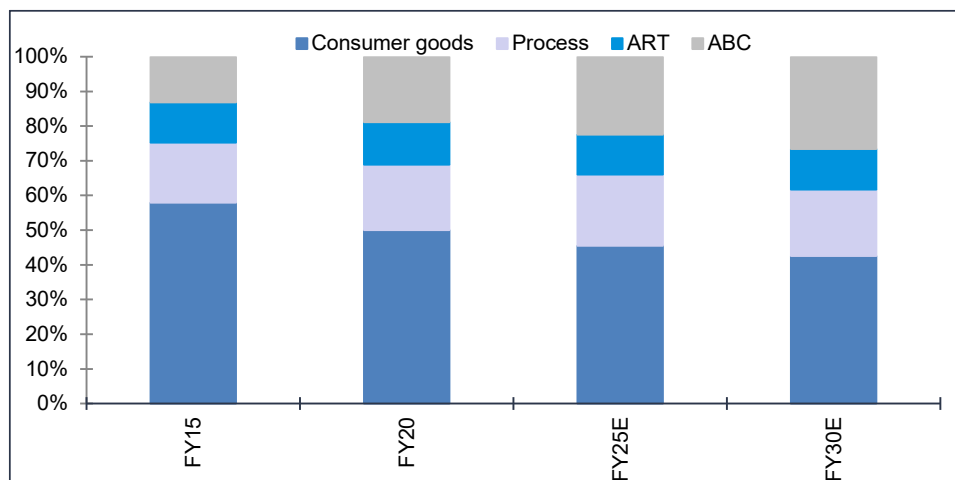
We believe stainless steel demand potential is also firm in bridges – both 'foot over bridge' (FOB) and 'rail over bridge' (ROB). Currently, there are about 135,620 major and minor ROB in the country, of which 26% are over 100 years old. The steel intensity in minor and major bridges is 60te and 300te respectively. The total ROB potential (assuming 300 bridges are replaced every year) works out to 100kte of steel

demand. Similarly, the total number of FOBs in the country are 14,000, most of which are old. Additionally, the Railways is trying to build more FOBs in order to reduce fatalities while crossing tracks. The total potential from FOBs could be as high as 70kte per annum.

In the process industry, green hydrogen presents a significant opportunity. The Union cabinet has approved the National Green Hydrogen (GH₂) Mission to build capabilities of producing at least 5mmt/year of GH₂ by CY30. This would entail 60-100GW electrolyser capacity and 125GW of RE capacity for GH₂ generation and associated transmission network. The mission aims to reach 10mmt of export markets at a later stage. In order to reach 5mmt/year of GH₂ by CY30, 2,700MLD of additional capacity of demineralized/desalinated water is required and another 50 GW of renewable power is required. The opportunity size for stainless steel in desalination plants is expected to be 400-450te per 100 MLD desalination plant. Similarly, stainless steel of approximately 0.5te/MW capacity of electrolyser capacity will be required.

The Architectural, Building & Construction (ABC) segment accounts for nearly 19-20% of the country's stainless steel demand. This segment's growth is expected to be led by investments in residential, commercial, airport infrastructure, water supply and sanitation (WSS) and railway infrastructure. As per CRISIL estimates, ABC segment demand CAGR is expected to be 9.8% (FY15-FY30) and reach 1.25mnte by FY30. The growth in ABC segment is expected to be the highest among all sectors using stainless steel – owing to the mega-trend of urbanisation.

