

India Road Sector

Road capex - FY19 Iull to recover in FY20-21

Initiate on Ashok Buildcon (BUY)

Initiate on KNR Construction (BUY)



JM Financial Institutional Securities Limited

JM FINANCIAL

TABLE OF CONTENTS

INDIA ROAD SECTOR

03 Introduction

04 Key Charts

MAIN THEMES

08 Macros - A Quick recap:

10 The Road Ahead?

11 Election-impact on ordering?

COMPANIES

14 Ashoka Buildcon (BUY, TP: INR 170)

24 KNR Constructions (BUY, TP: INR 255)

34 Sadbhav Engineering (HOLD, TP: INR 205)

Subhadip Mitra

subhadip.mitra@jmfl.com Tel: (91 22) 6630 3128

Koundinya Nimmagadda

koundinya.nimmagadda@jmfl.com Tel: (91 22) 6630 3574

JM Financial Research is also available on: Bloomberg - JMFR <GO>, Thomson Publisher & Reuters S&P Capital IQ and FactSet

Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

You can also access our portal www.jmflresearch.com

OTHER REPORTS



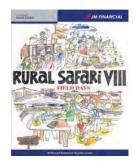
INDIA SPECIALTY CHEMICALS FEBRUARY 2019



INDIA STRATEGY 2019 OUTLOOK



INDIA POWER



RURAL SAFARI VIII



Road capex - FY19 Iull to recover in FY20-21

We expect a strong a pipeline of road awards by NHAI in FY20-22 based on a basket of 26,000km to be ordered in the next 2-3 years under the Bharatmala plan, of which DPR's are ready or in final stages for c17,000km. We also expect NHAI to continue leading the road sector capex since a majority projects under Bharatmala are large 4-6 large expressways, which normally come within its purview. Also, funding is not a constraint with NHAI's healthy balance sheet (D/E of 0.8x as of Sept'18). However we conservatively estimate a) NHAI ordering of 6,000km p.a. (vs. 7,400km in FY18) and b) delayed execution for HAM projects already awarded. Even under these conservative estimates we find FY19-21 earnings at a CAGR of 11% for Ashoka Buildcon (18% CAGR in our Bull case) but trading at 6x FY21 EPS, while KNR Constructions has 15% EPS CAGR in FY19-21 and trades at 10x FY21 EPS) We initiate with a BUY on both stocks. We maintain HOLD on Sadbhav Engineering despite inexpensive valuations (c.6x P/E FY21), due to sector peak leverage of c.9x D/E and delayed BOT asset sale, all of which hampers its ability to grow.

After peak ordering by NHAI in FY18 there has been a lull in FY19 not due to a shortage of funds or projects but on account of a) delayed financial closure (FC) of hybrid annuity (HAM) projects awarded in FY18 and b) delays in acquiring 80% land needed for granting appointed dates (AD) for FY18 HAM awards. However with most HAM projects now nearing FC and AD's for projects expected by Mar'19, we expect the large pipeline of active NHAI tenders (c.INR 1trn), to result in project award after the general elections. Additionally, NHAI is expected to award more EPC projects vs HAM in FY20, to avoid further delay in execution. With a healthy D/E of 0.8x (as of Sept'18), NHAI has ample cushion for 2-3 years of EPC / HAM ordering by leveraging its balance sheet, even if budgetary allocation to NHAI remains stagnant.

FY19 ordering slow can see a quick revival in FY20

The ordering on FY19 till Dec18 has been muted (estimated at 600-700Km), due to **a)** delayed / lengthy FC for HAM projects ordered in FY18 and **b)** delayed AD's for the same projects as NHAI faced hurdles in acquiring the required 80% of land for these projects. However FC for most projects is near completion while AD is expected by 4QFY19 end. Also ordering tends to slowdown seasonally prior to general elections in May'19. However, historically NHAI's ordering has consistently revived post elections (Exhibit 1) as road remains one of the key infrastructure needs of India. Additionally, NHAI has a ready basket of 17,000 km of projects with DPR's in advanced stage. This implies that ramp up in ordering can be much faster in FY20 and FY21.

KNR Construction

Given the life time high OB and good potential of inflows from NHAI in FY20-21 we find KNR having healthy visibility of revenue growth, though margins may taper off as the lucrative irrigation projects get completed by FY19. Despite factoring lower margins and stable inflows of c.INR 31bn in FY20-21 we find KNR able to deliver earnings CAGR of 14.6% in FY19-21 period while stock trades at P/E of 10x FY21 (core EPC earnings). We value that stock 6.5x EV /EBITDA (c.50% discount to L&T) to get to a TP of INR 255 (17% Upside). Initiate with a BUY.

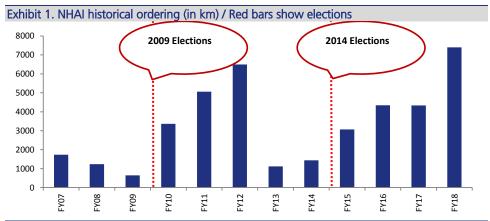
Ashoka Buildcon

With a life time high OB, we believe ABL is at an inflection point, which can trigger at least 20%+ revenue CAGR in FY19-21E (vs. guidance of 40%). Despite assuming slow execution (20% sales growth) and 11% fall in NHAI ordering (vs. FY18) in FY20-21, we find ABL delivering 12% CAGR in earnings (FY18-21) while stock trades at P/E of 6x FY21 (core EPC business). Our bull case, which factors 40% sales growth as per guidance, implies 17% EPS CAGR in FY18-21. We value the stock at EV / EBITDA of 6x (50% discount to L&T) for the EPC business and NPV value of BOT (implied P/BV of 1.1x) for a TP of INR 170 (44% upside). We initiate with a BUY.

Sadbhav Engineering

While SEL appears optically cheap at c.6x FY21 with an OB of 3.7x FY18 sales, these positives are offset by high D/E of c.9x at a consolidated level. Barring cash inflows from stake sale SEL has a risk of further rise in debt to fund equity in its new HAM projects, which in turn are key for SEL's revenue growth in FY20-21. Additionally without fresh equity SEL will be handicapped in bidding for new HAM projects in FY20-21 given its already heavy debt. Hence despite cheap valuations and a large OB which can potentially lead to 15% EPS CAGR in FY19-21, we remain cautious on the stock and maintain HOLD.

Focus Charts

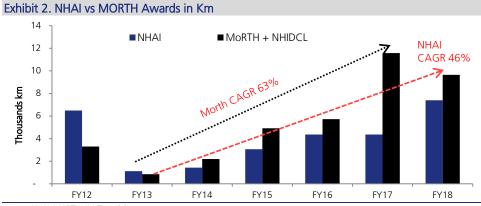


Source: NHAI, JM Financial

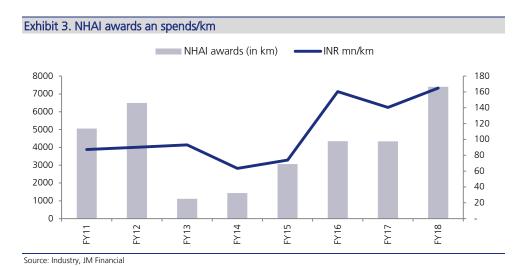
Historically NHAI's ordering revived post elections irrespective of the ruling party.

Additionally NHAI has a basket of 17,000km of DPR ready projects

NHAIs budgetary support remains stable while its D/E remains low at 0.82 as of Sep'18.



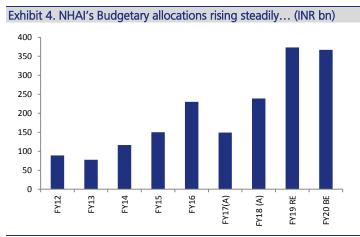
Source: NHAI, MORTH, JM Financial

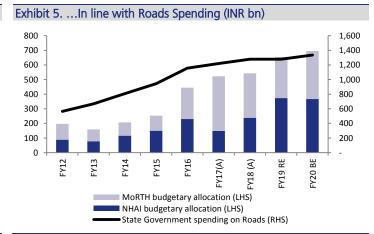


NHAI to continue leading road capex with majority Bharatmala projects under being large 4-6 large expressways which normally fall in its purview.