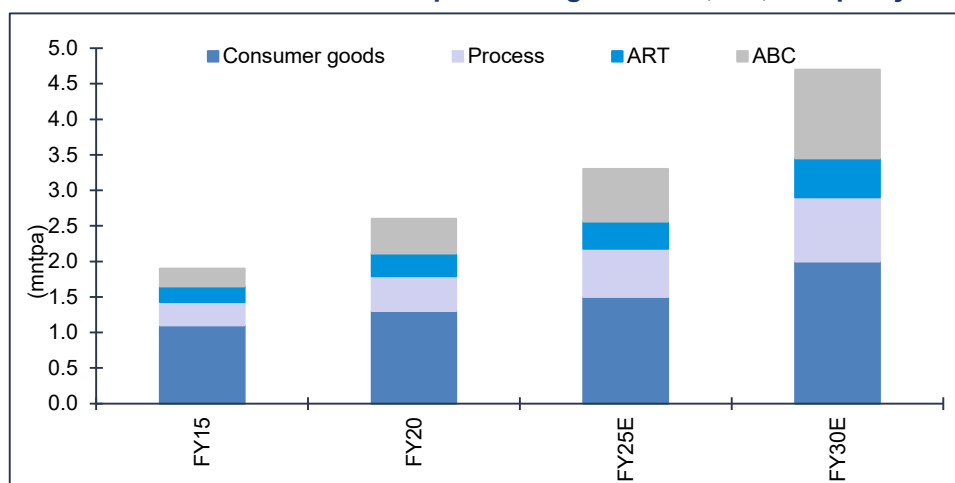
As per CRISIL Research, investment of Rs750bn-800bn is expected between FY22-FY30 compared to Rs360mn-400mn in FY16-FY22. Bulk of these investments are expected in brownfield capacity expansion projects in Delhi, Bengaluru and Hyderabad airport. Stainless steel is being extensively used for modernisation of existing airports and construction of new airports. The investment in airport infrastructure is expected to result in incremental demand of 40-60ktpa through to FY30.

Chart 2: India – Demand of ABC products is likely to grow fastest

Source: CRISIL, I-Sec research

#2. Jajpur expansion is essential to meet India's future needs

As per CRISIL estimates, domestic demand will grow by 7.2% during FY22-FY30 with value-added ABC and ART segments expected to grow more than the overall average. The demand for flat stainless steel products is likely to rise from 2.74mtpa in FY23 to 3.3-3.4mtpa by FY25 and further to 4.7-4.8mtpa by FY30. JSL, with additional capacity of 1mtpa, is well placed to take advantage of the potential demand growth in India.

Chart 3: Domestic demand is expected to grow to ~4,7~4,8mtpa by FY30E

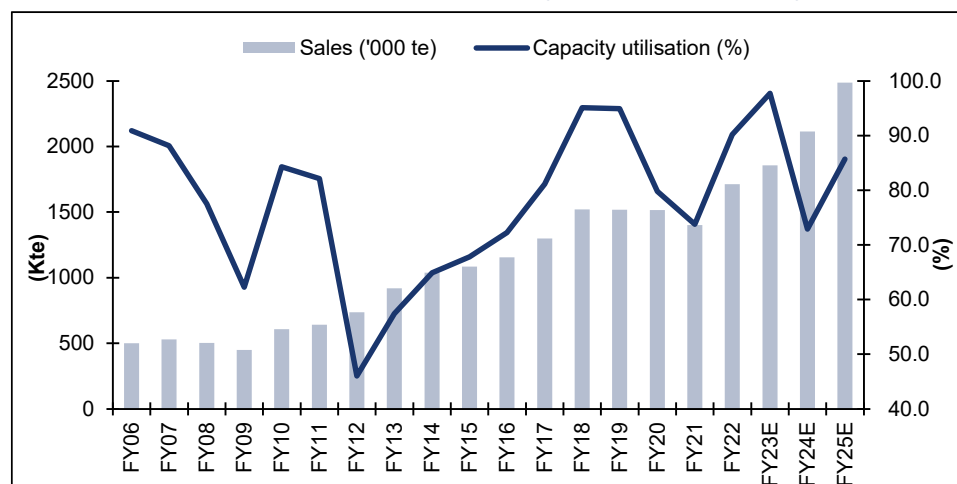
Source: CRISIL, I-Sec research

On the supply side, India's operational capacity is estimated to be around 5.5-5.8mtpa as at FY22-end. JSL accounts for close to 60-65% of total flat melt steel production and almost 50% of demand. The unorganised (or *patta*) segment accounts for the remaining 35-40% of flat steel demand. This segment is highly fragmented and constituted of small-scale players producing kitchenware products. Going forward, capacity additions are likely to be dominated by the organised segment as bulk of the

increase is expected to come from ABC, ART and process sectors, where quality requirements are high.

As a result, we expect JSL to be able to ramp up its capacity quickly in FY24E and FY25E. We expect its earnings growth to be largely volume-driven. As a result of 1mtpa stainless steel capacity getting commissioned at Jajpur, we expect sales volume to reach 2.1mnte and 2.5mnte in FY24E and FY25E respectively. In our view, there would be still be surplus capacity by the end of FY25E to further increase volumes without large capex. We expect capacity utilisation at 85.7% by FY25E-end.

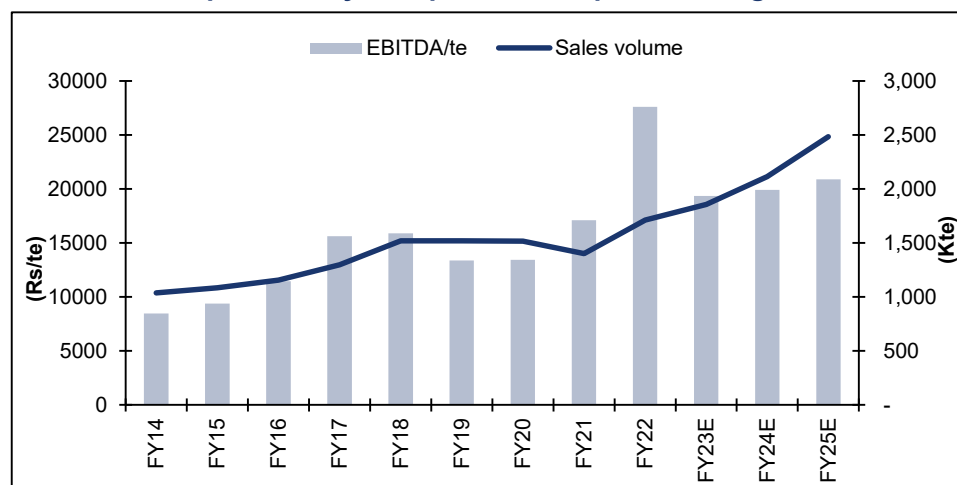
Chart 4: JSL's sales volume and capacity utilisation is likely to increase



Source: Company data, I-Sec research

We expect EBITDA/te at Rs20,900 by FY25E due to enhanced operating leverage post the merger and optimisation of administrative costs.

Chart 5: JSL's profitability is expected to improve through to FY25E



Source: Company data, I-Sec research

#3. Shift in regulatory framework and policies

We find three developments over the past six months as beneficial for the stainless steel sector: 1) removal of export duty to aid value-added exports; 2) imposition of anti-dumping duty on stainless steel seamless tubes and pipe imports from China for five years; and 3) recommendation of imposing 18.95% duty on imports of flat stainless steel products in *200 series* originated or routed through China. In our view, all the three developments are important as government has progressively removed most of the protectionist measures for stainless steel since Mar'21. While, these steps are not directly positive for JSL, since it is into flat products, we believe it signifies a favorable shift in government stance.

Investigation by the authorities shows that imports of *J3* and *201* series constitute almost 85% of total imports from China during the period of investigation (POI). The share of imports of utensil application products has increased over the enquiry period in both absolute and relative terms. Pattern of imports post POI show that the *200 series* imports have further increased significantly and the absolute level of imports in *300* and *400 series* increased significantly post POI and some of these imports are even more than the entire non-utensil sector imports. Imports are largely coming under product types *J3* and *201* grades, which is the product type produced by *patta* re-rollers, hence the imports are directly impacting them. This in turn is largely impacting the utensil application steel industry and threatening the survival of the MSME units in manufacturing induction furnace units and *patta* re-rollers.

Table 2: Stainless steel import pattern in India

Grade (kte)	Volume	(%)
200 Series - J3	117.96	54%
200 Series - 201	66.74	31%
Other Grades	33.73	15%
Total	218.43	100%

Source: DGTR, I-Sec research

While the actual subsidy margin determined by the DGTR is 19.91%, the investigation, being a sunset review, the authority has extended the existing duties as per the original investigation.