NHAI ordering picked up in FY18 just after announcement of Bharatmala plan

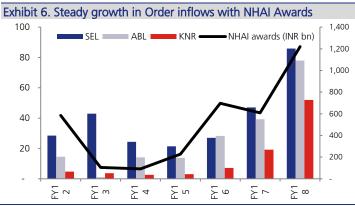
Exhibit-3 clearly shows the rising spend in INR/km for NHAI now at INR 170-180mn/km

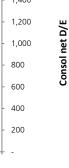


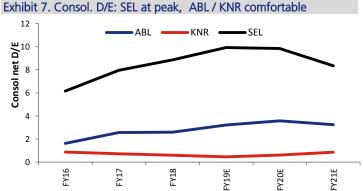


Source: Union Budget, JM Financial

Source: Union Budget, RBI Study of state budgets, JM Financial







Source: Company, JM Financial

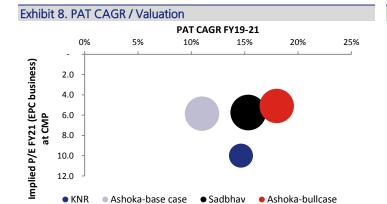
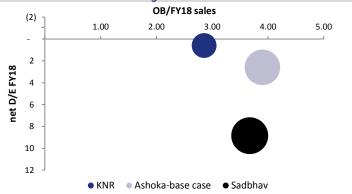


Exhibit 9. Order book / leverage

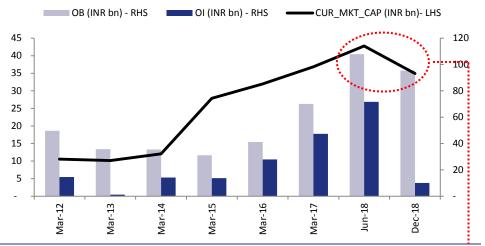
Source: Company, JM Financial



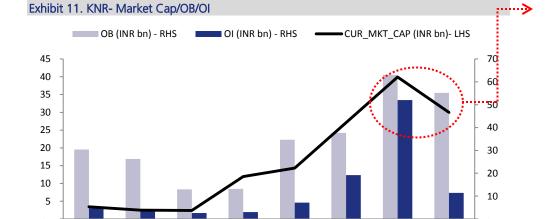
Source: Company, JM Financial

- ABL under stress case has 11% EPS CAGR (FY19-21) while Bull case CAGR is 18%. While stock trades at 6x FY21 EPS (core EPC).
- KNR has EPS CAGR of 15% though at higher valuations of 10x FY21 P/E.
- Although SEL has 16% PAT CAGR and is cheap at c.6x FY21 P/E high leverage / share pledge and delayed BoT asset sale has the company cash strapped which can derail its growth. Also 40% of promoter shareholding is pledged.

Exhibit 10. ABL-Market Cap/OB/OI



Source: Bloomberg, Company, JM Financial



Mar-16

Mar-17

Mar-18

Dec-18

Historically, Market capitalisation of most Road EPC players mirrors its order Inflows. With robust Ols witnessed in Jan-Apr'18, stock prices rose significantly.

But the muted Ols in 9MFY19 have meant equivalent stock corrections. For SEL the price fall is further steep due to growing debt burden (Exhibit 13) and pending FC for its HAM portfolio (Exhibit 15).

However, given c.26,000km of order basket, with DPRs largely prepared for c.17,000km of projects, we expect NHAI awarding to revive Ols (and hence stock re-rating) for likes of ABL and KNR



Mar-13

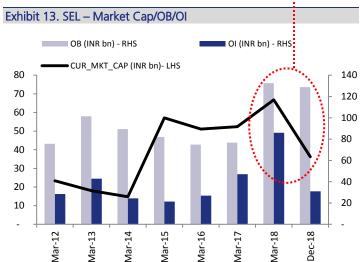
Mar-12



Mar-14

Mar-15

Source: Company, JM Financial



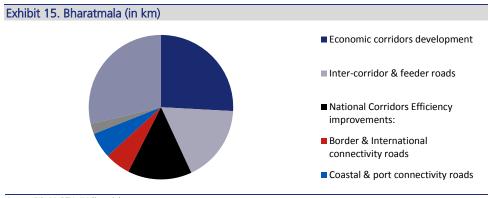
Source: Bloomberg, Company, JM Financial

Exhibit 14. Key	Exhibit 14. Key Players: HAM FC status						
Firm	HAM Projects Portfolio	FC Complete	Appointed date received	Remarks			
Ashoka Buildcon (BUY)	7	7	1	Excluding Bettadahalli-Shivamogga HAM where ACL has emerged as lowest bidder on 21 Feb'19			
KNR Constructions (BUY)	5	4	1	Including KSHIP HAM where concession agreement is signed on 18 Jan'19			
Sadbhav Engineering (BUY)	13	8	8				
Dilip Buildcon (NR)	12	12	4	Including DBL Sangli Borgaon HAM where FC achievement is notified on 27 Feb'19			
PNC Infratech (NR)	7	7	4	Including Chakeri-Allahabad where FC is achievement notified on 14 Feb'19			

ABL, KNR and PNC has the highest proportion of FC completed projects while appointed dates are excepted in 1-2months

Macros - A Quick recap:

The Bharatmala announcement:



Oct'17, Cabinet Union approved the Bharatmala plan for

- Developing 34,800km of roads
- Costing INR 5.35trn investments and
- Phase-1 completion by FY21-22.

The plan envisages connectivity from factory to market by linking industrial / economic corridors via road connectivity between railwayports and coastal / border roads

Source: PIB, MoRTH, JM Financial

Exhibit 16. Bharatmala-Estimated Cost(INR bn)

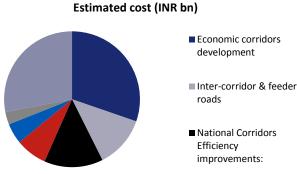
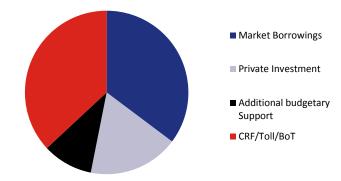


Exhibit 17. Bharatmala-funding (INR bn)



Source: PIB, MoRTH, JM Financial

Ordering peaks in 4Q18 / HAM take lion's share:

Exhibit 18. FY18-Awar	rds		
Mode	Length (in km)	Value (INR bn)	(% of Total Value of Awards)
EPC	3,791	430	35.2%
HAM	3,396	765	62.7%
BOT-Toll	209	25	2.0%
Total	7,396	1220	100%

Source: JM Financial, Industry, PIB

Source: PIB, MoRTH, JM Financial

Till Dec'17 NHAI awarded projects costing only INR 221bn covering 1,170km of highways.

However, ordering catapulted in 4QFY18 as NHAI ended FY18 with awards worth

- c.INR 1,220bn +100% YoY
- covering 7,397km, +70% YoY

Hybrid-Annuity-Model Notably, (HAM) orders took lion's share (63% in INR terms) vs EPC model (35% share).

But pace slackens in FY19 on delayed financial closure (FC)...: The ordering on FY19 till Feb'19 has been muted (estimated at 600-700 km). This is because, most HAM projects have seen delayed / lengthy FC proceedings given a) highly leveraged balance sheets of few players resulting from the BOT era, b) high concentration of orders with top 5 players (ABL, DBL, SEL, KNR, PNC) who got c.50% of HAM projects, and c) Stressed banking sector /NBFC's liquidity crisis, led to delayed FC for most projects while c.15 projects are

Typically HAM projects have

- NHAI grant for 40% of project cost
- Balance 60% is funded through a mix of debt /equity

still awaiting financial closure / sanctions for their projects.

• ... and challenges in land acquisition / appointed dates: NHAI is now strictly following its policy of announcing appointed dates (AD – zero date for start of construction) for projects awarded only when it has acquired majority of the land (80% for HAM / 90% for EPC). This ensures that once a project is under construction it has limited risk of delays due to land non-availability – a major issue faced in the past. However this same policy is delaying receipt of ADs for projects awarded in FY18 as NHAI is yet to acquire the required threshold of land. Hence EPC players are sitting on projects with FC completed /near completion but pending AD. This has also led rising working capital costs as some players (like DBL) have already started initial execution and earth work assuming ADs will come soon but are now facing execution delays. However our interactions with industry participants and NHAI officials suggest that AD's for majority projects are targeted by FY19 (pre-elections).

Exhibit 19. Key Players- HAM Portfolio snapshot **HAM Projects** Appointed FC Complete Firm Remarks Portfolio date received Excluding Bettadahalli-Shivamogga 7 7 Ashoka Buildcon (BUY) 1 HAM where ACL has emerged as lowest bidder on 21 Feb'19 Including KSHIP HAM where **KNR Constructions** 5 4 concession agreement is signed on 1 (BUY) 18 Jan'19 Sadbhav Engineering 8 13 8 (BUY) Including DBL Sangli Borgaon HAM where 4 Dilip Buildcon (NR) 12 12 FC achievement is notified on 27 Feb'19 Including Chakeri-Allahabad where 7 7 4 FC achievement is notified to PNC Infratech (NR) exchanges on 14 Feb'19

Source: Company, JM Financial

Steep targets - execution to catch-up: FY19 was declared as the "Year of Construction" as the ministry of roads and transport (MoRTH) had set a target of constructing at least 12,000km of highways in FY19 with NHAI accounting for 6000km / 9,700km by MoRTH and 720km by NHIDCL. This translates into c.33km/ day vis-à-vis 27km/ day constructed in FY18, implying a higher focus on execution. However, till date c.61,300km of road projects, costing c.INR 6.48tm are in progress as per MoRTH, while in 9MFY19, c.5,759km of highways were constructed implying 16.5% YoY growth vs. a minimum target of 22% YoY growth. With majority HAM projects still pending AD, much of the execution will now spill over into FY20.

_							
Ī	Exhibit 20. FY1	19 Construction Pro	ogress				
		FY18	FY19	YoY%			
	Full Year	9,829	12,000*	22.100/			
	km/day	27	33	22.10%			
	9-month	4,942	5,759	16 500/			
	km/day	18	21	16.50%			

Source: PIB, MoRTH, JM Financial *MoRTH + NHAI FY19 minimum target

Exhibit 2	21. Co	nstruct	ion Yo	Y				
30]	ı	kr	n/day (L	HS) •	Yo	Y % grov	vth (RH	60%
20 -		_					_	- 40% - 20%
10 -								- 0% 20%
- +					_			-40%
	FY12	FY13	FY14	FY15	FY16	FY17	FY18	YTD FY19

Source: PIB,MoRTH, JM Financial

Why is FC delayed?

PSU banks have stayed out of financing new HAM projects partly due to

- **a)** Past NPA pressures and issues with older BOT projects along with
- **b)** Balance sheet stress. Hence FC has been led by private banks and NBFCs which have been selective in picking projects.

While we hear of FCs being closed at more stringent norms and at cost lower than the bid win costs which would imply higher equity requirement from EPC players.

The Road Ahead?

■ NHAI Award Basket: Of the 34,000km (phase-I) of Bharatmala (announced in Oct'18), NHAI has already awarded c.4,200 km in FY18 and c.600-700km of projects are estimated to have been awarded in YTD FY19, which may reach 3,000-4,000 km by Mar'19. This would imply a basket of c.26,000 km of projects left for award of which DPR's are ready/in final stages for c17,000 km. Hence we expect that following the elections NHAI awarding will revive in FY20 and can reach 7,000-8,000/annum given backlog of DPR projects.

- Greenfield vs. brownfield: While most of the projects awarded till FY18 were brownfield capex, going ahead focus is largely on greenfield expressways. NHAI has identified 52 greenfield corridors of which c.2,000 km may get ordered in FY19. However greenfield projects typically have a longer life cycle given DPR preparation, approvals land acquisition etc., which delay awarding. However, land acquisition costs for greenfield corridors are expected to be lower vs. brownfield corridors.
- Order mix to shift back to EPC: Given the a) pending FC of HAM projects, b) delay in appointed dates, c) high order concentration in hand of few players limited competition and d) stressed banking sector / NBFC liquidity crisis, we expect NHAI's order mix to move away from HAM and back to EPC in the near future. Also, most large players participating in HAM already have their plates full of orders, implying fully leveraged balance sheets. Additionally NHAI can borrow debt at much cheaper costs than EPC player which would reduce life cycle cost of constructing projects under EPC mode vs. HAM. However this also implies that NHAI will incur higher upfront costs and stretch its balance sheet as debt rises.
- NHAIs D/E still favourable: NHAI's D/E stood at c.0.82x<1x at 1HFY19 despite the mammoth ordering seen in FY18. While NHAI borrows funds (INR 330bn debt inflow in FY17) at competitive rates, it also receives funds through capital base, cess fund, grants-capital/maintenance and budgetary supports which are as high as INR 370bn (FY20 BE). The budgetary allocations have remained flat even in pro-consumption budgets, while borrowings are expected to rise in future. Given NHAI's low D/E, we believe it has room to leverage its further and can order c.6,000km / year easily.</p>

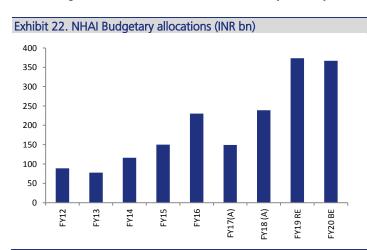


Exhibit 23. Roads Spending (INR bn) 400 1,600 350 1,400 1.200 300 250 1.000 200 800 150 600 100 400 50 200 O FY13 FY16 FY17(A) RE 3 FY20 BE FY18 (FY19 NHAI budgetary allocation (LHS) MoRTH budgetary allocation (LHS) State Government spending on Roads (RHS)

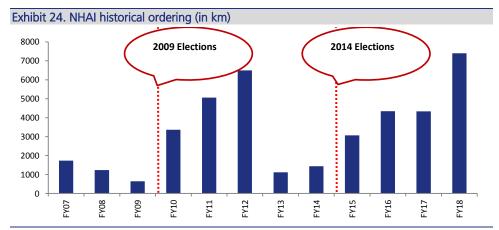
Source: Union Budget, JM Financial

Source: Union Budget, RBI Study of state budgets, JM Financial

Election-impact on ordering?

 Given the upcoming general elections, the model code of conduct is expected to kick-in from Mar'19 implying that there is limited room for NHAI awards in YTDFY19. Hence, we expect only c4,000km of awards in FY19.

• Given the uncertainty of awarding post elections, most stocks have corrected to historical lows. However, historically NHAI's ordering has consistently revived post elections irrespective of the ruling party (see chart) as road remains one of the key infrastructure needs of India. Additionally we now have a ready basket of 17,000km of projects with DPR's in advanced stage. This implies that ramp up ordering can be much faster in FY20 once the over-hang of election passes and the new government focuses on infrastructure development.



Source: NHAI, JM Financial

Exhibit 25. EPC Conces	sion agreement		
	Current	New EPC agreement	Impact
	Within 30 days from date of agreement, >=90% of total length of project (Clause 4.1.3(a))	Within 30 days from date of agreement, >=90% of total length of project, which shall be in contiguous stretches of length not less than 5 km (Clause 3.1.(iii).(a))	Positive: Larger work front for contractors to
	If works cannot be taken in municipal limits of a town or within any area falling in a reserved forest or wildlife sanctuary or the stretches as requisite clearances/approvals/affected land parcels for commencing construction of works have not been given within 240 days of appointed date - affected works to be withdrawn (Clause 8.3.3)	The window has been reduced to 180 days in the new EPC agreement.	Positive: Contractors to have faster access to worl front.
Disqualification of Contractor		contractor shall be ineligible for hidding any future	Higher attention to execution and milestones but this is also positive for contractors with strong execution capability as contractors would be your
Deemed termination of contract	F	Upon signing the agreement and submission of performance security by the contractor, if the appointed date doesn't occur within 90 days, agreement shall be deemed to have terminated wherein authority shall pay damages to the contractor equivalent to 1% of contract price(3% in case of standalone bridges) (Clause-3.4)	Positive: Obligation on authority to provide timely
Maintenance Period	4 years from date of completion. Contractor shall be paid 0.5%, 1%, 1.5% and 2% of contract price in 1st, 2nd , 3rd and 4th years respectively (Clause 14.1.1)	roads), including structure where in contractor shall be paid o 0.25% of contract price for each of	Emphasis on O&M with reduced compensation 8 increased tenure mean contractors are to ensure quality in the construction phase of the pavement While it is good for the commuters, the norms or stringent on contractors. However, will benefit contractors with good execution capabilities However, an increase in defect liability period would mean that contractors are to submit performance guarantees for longer durations- are increase in non-fund charges.
Mobilisation advance @10% of contract price	Interest bearing at bank rate (Clause 19.2.1)	Interest bearing at " bank rate+3% " (Clause 19.2.i)	Increase in interest expense for the contractors
Recovery of Mobilisation advance	Deductions to start once all certified payments exceed 20% of contract price (Clause 19.2.7(b))	Deductions to commence in first stage payment statement itself. (Clause 19.2.vi(a))	Increased working capital requirement for the contractor
Performance security		Authority to return additional performance security to contractor within 28 days from Completion certificate. In case of any delays, authority shall pay interest at 9% p.a (Clause 7.4.iii)	
Right of Way (joint inspection)	t 30 days (Clause- 8.2.1)	10 days (Clause- 8.2.1)	Focus on execution
Change of Scope	"The Authority may, notwithstanding anything to the contraryrequire the Contractor to make modifications/ alterations to the Works before the issue of completion certificate " (Clause 13.1.1)	the contraryrequire the Contractor to make	Positive: Emphasis on smoother execution of the

Annaintment of Author	Within 30 days of agreement / dec	Within 30 days of agreement / declaration of Within 10 days of agreement / declaration of				
Appointment of Authority' engineer	appointed date	appointed date	Positive: Fastens OB to execution cycle			
	(Clause 18.1.2)	(Clause 18.1.iii)				
	, , , , , , , , , , , , , , , , , , , ,	The test checks by the Authority's Engineer shall The test checks by the Authority's Engineer shall				
	comprise at least 20% of the quantity	comprise at least 20% of the quantity or number comprise at least 50% of the quantity or number				
Quality testing	of tests prescribed for each category or t	of tests prescribed for each category or type of test of tests prescribed for each category or type of test Emphasis on Quality				
	for quality control by the Contractor.	or quality control by the Contractor. for quality control by the Contractor.				
	(Clause 11.10.1)	(Clause 11.10.i)				

Source: NHAI, JM Financial

Ashoka Buildcon | BUY

JM FINANCIAL

Peak OB, trough valuations and robust balance sheet

Ashoka Buildcon (ABL) is one of India's largest Road EPC companies with an NHAI order market share of 3-5%. ABL's order book (OB) stands at INR 95bn (c.4x FY18 sales) with c.78% mix being from roads. Additionally, ABL has achieved financial closure (FC) for all its HAM projects where the appointed dates (AD) are expected soon culminating to implied EPC revenue growth in FY20. ABL's balance sheet is healthy with standalone / consolidated net D:E of nil / 2.6x in FY18, which peaks at c.0.3x / 3.6x by FY20 when all HAM projects will be commissioned. The equity required for HAM projects will be funded by internal accruals (c. INR 6.5bn needed) coupled with incremental debt (if required) at the standalone level, given the low leverage (Exhibit 32). With a life time high OB, we believe ABL is at an inflection point, which can trigger at least 20%+ revenue CAGR in FY19-21E (vs. guidance of 40%). Despite assuming slow execution (20% sales growth and 11% fall in NHAI ordering (vs. FY18) in FY20-21, we find ABL delivering 12% CAGR in earnings (FY18-21) while stock trades at P/E of 6x FY21 (core EPC business). Our bull case, which factors 40% sales growth as per guidance, implies 17% EPS CAGR in FY18-21. We value the stock at EV / EBITDA of 6x (50% discount to L&T) for the EPC business and NPV value of BOT (implied P/BV of 1.1 x) for a TP of INR 170 (44% upside). We initiate with a BUY.