In addition, the Union road transport and highways minister, Mr. Nitin Gadkari, has hinted at a policy for making the use of stainless steel mandatory in bridges in areas close to the sea owing to corrosion. Prior to this, the ministry has already mandated the use of stainless steel in place of 'fusion-bonded epoxy-coated' material in reinforced concrete bridges (both superstructure and substructure) on national highways located in extreme environment exposure (susceptible to severe corrosion). Recently, the Research Designs & Standards Organization (RDSO) released a circular mandating the use of stainless steel in chequered plates in bridge applications. In our view, these policy shifts will further entail the higher use of stainless steel in infrastructure projects.

#4. JSL deserves a better valuation compared to peers

JSL's overseas peers' sales volumes have declined over past 5 years. However, in the case of JSL, there has been a growth of 8.1% CAGR. While in case of JSL, Shipments declined sequentially in CY21, they rose to a record high in CY22 despite imposition of export duty owing to strong focus on domestic market. Going ahead, we believe JSL's shipments will likely grow further as the new capacity at Jajpur ramps up. In the case of peers, the recessionary environment is likely to result in subdued volume growth.

Table 3: Shipments of JSL vs overseas peers

Shipments (kte)	CY17	CY18	CY19	CY20	CY21	CY22	(5-year CAGR)
Aperam	1,882	1,914	1,722	1,639	1,796	1,600	-3.2%
Outokumpu	2,448	2,428	2,196	2,121	2,254	2,106	-3.0%
Acerinox	2,519	2,440	2,231	2,144	2,619	2,190	-2.8%
JSL	1,156	1,454	1,515	1,520	1,333	1,702	8.1%

Source: Company data, I-Sec research

EBIT/te of peers has expanded significantly since CY19. Currently, profitability of peers is at record highs. Hence, they are trading at lower multiples as the current level of high earnings appears unsustainable. In the case of JSL however, profitability is expected to improve further from the current levels.

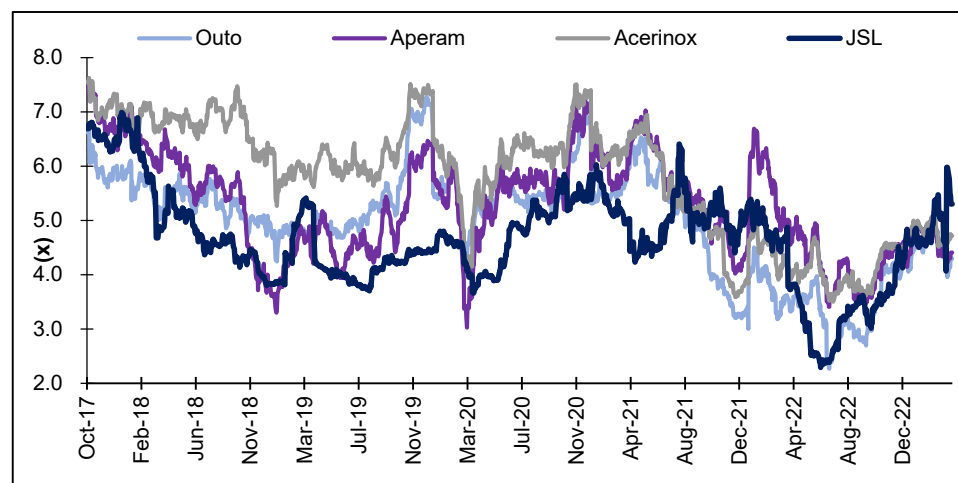
Table 4: EBIT/te of JSL vs overseas peers

EBIT/te	CY19	CY20	CY21	CY22	(3-year CAGR)
Aperam	88	97	431	431	69.6%
Outokumpu	15	(26)	299	471	215.3%
Acerinox	10	69	309	400	238.5%
JSL	150	125	258	233	16.0%

Source: Company data, I-Sec research

On EV/EBITDA, all the peers are trading at a level lower than their historical average as the current level of profitability is not sustainable and is likely to come off, given the still-high power cost and pressure on volumes.