- Strong OB with HAM financial closure gives earnings visibility: Roads form a significant part of its OB (78%) which is expected to remain high given robust order basket of NHAI (>17,000km with ready DPRs). As compared to ABLs historic order book levels of c1.7-2.7x sales), it closed 3QFY19 with life time high OB / sales of 4x (FY18 sales). With execution expected to pick up in FY20 as construction starts on financially closed HAM projects, we believe ABL is at an inflection point which can trigger at least 22% revenue CAGR in FY19-21E (vs guidance of 40%). We factor EBITDA margins of c.12-12.6% over FY19-21E (historic trend of c.12-13% and guidance of 13%). Our macro assumptions also factor a) no incremental Ols in FY19 / c.INR 45bn p.a in FY20-21E- already L1 for INR 13.8bn HAM project and b) delayed execution of HAM projects given land acquisition / ROW issues. Despite this we find ABL's revenue CAGR of 28% and PAT CAGR of 12% over FY18-21E. The slower profit growth vs. revenue growth is due to rise in effective tax rate from FY20 as ABL outgrows its minimum alternate tax (MAT) benefit.
- D/E ratio the best among peers: ABL's FY18 consolidated net D/E stood at 2.6x in FY18 which we expect to peak out at c.3.6x by FY20, factoring incremental debt for fresh HAM inflows worth c.INR 16bn. The equity required for existing HAM projects (INR 6.5bn) will be funded from internal accruals / current cash, with any shortfall being met through incremental debt at standalone level given low leverage (Exhibit 32).
- HAM-FC complete: Currently, many HAM projects still await FC, while ABL has managed to tie up debt for all its HAM projects, given its balance sheet strength and quality of HAM portfolio. ABL has received appointed date for 1 of its HAM projects while the dates for other 4 are expected by 4QFY19 end. Given robust execution capability, we believe land acquisition and AD's remain the key monitorables for earnings growth.

		Su	bha	dip	Mitr	a
	T 1	101	221		0040	-

subhadip.mitra@jmfl.com | Tel: (91 22) 66303128

Koundinya Nimmagadda

koundinya.nimmagadda@jmfl.com | Tel: (91 22) 66303574

Recommendation and Price Target	
Current Reco.	BUY
Previous Reco.	
Current Price Target (12M)	170
Upside/(Downside)	34.5%
Previous Price Target	
Change	NA

Key Data – ASBL IN	
Current Market Price	INR126
Market cap (bn)	INR35.5/US\$0.5
Free Float	39%
Shares in issue (mn)	280.7
Diluted share (mn)	280.7
3-mon avg daily val (mn)	INR39.5/US\$0.6
52-week range	197/93
Sensex/Nifty	36,064/10,864
INR/US\$	70.9

Price Performance			
%	1M	6M	12M
Absolute	-2.0	-16.8	-24.2
Relative*	-0.8	-17.0	-27.9
* To the BSE Sensex			

Exhibit A. ABL-SOTP		
Segment	Value per share (INR)	Implied P/E
Road BOTs		
Road BOT assets(Mar-19 NPV)	57	5
Under Construction assets		
	57	5
Construction (6x EV/Ex)	133	
Less: Net Debt (ex BOT)	-18	10
Less: Equity infusion into CGD	-3	
Total Fair value	169	14

Source: JM Financial

Financial Summary					(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Net Sales	19,909	24,369	34,061	42,297	51,111
Sales Growth	3.5%	22.4%	39.8%	24.2%	20.8%
EBITDA	2,427	2,934	4,319	5,237	6,224
EBITDA Margin	12.1%	12.0%	12.6%	12.3%	12.1%
Adjusted Net Profit	1,761	2,370	2,662	2,759	3,299
Diluted EPS (Symbole)	9.4	12.7	9.5	9.8	11.8
Diluted EPS Growth	18.7%	34.6%	-25.1%	3.6%	19.6%
ROIC	25.0%	26.8%	23.9%	20.8%	23.0%
ROE	10.2%	11.9%	12.0%	11.3%	12.1%
P/E (x)	13.4	9.9	13.3	12.8	10.7
P/B (x)	1.3	1.1	1.5	1.4	1.2
EV/EBITDA (x)	15.1	12.1	10.0	8.4	7.2
Dividend Yield	0.6%	1.3%	0.8%	0.8%	0.8%

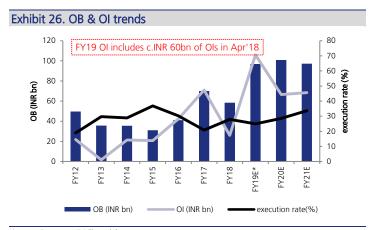
Source: Company data, JM Financial. Note: Valuations as of 04/Jan/2019

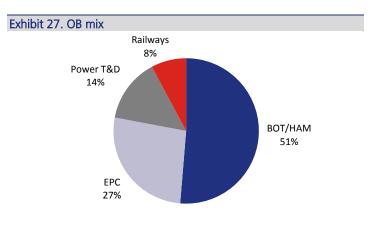
JM Financial Research is also available on: Bloomberg - JMFR <GO>, Thomson Publisher & Reuters S&P Capital IQ and FactSet

Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

Investment Rationale

High earnings visibility/OB: ABL's OB stands at INR 95.4bn (c.3.9x FY18 sales) suggesting high growth visibility. ABL recorded INR 70bn of Ols in FY19 (c. 3x FY18 OI) mainly in Apr'18 due to low base of FY18 and peak awarding activity by NHAI in 4QFY18. Roads form a significant part of its OB (78%) and we expect the share of road projects to remain high given robust order basket with NHAI where road projects of c17,000km have a ready DPR (detailed project reports).



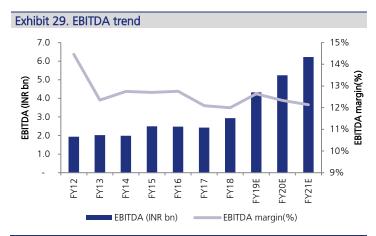


Source: Company, JM Financial

Source: Company, JM Financial

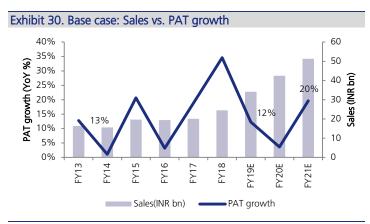
- ABLs revenue growth has been volatile historically, given lower historical OB base of (1.7-2.5x TTM sales). However, with a life-time high OB of 4x FY18 sales, we believe ABL is at an inflection point that can trigger at least 20% revenue CAGR in FY19-21E (vs. quidance of 40%).
- ABL has maintained high EBITDA margins historically at c.12-13%. We factor c.12-12.6% margins over FY19-20E vs. management guidance of 13%.





Source: Company, JM Financial

- Despite conservative assumptions of a) Nil / c.45bn in FY19/20/21 and b) delayed execution of HAM projects given land acquisition / ROW issues, we estimate revenue CAGR of 22% and PAT CAGR of 11% over FY19-21E. ABL's effective tax rate is expected to rise in FY20 as the company outgrows its minimum alternate tax (MAT) benefit. However, rising revenue driven by OB execution will more than offset this impact at a net profit level.
- However our bull case which factors 40% revenue growth (as per guidance) implies EPS
 CAGR of 17% in FY18-21 (Exhibit 30 & 31)



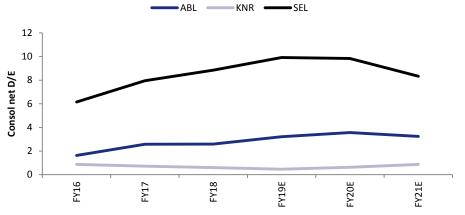


Source: Company, JM Financial

Source: Company, JM Financial

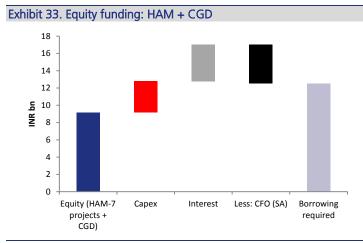
■ D/E ratio the best among peers: ABL's FY18 consol net D/E stood at 2.6x in FY18 which enables it to leverage its balance sheet for future order inflows while standalone debt was nil in FY18. We expect the consol net D/E to reach c.3.6x by FY20, despite assuming c.16bn / c.9bn of HAM Ols over FY20/FY21 which will drive earnings growth.

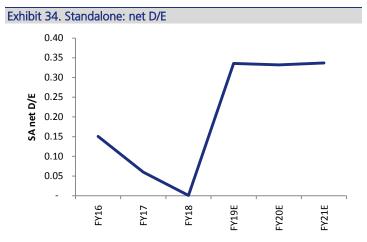




Source: JM Financial, Industry

■ HAM-FC complete: In the current scenario where many HAM projects awarded by NHAI are still pending FC, ABL has tied up debt for all its HAM projects, given its balance sheet strength and quality of HAM portfolio. ABL has received appointed date for one of its HAM projects while that for 4 other projects is expected in 4QFY19. Given its robust execution capability, we believe that execution will not be a constraint while land acquisition & appointed dates by the authority are the key monitorables. The equity required for HAM projects (c.INR 4.8 bn) will be funded by internal accruals / current cash with any shortfall being met through incremental debt at standalone level given very low leverage.(Exhibit 32)



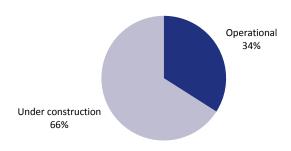


Source: Company, JM Financial

Source: Company, JM Financial

- BOT/HAM Portfolio: ABL's BOT/HAM portfolio consists of 17 BOT-Toll/Annuity + HAM projects. While ABL directly holds 3 BOT-annuity projects, 14 projects are held through its subsidiary Ashoka Concessions Ltd (ACL) where in ABL holds c.61% with the rest being held by SBI Macquarie Infrastructure Trust and Macquarie SBI Infrastructure Investments Pte Limited. Of this, 7 new HAM projects and 3 BOT projects are under construction with the rest being operational.
- SBI Macquarie deal: ABL entered into a JV with SBI Macquarie whereby the latter's ownership of 31% in subsidiary Ashoka Concessions Ltd (ACL) would increase to 39% over a time subject to a) performance of Sambalpur-BOT asset and b) 12% return on investment for Macquarie. SBI Macquarie has infused capital through Compulsory Convertible Debentures (CCDs) for 39% stake maturing in Mar'19 (with an option to extend it by another 6 months), with committed returns 12% under the deal. As a result the company has provided for a liability of INR 1.7bn at its SA level, which would be reversed if the returns exceed 12%. ABL management is hopeful of an asset swap with SBI Macquarie which would result in transfer of assets in a no cash deal. This would result lowering ABL's consolidated D/E and clear the overhang of the deal with no impact on cash flow. We have conservatively not factored any positive benefit of this deal.

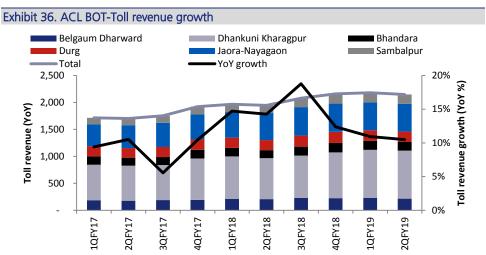
Exhibit 35. ABL SPVs



Operational assets

ABL operates 6 BOT-Toll subsidiaries under its BOT arm-Ashoka Concessions Ltd, where ABL owns c.61% and a 100% owned BOT annuity project (Exhibit-41). Toll revenue grew at average c.12% over last 10 quarters, as the BOT portfolio witnessed double-digit revenue growth (except 3QFY17 due to impact on traffic from demonetisation).

• We factor only **c.10.5%** revenue growth for the BOT portfolio and find that most projects (except Sambalpur), are cash self-sufficient with only MMR support required from parent.



Diversification - Hit or a miss?

Realty business dropped: While ABL's performance in the road sector and power T&D space is heartening, management has been attempting to diversify its business. After opting out of the realty business (MIAL) for which it had received an LOA in Feb'18, the company is now exploring opportunities in railways construction and gas distribution businesses.

- City Gas Distribution (CGD) business: The company has started a CGD business through its subsidiary-Unison Enviro Private Limited and has bagged 3 orders for Ratnagiri, Chitradurga & Latur areas which require a cumulative capex of c.INR 6.5bn spread over the next 5 years. DBL has roped in Morgan Stanley India Infrastructure (MSII) as the equity partner with 49% stake for a committed investment of c.INR 1.5bn. However, given the non-core and initial stage of investment in this business, we don't factor any value to this business and believe the capital committed here could be at risk until the business matures. We hence do not allot any value to this business while factoring cash outflow in the net debt (INR 825mn).
- Railways: ABL has entered into railways construction business with the receipt of c.INR 8bn order from rail Vikas Nigam Limited (RVNL). Given the company's ability to execute roads / bridges and power T&D projects, we believe this diversification can be a future trigger being closely related to its core competence high growth potential.

Key Risks

- Dependence on NHAI orders: Like all Road EPC players c.78% of ABL's OB is contributed by roads. Hence ABL's future growth (beyond FY21) is linked to awarding by NHAI. Given a) pending FC of many HAM projects, b) delay in receipt of appointed date for projects with FC, owing to land acquisition/RoW issues and c) political uncertainty in an election year, we foresee slower / nil ordering activity by NHAI in FY19. However this may not impact ABL and also other road EPC players given strong OBs in FY19. However a recovery in NHAI awarding by FY20 is required to have visibility on FY21 growth and beyond.
- Land Acquisition: Although ABL had tied up debt for all of its HAM projects, it is yet to
 receive appointed dates for 4 of its HAM projects. Any delay in appointed dates owing to
 land acquisition/RoW issues can defer the earnings growth.
- Diversification: While ABL's performance in the road sector and power T&D space is heartening, management has been on the look-out to diversify its businesses. After opting out of the realty business (MIAL) for which it had received an letter of award (LOA) in Feb'18, the company is exploring opportunities in railways construction and gas distribution businesses. We believe railway construction is largely related to its core competence. However, CGD is not a related business activity for ABL and hence, we believe investment into this business is at high risk.

Valuation

We factor a) Nil / c.INR 45bn of Ols over FY19 / FY20, b) EBITDA margins at c.12-12.6% (vs. management guidance of c.13%) and find ABL's EPC business delivering an EPS CAGR of c.11.3% over FY19-21E. We factor only c.10.5% revenue growth for the BOT portfolio and find that most projects (except Sambalpur project), are cash self-sufficient with only MMR support required from parent.

Exhibit 37. Snapshot											
СМР	Impli	ed P/E	Implied P/E (adj)		Implied EV/EBITDA		Implied EV/EBITDA (adj)				SA EPS CAGR
	FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21	FY19-21		
Price 126	12.8	10.7	7.0	5.8	8.4	7.2	5.3	4.6	11.3%		

Source: Company, JM Financial

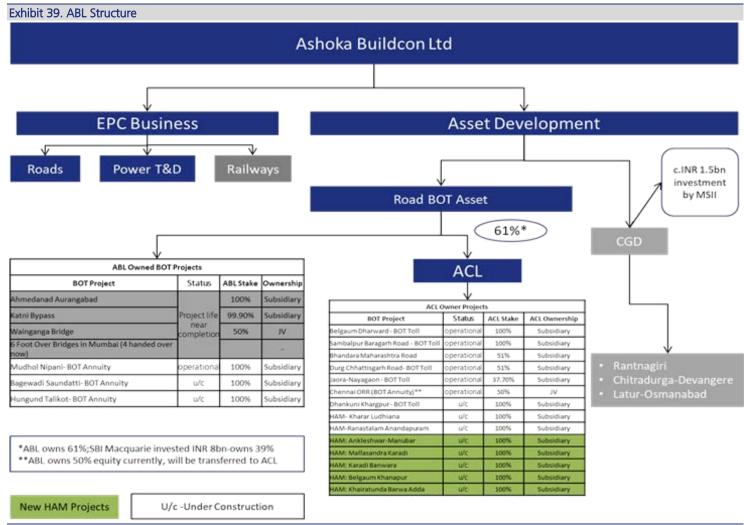
■ We value ABL at 6x FY21 EV/EBITDA (50% discount to L&T) for the EPC business and BOT at NPV value (implied P/BV of 1.1 x) to arrive at TP of INR 170 (upside of c.34 %). We initiate with a BUY.

Exhibit 38. SOTP						
Segment	Basis	Multiple (x)	Value (INR mn)	Value per share (INR)	% of TP	Implied P/E
Road BOTs						
Road BOT assets	Mar-19 NPV	,	16,082	57	34%	5
Under Construction assets						
			16,082	57	34%	5
Construction	Mar-21 EV/E (x)	6.0	37,344	133	79%	
Less: Net Debt (ex BOT)			-5,039	-18	-11%	10
Less: Equity infusion into CGD			-829	-3	-2%	
Total Fair value			47,558	169	100%	14

Company background and brief history

ABL started as a civil construction player in 1978, and ventured into development of state road projects in 1996. It won its first BOT project in Maharashtra in 1997. The company ventured into NHAI BOT projects and won its first project in 2006. In 2006, IDFC managed funds invested in ABL and two NH projects of ABL-the first PE deal. The company had also ventured into power T&D EPC business in this period. In 2012, SBI Macquarie had invested c.INR 8bn in ACL (ABL's subsidiary) which holds the BOT Toll portfolio-the second PE deal. The company had raised c.INR 5bn through QIP in 2015. It had also received its first international EPC contract for USD 38.11mn in 2015. Recently, it has ventured into railways EPC contract and CGD business wherein MSII had agreed to infuse c.INR 1.5bn-the third PE deal. The company had successfully handed over a few PPP projects with a few more projects completing their concession period in 2-3 years.