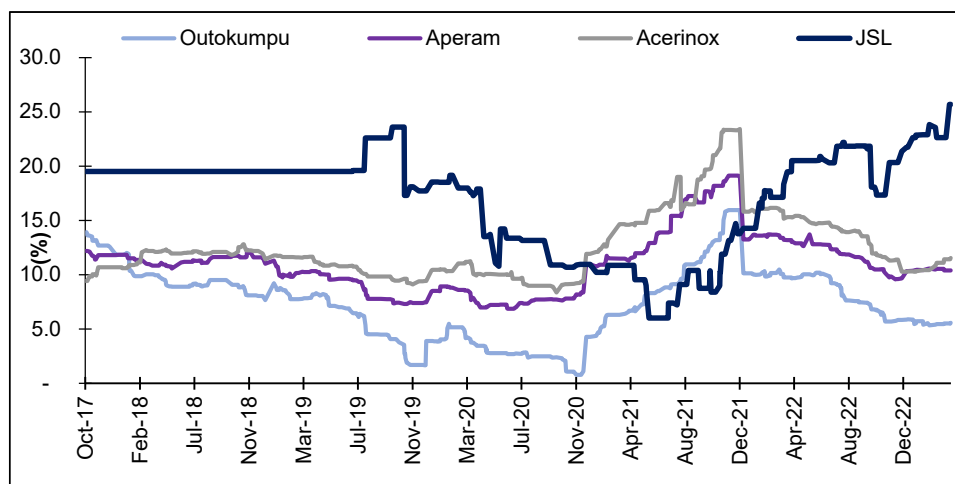
Chart 6: EV/EBITDA of JSL vs overseas peers



Source: Bloomberg, I-Sec research

As a result, there is a dichotomy between the RoE (2-year forward) of European stainless steel stocks and JSL. While RoE for global peers is likely to slip, in the case of JSL it is expected to improve as 1mtpa capacity at Jajpur ramps up.

Chart 7: RoE of JSL vs overseas peers



Source: Bloomberg, I-Sec research

We value JSL at Rs385 on FY25E EBITDA

As a result of better volume prospects, improving returns and strong leadership position in the Indian market, we believe JSL is well-placed to reap the benefits of overall industry growth. Hence, we value the stock at 6x– corresponding to 1.5 deviations above its past 5-year trading range. Currently, the acquisition of promoters' shares in JUSL is not yet complete, hence, we take an option value of JUSL at this stage and roll over to FY25E.

Our target price works out to Rs385 (earlier: Rs300) on 6x FY25E EBITDA. Maintain **BUY**.

Table 5: We value JSL at Rs385/share

Particulars	FY25E
EBITDA (Rs mn)	51,972
Multiple (x)	6.0
EV (Rs mn)	3,11,829
Net debt (Rs mn)	21,154
Market Cap (Rs mn)	2,90,676
Number of shares (mn)	823
Value per share (Rs)	353
Option Value of JUSL	
EBITDA (Rs mn)	8,400
Multiple (x)	6.0
EV (Rs mn)	50,400
Net debt (Rs mn)	23,180
Market Cap (Rs mn)	27,220
Number of shares (mn)	823
Value per share (Rs)	33
Fair value (Rs/share)	385

Source: I-Sec research

Valuations and key risks

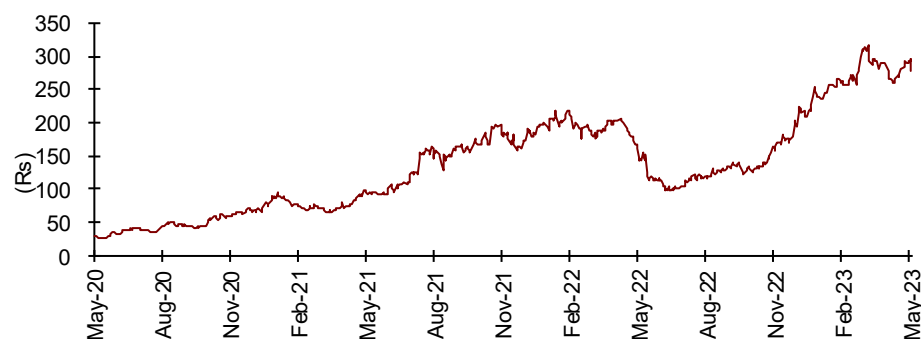
We maintain **BUY** on JSL with a revised target price of Rs385/share (earlier: Rs300) on 6x FY25E EBITDA, corresponding to 1.5 deviations above its past 5-year mean. In our view, the premium is justified given that JSL is consolidating its position in the domestic stainless steel space and is the only player equipped to capitalise on the growth opportunities.