Share Pledge: Nil



Source: Company, JM Financial

Management details

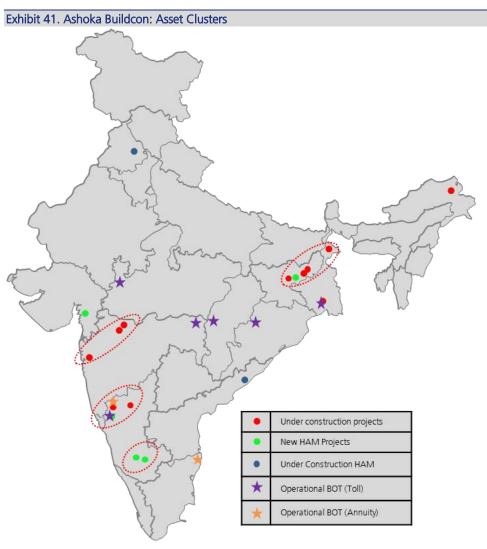
ABL is founded by Mr Ashok Katariya, a gold medallist from College of Engineering in Pune. Mr Satish Parakh is the managing director of the company and he is associated with the company from 1982. The board consists of five non-executive independent directors wherein none of the members have directorship in more than 2 listed entities (including ABL).

Annexure-I

Exhibit 40. New HAM Portfolio									
New HAM Portfolio	Bid project	Total Project	ct 5	E accide a	C1	Financial	Appointed	Land Acquis	ition status
New HAIVI PORTIOIO	cost	Cost	Debt	Equity	Grant	Closure	dates	3G	ЗН
Mallasandra Karadi	9,170	7,406	2,750	988	3,668			90%	36%
Karadi banwara	12,185	10,064	3,850	1,340	4,874			70%	36%
Belgaum Khanapur	8,562	7,457	2,950	1,082	3,425	Debt Tied up for all		91%	29%
Khairatunda-Barwa adda	8,601	7,117	2,700	976	3,440	projects		89%	68%
Ankleshwar Manubar	16,870	14,831	6.000	2.083	6,748	' '	Received - 10	•	
Alikiesiiwai ivialiubai	10,670	14,651	6,000	2,003	0,740		Dec'18	N/A	4
Total	55,388	46,875	18,250	6,469	22,155				

Source: Company, JM Financial

Annexure-II



Financial Tables (Standalone)

Income Statement				(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Net Sales	19,909	24,369	34,061	42,297	51,111
Sales Growth	3.5%	22.4%	39.8%	24.2%	20.8%
Other Operating Income	156	94	131	162	196
Total Revenue	20,065	24,463	34,192	42,459	51,307
Cost of Goods Sold/Op. Exp	15,992	19,524	27,409	34,317	41,720
Personnel Cost	901	1,067	1,174	1,291	1,420
Other Expenses	745	938	1,290	1,614	1,943
EBITDA	2,427	2,934	4,319	5,237	6,224
EBITDA Margin	12.1%	12.0%	12.6%	12.3%	12.1%
EBITDA Growth	-2.1%	20.9%	47.2%	21.2%	18.9%
Depn. & Amort.	507	532	793	981	1,101
EBIT	1,919	2,402	3,526	4,255	5,123
Other Income	719	978	1,075	950	980
Finance Cost	474	485	904	1,088	1,179
PBT before Excep. & Forex	2,164	2,894	3,697	4,117	4,924
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	2,164	2,894	3,697	4,117	4,924
Taxes	403	524	1,035	1,359	1,625
Extraordinary Inc./Loss(-)	0	0	0	0	0
Assoc. Profit/Min. Int.(-)	0	0	0	0	0
Reported Net Profit	1,761	2,370	2,662	2,759	3,299
Adjusted Net Profit	1,761	2,370	2,662	2,759	3,299
Net Margin	8.8%	9.7%	7.8%	6.5%	6.4%
Diluted Share Cap. (mn)	187.1	187.1	280.7	280.7	280.7
Diluted EPS (Symbole)	9.4	12.7	9.5	9.8	11.8
Diluted EPS Growth	18.7%	34.6%	-25.1%	3.6%	19.6%
Total Dividend + Tax	180	360	360	360	360
Dividend Per Share (')	0.8	1.6	1.1	1.1	1.1

Balance Sheet					(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Shareholders' Fund	18,768	21,003	23,304	25,702	28,641
Share Capital	936	936	1,404	1,404	1,404
Reserves & Surplus	17,832	20,067	21,900	24,298	27,237
Preference Share Capital	0	0	0	0	0
Minority Interest	0	0	0	0	0
Total Loans	1,768	1,251	8,751	9,351	10,651
Def. Tax Liab. / Assets (-)	-304	-349	-349	-349	-349
Total - Equity & Liab.	20,232	21,905	31,706	34,704	38,943
Net Fixed Assets	1,847	2,324	3,730	2,771	3,062
Gross Fixed Assets	2,500	3,495	5,695	5,717	7,109
Intangible Assets	114	162	162	162	162
Less: Depn. & Amort.	925	1,431	2,225	3,206	4,307
Capital WIP	158	97	97	97	97
Investments	13,065	13,182	17,710	20,280	22,447
Current Assets	19,285	23,414	32,321	38,895	46,227
Inventories	866	1,459	2,039	2,532	3,060
Sundry Debtors	5,875	10,117	14,141	17,560	21,220
Cash & Bank Balances	638	1,235	923	818	1,004
Loans & Advances	1,424	4,035	6,038	6,584	7,168
Other Current Assets	10,482	6,568	9,180	11,399	13,775
Current Liab. & Prov.	13,965	17,015	22,056	27,243	32,794
Current Liabilities	5,693	5,927	8,284	10,288	12,431
Provisions & Others	8,272	11,087	13,771	16,955	20,362
Net Current Assets	5,320	6,399	10,266	11,652	13,433
Total – Assets	20,232	21,905	31,705	34,704	38,942

Source: Company, JM Financial

Source: Company, JM Financial

Cash Flow Statement				(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Profit before Tax	2,164	2,894	3,697	4,117	4,924
Depn. & Amort.	507	532	793	981	1,101
Net Interest Exp. / Inc. (-)	16	-141	-171	138	199
Inc (-) / Dec in WCap.	2,307	2,415	-4,178	-1,491	-1,596
Others	149	73	0	0	0
Taxes Paid	-722	-789	-1,035	-1,359	-1,625
Operating Cash Flow	4,421	4,985	-894	2,387	3,003
Capex	-400	-1,417	-2,200	-22	-1,392
Free Cash Flow	4,021	3,568	-3,094	2,365	1,611
Inc (-) / Dec in Investments	-949	-2,397	-4,528	-2,571	-2,167
Others	-107	473	0	0	0
Investing Cash Flow	-1,456	-3,341	-6,728	-2,593	-3,559
Inc / Dec (-) in Capital	0	0	0	0	0
Dividend + Tax thereon	-150	-181	-360	-360	-360
Inc / Dec (-) in Loans	-1,268	386	7,500	600	1,300
Others	-1,184	-1,253	171	-138	-199
Financing Cash Flow	-2,602	-1,047	7,310	101	741
Inc / Dec (-) in Cash	364	596	-311	-104	185
Opening Cash Balance	274	638	1,235	923	818
Closing Cash Balance	638	1,235	923	818	1,004

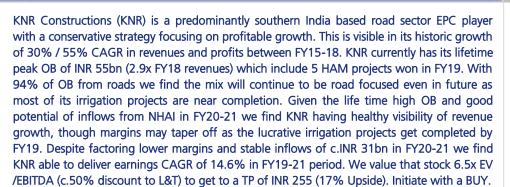
Source: Company, JM Financial

Dupont Analysis					
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Net Margin	8.8%	9.7%	7.8%	6.5%	6.4%
Asset Turnover (x)	1.0	1.2	1.3	1.3	1.4
Leverage Factor (x)	1.1	1.1	1.2	1.4	1.4
RoE	10.2%	11.9%	12.0%	11.3%	12.1%

Key Ratios					
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
BV/Share (')	100.3	112.2	83.0	91.6	102.0
ROIC	25.0%	26.8%	23.9%	20.8%	23.0%
ROE	10.2%	11.9%	12.0%	11.3%	12.1%
Net Debt/Equity (x)	0.1	0.0	0.3	0.3	0.3
P/E (x)	13.4	9.9	13.3	12.8	10.7
P/B (x)	1.3	1.1	1.5	1.4	1.2
EV/EBITDA (x)	15.1	12.1	10.0	8.4	7.2
EV/Sales (x)	1.8	1.4	1.3	1.0	0.9
Debtor days	107	151	151	151	151
Inventory days	16	22	22	22	22
Creditor days	118	100	101	101	101

KNR Constructions | BUY

Winning the race... slow and steady



- Peak OB: KNR's OB stood at c.INR 15.4bn at the end 9MFY19; excluding the newly won 5 HAM projects where appointed dates are yet to be received. Including these HAM projects OB stands INR 55bn (2.9x FY18 Rev). Roads (94%) form a significant part of the OB as is the case with most other road players while the irrigation projects form c.6% of OB. However, management guides to complete majority of the Irrigation works by FY19.
- Conservative bidding strategy: KNR has a conservative strategy of prioritising on profitability over fresh order inflows. The company also bids for smaller ticket size projects to limit its exposure to a single project, which also implies exposure to higher competition. On the other hand the conservative bidding strategy has resulted in its BOT projects not only servicing debt through internal accruals but also being FCFE positive. Recent sale of its 3 HAM projects to Cube Highways at healthy valuations (1.5x-2.1x P/BV) is another feather in its cap (details in Exhibit 60).
- Execution/EBITDA margins: KNR owns 100% of its equipment to execute the project, subcontracting only low margin activities of the projects, which is reflected in its EBITDA margins that have remained at c17%. Although management has been guiding for c.14-15% sustainable margins, its margins have historically fallen to 14% only in FY15 which was period cyclical downturn in road sector capex and execution. In 9MFY18, KNR's EBITDA margins stood at c.17% / c.25% from Roads/Irrigations, resulting in blended margins of c.20%. We conservatively factor c.16.5%/c.20% margins from Roads / Irrigation projects. In current scenario of peak order book execution pick up expected in FY20-21 from HAM execution we find it unlikely that KNR margins will fall to historic lows (Exhibit 54 chart of Rev growth vs margins & OB)
- Healthy balance sheet: KNR's FY18 consol net D/E stood at 0.6 x at the end of FY18 leaving ample space for leverage for future HAM inflows. Additionally, c.30% of debt is funded by promoters further limiting the external debt risk. We expect the consol net D/E to reach c.0.9x by FY21, factoring c.9.4bn of annual HAM OIs