Key risks to business model

Absence of duty support. There is a huge risk of increase in Indonesian exports of the 200/300 series to India. Even for the industries linked to approval/accreditation, depending on the extent of interest from the Indonesian players, we see a possibility of imports increasing substantially. Government has already removed the anti-dumping duty on stainless steel imports (on which Indonesia does not draw any import duty because it is an FTT partner). Perhaps, given the size of the market, policy support may not be as easily forthcoming for stainless steel as for steel.

Adverse macros resulting in lower volumes and prices compared to our estimates

Price chart



Source: Bloomberg

Financial summary

Table 3: Profit & Loss statement

(Rs mn, year ending March 31)

	FY22	FY23E	FY24E	FY25E
Operating Income	3,62,348	4,02,725	3,89,537	4,39,581
Operating Expenses	3,10,944	3,66,789	3,47,405	3,87,610
EBITDA	51,404	35,936	42,131	51,972
% margins	14.2%	8.9%	10.8%	11.8%
D&A expense	6,213	6,465	7,563	8,579
Gross Interest	4,636	4,846	3,988	2,292
Other Income	1,699	2,648	2,561	2,890
Recurring PBT	42,255	27,274	33,143	43,991
Add: Extraordinary	-	-	-	-
Less: Taxes	10,214	6,520	8,133	11,261
Reported Net Income	38,189	22,540	26,750	34,345
Recurring Net Income	38,189	22,540	26,750	34,345

Source: Company data, I-Sec research

Table 4: Balance sheet

(Rs mn, year ending March 31)

	FY22	FY23E	FY24E	FY25E
Assets				
Total Current Assets	1,35,499	1,36,508	1,31,415	1,66,473
Of which cash&cash eqv.	2,560	4,413	4,269	4,817
Total Current Liabilities	78,296	68,207	67,276	81,043
Net Current Assets	57,203	68,301	64,138	85,429
Investments	6,397	10,447	12,447	14,447
Net Fixed Assets	74,544	74,679	1,02,117	97,038
CWIP	5,179	15,079	5,079	8,579
Total Assets	1,38,141	1,59,274	1,72,549	1,92,261
Liabilities				
Borrowings	39,869	39,272	26,621	12,812
Deferred Tax Liability	8,175	8,175	8,175	8,175
Other long term liabilities	2,465	2,465	2,465	2,465
Minority Interest	725	939	1,198	1,583
Equity Share Capital	1,635	1,648	1,648	1,648
Reserves & Surplus	85,998	1,07,714	1,33,640	1,67,161
Net Worth	87,632	1,09,362	1,35,288	1,68,809
Total Liabilities	1,38,141	1,59,274	1,72,549	1,92,261

Source: Company data, I-Sec research

Table 5: Cashflow statement

(Rs mn, year ending March 31)

	FY22	FY23E	FY24E	FY25E
Operating Cashflow	42,255	27,274	33,143	43,991
Working Capital Changes	(36,364)	(5,194)	6,018	(18,743)
Capital Commitments	(5,761)	(16,500)	(25,000)	(7,000)
Free Cashflow	(935)	9,508	16,757	16,583
Investing Cashflow	(5,890)	(17,902)	(24,439)	(6,110)
Chg. In Share Capital	77	14	-	-
Buyback of shares	-	-	-	-
Inc/(Dec) in Borrowings	4,171	(810)	(12,911)	(14,194)
Dividend paid	-	(824)	(824)	(824)
Others	2,638	214	259	385
Interest paid	(4,636)	(4,846)	(3,988)	(2,292)
Financing Cashflow	2,251	(6,253)	(17,463)	(16,925)
Chg. in Cash & Bank balances	1,188	1,853	(145)	548

Source: Company data, I-Sec research

Table 6: Key ratios

(Year ending March 31)