JM	FINANCIAL

Subhadip Mitra

subhadip.mitra@jmfl.com | Tel: (91 22) 66303128

Koundinya Nimmagadda

koundinya.nimmagadda@jmfl.com | Tel: (91 22) 66303574

Recommendation and Price Target	
Current Reco.	BUY
Previous Reco.	NR
Current Price Target (12M)	255
Upside/(Downside)	16.8%
Previous Price Target	0
Change	NA

Key Data – KNRC IN	
Current Market Price	INR218
Market cap (bn)	INR30.7/US\$0.4
Free Float	45%
Shares in issue (mn)	140.6
Diluted share (mn)	140.6
3-mon avg daily val (mn)	INR28.0/US\$0.4
52-week range	340/163
Sensex/Nifty	36,064/10,864
INR/US\$	70.9

Price Performance %	1M	6M	12M
Absolute	10.3	-2.5	-30.0
Relative*	11.6	-2.7	-33.4

^{*} To the BSE Sensex

Exhibit B. KNR-SOTP		
Particulars	Value (INR /share)	Implied P/E
EPC business (A) (6.5x FY21 EV/EBITDA)	232	12
Less: Net Debt (B)	(9)	(1)
Total (C = A-B)	223	12
BOT Asset Value (D) (FY20 NPV)	32	2
Total (C+D)	255	14
Source: JM Financial		

Financial Summary					(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Net Sales	15,411	19,317	19,009	24,746	30,832
Sales Growth (%)	70.7	25.3	-1.6	30.2	24.6
EBITDA	2,296	3,861	3,608	4,024	5,028
EBITDA Margin (%)	14.9	20.0	19.0	16.3	16.3
Adjusted Net Profit	1,681	2,721	1,993	2,207	2,620
Diluted EPS (INR)	12.0	19.3	14.2	15.7	18.6
Diluted EPS Growth (%)	-79.1	61.9	-26.7	10.7	18.7
ROIC (%)	20.2	24.5	13.9	16.6	17.7
ROE (%)	20.6	26.5	15.9	15.2	15.5
P/E (x)	18.2	11.3	15.4	13.9	11.7
P/B (x)	3.4	2.6	2.3	2.0	1.7
EV/EBITDA (x)	13.9	8.4	9.1	7.9	6.4
Dividend Yield (%)	0.0	0.2	0.2	0.2	0.2

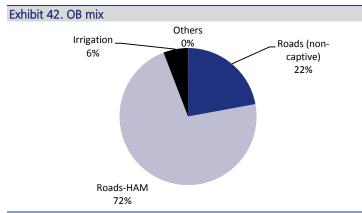
Source: Company data, JM Financial, Note: Valuations as of 04/Jan/2019

JM Financial Research is also available on: Bloomberg - JMFR <GO>, Thomson Publisher & Reuters S&P Capital IQ and FactSet

Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

Investment Rationale

■ Peak OB: KNR's OB stood at c.INR 15.4bn at the end 9MFY19; excluding the newly won 5 HAM projects where appointed dates are yet to be received. Including these HAM projects OB stands INR 55bn (2.9x FY18 Rev). Road (94%) form a significant part of the OB as is the case with most other road players while the company also executes irrigation works that form c.6% of OB. However, management guides to complete majority of the irrigation works in FY19.

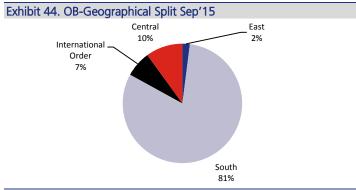


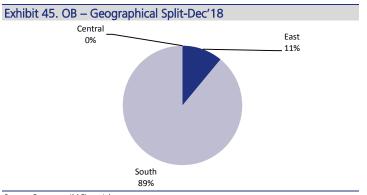


Source: Company, JM Financial

Source: Company, JM Financial *FY18 OB doesn't include New HAM projects

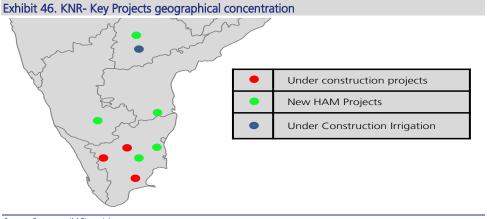
Focused yet efficient: Predominantly a player focused on southern part of India, KNR has increased its focus on southern states evident from the change in geographical mix of orders from Sep'15 to Dec'18. It focuses on co-locating its projects thereby churning its assets efficiently. The newly won HAM projects are also co-located into 2 clusters (exhibit-46).





Source: Company, JM Financial

Source: Company, JM Financial



Conservative bidding strategy: KNR has a conservative strategy of prioritising on profitability over fresh order inflows. The company also bids for smaller ticket size projects to limit its exposure to a single project which also implies exposure to higher competition. On the other hand the conservative bidding strategy has resulted in its BOT projects not only servicing debt through internal accruals but also being FCFE positive.

■ Execution/EBITDA margins: KNR owns 8,880 units of construction equipment and has an in-house team of 1,325 qualified and experienced employees through which it executes most of its works in-house, sub-contracting only low margin activities of the projects, which is reflected in its EBITDA margins that have remained at high teens. Although management has been guiding for c.14-15% sustainable margins, its margins have historically fallen to 14% only in FY15 which was period cyclical downturn in road sector capex and execution. In 9MFY18, KNR's EBITDA margins stood at c.17% / c.25% from Roads/Irrigations, resulting in blended margins of c.20%. We conservatively factor c.16.5%/c.20% margins from roads / irrigation projects.

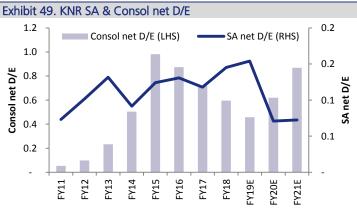


Source: Company, JM Financial

- Healthy balance sheet: KNR's FY18 consolidated net D/E stood at 0.6 x which enables it to leverage its balance sheet for future order inflows. Also, c.30% of this is funded by promoters thereby limiting the risk from external debt. We expect the consol net D/E to reach c.0.9x by FY21, factoring c.9.4bn of annual HAM OIs which would drive earnings growth.
- HAM asset sale: KNR had signed a share purchase agreement (SPA) with Cube Highways and Infrastructure III Pte Ltd (Cube) to sell stake in 3 HAM, in a phased manner (see New HAM projects in Exhibit 63 for more details). Although, KNR has the ability to infuse equity for its HAM projects given a strong balance sheet, the SPA would strengthen its balance sheet further, enabling it to bid for HAM projects going ahead.

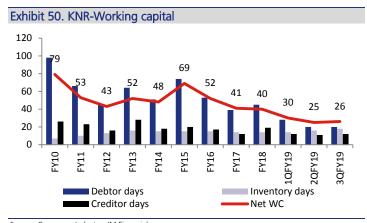
non Promoter
Loan
70%

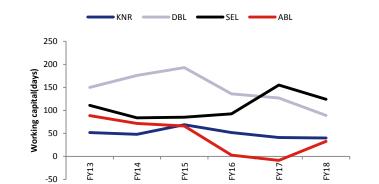
Source: Company, JM Financial, Industry



Source: Company, JM Financial, Industry

Efficient WC Cycle: KNR's working capital cycle is the best among its peers (Exhibit-50/51) except for ABL, where the working capital cycle is volatile. KNR is able to reduce its working capital cycle with every year. We believe a shift in order inflow mix from third party vendors in the past to NHAI has partially helped the cause. In 9MFY19, it has reduced its working capital days to 26 days from 40 days in FY18, largely driven by reduction in debtor's days to 20 days (vs. 45 days in Mar'18)-partially offset by an increase in inventory days (18 days in Dec'18 vs. 14 days in Mar'18). However, we conservatively do not factor in the benefits of the reduction in the working capital cycle over 9MFY19 in our estimates.