	FY22	FY23E	FY24E	FY25E
Per Share Data (Rs)				
EPS(Basic Recurring)	38.6	26.3	31.1	46.4
Diluted Recurring EPS	38.6	26.3	31.1	46.4
Recurring Cash EPS	46.2	34.2	39.9	56.2
Dividend per share (DPS)	-	1.0	2.0	3.0
Book Value per share (BV)	106.4	132.3	163.0	208.7
Growth Ratios (%)				
Operating Income	67.8%	11.1%	-3.3%	12.8%
EBITDA	101.5%	-30.1%	17.2%	23.4%
Recurring Net Income	280.5%	-41.0%	18.7%	28.4%
Valuation Ratios (x)				
P/E	4.5	7.6	6.4	5.0
P/CEPS	3.8	5.9	5.0	4.0
P/BV	1.9	1.6	1.3	1.0
EV / EBITDA	4.0	5.7	4.6	3.4
EV / Sales	0.6	0.5	0.5	0.4
EV / FCF	(221.0)	21.6	11.5	10.7
Operating Ratios (%)				
Gross Margin	32.1	29.2	29.2	29.0
Other Income / PBT	4.0	9.7	7.7	6.6
Effective tax rate	24.2	23.9	24.5	25.6
Asset Turnover (x)	-	-	-	-
Debtor (days)	28.0	33.0	32.0	32.0
Inventory (days)	56.7	61.6	60.2	60.3
Creditor (days)	71.8	70.0	65.0	65.0
Net D/E Ratio (x)	42.2	31.6	16.4	4.7
Profitability Ratios (%)				
Rec Net Income Margins	10.5	5.6	6.9	7.8
RoCE	43.1	23.1	23.7	26.7
RoNW	54.0	22.9	21.9	22.6
Dividend Yield	-	0.5	1.0	1.0
EBITDA Margins	14.2	8.9	10.8	11.8

Source: Company data, I-Sec research

This report may be distributed in Singapore by ICICI Securities, Inc. (Singapore branch). Any recipients of this report in Singapore should contact ICICI Securities, Inc. (Singapore branch) in respect of any matters arising from, or in connection with, this report. The contact details of ICICI Securities, Inc. (Singapore branch) are as follows: Address: 10 Collyer Quay, #40-92 Ocean Financial Tower, Singapore - 049315, Tel: +65 6232 2451 and email: navneet_babbar@icicisecuritiesinc.com, Rishi_agrawal@icicisecuritiesinc.com.

"In case of eligible investors based in Japan, charges for brokerage services on execution of transactions do not in substance constitute charge for research reports and no charges are levied for providing research reports to such investors."

New I-Sec investment ratings (all ratings based on absolute return; All ratings and target price refers to 12-month performance horizon, unless mentioned otherwise)

BUY: >15% return; ADD: 5% to 15% return; HOLD: Negative 5% to Positive 5% return; REDUCE: Negative 5% to Negative 15% return; SELL: < negative 15% return

ANALYST CERTIFICATION

I/We, Amit Dixit, PGDM, B.Tech, Mohit Lohia, CA; Pritish Urumkar: MBATech (Finance); authors and the names subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect our views about the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report. Analysts are not registered as research analysts by FINRA and are not associated persons of the ICICI Securities Inc. It is also confirmed that above mentioned Analysts of this report have not received any compensation from the companies mentioned in the report in the preceding twelve months and do not serve as an officer, director or employee of the companies mentioned in the report.

Terms & conditions and other disclosures:

ICICI Securities Limited (ICICI Securities) is a full-service, integrated investment banking and is, inter alia, engaged in the business of stock brokering and distribution of financial products. Registered Office Address: ICICI Venture House, Appasaheb Marathe Marg, Prabhadevi, Mumbai - 400 025. CIN: L67120MH1995PLC086241, Tel: (91 22) 6807 7100.

ICICI Securities is Sebi registered stock broker, merchant banker, investment adviser, portfolio manager and Research Analyst. ICICI Securities is registered with Insurance Regulatory Development Authority of India Limited (IRDAI) as a composite corporate agent and with PFRDA as a Point of Presence. ICICI Securities Limited Research Analyst SEBI Registration Number – INH000000990. ICICI Securities Limited SEBI Registration is INZ000183631 for stock broker. ICICI Securities is a subsidiary of ICICI Bank which is India's largest private sector bank and has its various subsidiaries engaged in businesses of housing finance, asset management, life insurance, general insurance, venture capital fund management, etc. ("associates"), the details in respect of which are available on www.icicibank.com.

ICICI Securities is one of the leading merchant bankers/ underwriters of securities and participate in virtually all securities trading markets in India. We and our associates might have investment banking and other business relationship with a significant percentage of companies covered by our Investment Research Department. ICICI Securities and its analysts, persons reporting to analysts and their relatives are generally prohibited from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover.

Recommendation in reports based on technical and derivative analysis centre on studying charts of a stock's price movement, outstanding positions, trading volume etc as opposed to focusing on a company's fundamentals and, as such, may not match with the recommendation in fundamental reports. Investors may visit icicidirect.com to view the Fundamental and Technical Research Reports.

Our proprietary trading and investment businesses may make investment decisions that are inconsistent with the recommendations expressed herein.

ICICI Securities Limited has two independent equity research groups: Institutional Research and Retail Research. This report has been prepared by the Institutional Research. The views and opinions expressed in this document may or may not match or may be contrary with the views, estimates, rating, and target price of the Retail Research.

The information and opinions in this report have been prepared by ICICI Securities and are subject to change without any notice. The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of ICICI Securities. While we would endeavour to update the information herein on a reasonable basis, ICICI Securities is under no obligation to update or keep the information current. Also, there may be regulatory, compliance or other reasons that may prevent ICICI Securities from doing so. Non-rated securities indicate that rating on a particular security has been suspended temporarily and such suspension is in compliance with applicable regulations and/or ICICI Securities policies, in circumstances where ICICI Securities might be acting in an advisory capacity to this company, or in certain other circumstances.

This report is based on information obtained from public sources and sources believed to be reliable, but no independent verification has been made nor is its accuracy or completeness guaranteed. This report and information herein is solely for informational purpose and shall not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. ICICI Securities will not treat recipients as customers by virtue of their receiving this report. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. The recipient should independently evaluate the investment risks. The value and return on investment may vary because of changes in interest rates, foreign exchange rates or any other reason. ICICI Securities accepts no liabilities whatsoever for any loss or damage of any kind arising out of the use of this report. Past performance is not necessarily a guide to future performance. Investors are advised to see Risk Disclosure Document to understand the risks associated before investing in the securities markets. Actual results may differ materially from those set forth in projections. Forward-looking statements are not predictions and may be subject to change without notice.

ICICI Securities or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months.

ICICI Securities or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from the date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory service in a merger or specific transaction.

ICICI Securities or its associates might have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the companies mentioned in the report in the past twelve months.

ICICI Securities encourages independence in research report preparation and strives to minimize conflict in preparation of research report. ICICI Securities or its associates or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither ICICI Securities nor Research Analysts and their relatives have any material conflict of interest at the time of publication of this report.

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

ICICI Securities or its subsidiaries collectively or Research Analysts or their relatives do not own 1% or more of the equity securities of the Company mentioned in the report as of the last day of the month preceding the publication of the research report.

Since associates of ICICI Securities and ICICI Securities as a entity are engaged in various financial service businesses, they might have financial interests or actual/ beneficial ownership of one percent or more or other material conflict of interest in various companies including the subject company/companies mentioned in this report.

ICICI Securities may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report.

Neither the Research Analysts nor ICICI Securities have been engaged in market making activity for the companies mentioned in the report.

We submit that no material disciplinary action has been taken on ICICI Securities by any Regulatory Authority impacting Equity Research Analysis activities.

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 ICICI Securities 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.

This report has not been prepared by ICICI Securities, Inc. However, ICICI Securities, Inc. has reviewed the report and, in so far as it includes current or historical information, it is believed to be reliable, although its accuracy and completeness cannot be guaranteed.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. None of the research recommendations promise or guarantee any assured, minimum or risk free return to the investors.

Name of the Compliance officer (Research Analyst): Mr. Anoop Goyal, Contact number: 022-40701000, **E-mail Address** : complianceofficer@icicisecurities.com

For any queries or grievances: [Mr. Prabodh Avadhoot](mailto:Mr.Prabodh.Avadhoot) Email address: headservicequality@icicidirect.com Contact Number: 18601231122