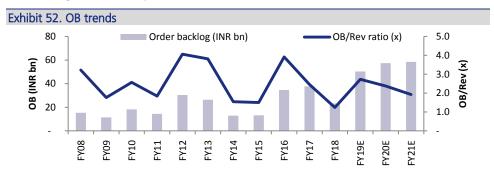


Source: Company, Industry, JM Financial

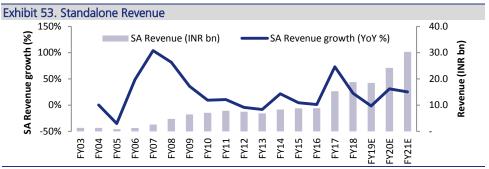
Source: Company, Industry, JM Financial

Exhibit 51. Working capital-peer comparison

Challenges of the past



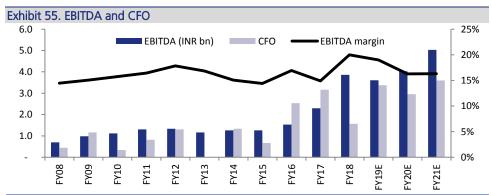
Source: Company, JM Financial
*FY18 OB doesn't include new HAM OI



Source: Company, JM Financial



Source: Company, JM Financial



Source: Company, JM Financial

KNR's standalone revenue grew at c.24% CAGR over FY03-11 during the previous boom; on the back of strong OB (exhibit-52) in line with NHAI's ordering activity.

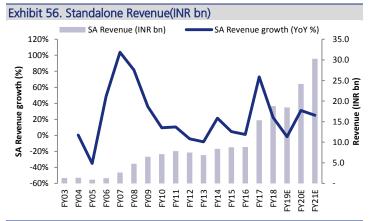
Cancellation/de-scoping of orders in FY13 (c.45% of OB) from 3rd party players coupled with muted NHAI awarding in FY14-15 implied muted revenue growth.

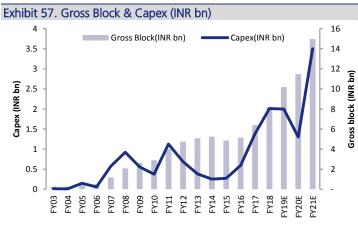
However with growing NHAI awards in FY16-18, KNR's OB and hence revenue grew at c.46% CAGR

Despite Order cancellation / muted Ols, efficient working capital and cost controls helped maintain EBITDA margins and cash flows

The road ahead is encouraging

While in the previous cycle, KNR had to suffer on account of cancellation / de-scoping of a couple of orders from third party players, given that c.100% of OB is now from central / state government authorities the risk is now limited to two players- the government body and KNR. Therefore <u>chances of a de-scoping / cancellation are relatively lower now vis-àvis the previous cycle</u>. However, the challenges are different going ahead.

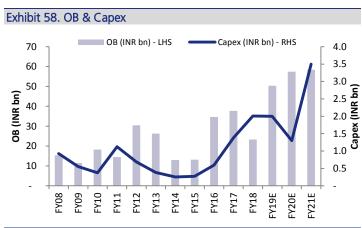


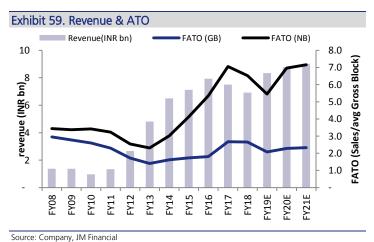


Source: Company, JM Financial

Source: Company, JM Financial

While revenue grew at c.25% CAGR over FY03-11-the previous boom cycle, KNR had incurred a net capex of INR 3.8bn as gross block grew from INR 262mn in FY03 to INR 4bn in FY11.





Source: Company, JM Financial

*FY18 OB doesn't include new HAM projects

**FY12-13 OB includes cancelled orders

 KNR's capex has largely followed OB (naturally), except for FY12-13 period when few orders were cancelled. It had incurred a capex of c.3.4bn over FY17-18 as it had entered into its next orbit with historic high OB/OIs.

- However, asset turnover ratio is expected to reach its historic peak of 2.3x/7.2x at Gross Block/Net Block for KNR by FY21 implying highest utilisation of assets. However, this would also mean that the company will have to incur incremental capex. It has incurred a capex of c.INR 1.6bn in 9MFY19 and expects to incur c.300-400mn in 4QFY19. Additionally, management guides for incremental capex of c.INR 1.3bn in FY20 dependant on new OI.
- Given robust sales growth of 27% over FY19-21E and efficient working capital we believe KNR will be able to meet this through internal accruals alone. However, incremental capex would also make it asset-heavy at standalone level which means a) significant financial deleverage in case of a slowdown in awarding activity or b) Incremental capex for the next leg of growth given asset turnover ratio is at a historic high implying- growth will come at a cost.

New HAM Projects

As highlighted above, KNR has won 5 HAM projects (4 NHAI + 1 KSHIP) in FY19 with a total bid project cost of c.INR 56bn (estimated EPC cost c.INR 39bn). The company has achieved financial closure for all its NHAI projects while the KSHIP project is pending as of 9MFY19. Given a) strong balance sheet, and b) higher grant amount (c. 65%) from the authority, we believe that KNR should be to tie up debt for this project. Also, it had received appointed date for its Chittor-Mallavaram project, which can contribute to revenues from 4QFY19.

• Management guides for a total equity requirement of <u>INR 4.4bn in its 5 HAM projects</u> to be funded by internal accruals. However KNR has already its HAM portfolio having signed a share purchase agreement (SPA) with Cube highways and Infrastructure III Pte Ltd (Cube) to <u>sell stake in 3 HAM projects</u>. As per the SPA, KNR and Cube shall infuse c.51% and c.49% of equity requirement during the construction phase. KNR shall handover the HAM projects in two stages-post CoD and after the expiry of mandatory lock-in period.

Exhibit 60. Details of HAM SPA (INR mn)					
HAM Project	Total Equity Requirement	Equity investment by KNR	Equity investment by Cube	Consideration for KNR's 51% share at exit	Implied P/B
KNR Srirangam Infra Pvt Ltd (Trichy-Kallagam)	962	491	472	736	1.50
KNR Chidambaram Infra Pvt Ltd (Meensurutti-Chidambaram)	455	232	223	365	1.57
KNR Tirumala Infra Pvt Ltd (Chittoor - Mallavaram)	1,432	731	702	1,521	2.08

Source: Company, JM Financial

Key Risks

- Dependence on road orders: Like all Road EPC players c.94% mix OB contributed by roads. As the management targets to complete the existing irrigation projects largely in FY19, KNR's revenue future growth is linked to awarding by NHAI. Given a) pending financial closure of c.15-20% of awarded HAM projects, b) delay in appointed date of projects that have achieved FC, owing to land acquisition/RoW issues and c) political uncertainty in an election year, we foresee slower ordering activity by NHAI in FY19 which may not impact KNR or other road EPC players given strong OBs. However a recovery in NHAI awarding by FY20 is required to have visibility on FY21 growth and beyond.
- Land acquisition / appointed dates: Although KNR had achieved financial closure for 4 of
 its HAM projects, it is appointed in only one project while appointed dates are pending
 for the other three projects where FC is complete. Any delay in appointed dates owing to
 land acquisition/RoW issues would defer the earnings growth
- Geographical concentration: c.90% of KNR's OB is concentrated in the four southern states of India. While this helps in better churning of assets, the marginal cost of construction it would need for new projects in new geographies would be higher when compared with its peers thereby resulting in a competitive disadvantage.
- Ownership of all equipment: The company has a policy of high equipment ownership which on one hand benefits from higher margins, quality control and on time project completion but on the hand exposes KNR to risk of operating de-leverage in a down turn. However this risk is offset by its conservative strategy of focussing on profitable order rather than aggressive order inflows.

Valuation

• Given a muted awarding activity by NHAI in YTDFY19, we do not factor any incremental OIs in FY19 and c.31bn of OI's over FY20-21E, with c.22bn annual road OIs (c.30% from HAM projects). However, given a strong OB (c.2.9x FY18 Rev), we find KNR's EPS to grow at c.14.6% over FY19-21E vs. EPS CAGR of c.29% over FY15-19E, witnessed after cancellation of third party orders.

• We factor c.10% revenue growth and find its BOT are not only able to service debt through internal accruals but also FCFE positive.

Exhibit 61. Sna	Exhibit 61. Snapshot								
СМР	Implied P/E		Implied P/E (adj) Implie		Implied E	V/EBITDA	Implied EV/EBITDA (adj)		SA EPS CAGR
	FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21	FY19-21
Price 218	13.9	11.7	11.9	10.0	7.9	6.4	6.8	5.5	14.6%

Source: Company, JM Financial

 We value KNR at 6.5x FY21 EV / EBITDA (c.50% discount to L&T) for the EPC business and BOT at NPV to arrive at SOTP based TP of INR 255 (17% upside). We initiate with a BUY.

Exhibit 62. SOTP Valu	ation					
Particulars	Basis	Multiple (x)	Value (INR mn)	Value (INR /share)	% of TP	Implied P/E
EPC business (A)	FY21 EV /EBITDA	6.5	32,680	232	91%	12
Less: Net Debt (B)			(1,316)	(9)	-4%	(1)
Total (C = A-B)			31,364	223	88%	12
BOT Asset Value (D)			4,473	32	12%	2
, ,	FY20-NPV	1.0	3,268	23	9%	
Muzaffarpur	FY20-NPV	1.0	1,205	9	3%	
Total (C+D)			35,837	255	100%	14

Company background and brief history

With an expertise in executing road EPC and irrigation contracts, KNR commenced its EPC business in 1995, Started as a subcontractor, executing projects for Sadbhav Engineering, GVK, GMR, and the company grew into a full size contractor winning 5 HAM projects in 2018-19. The company got listed in 2008 on the bourses and had delivered returns of c.20% CAGR to shareholders since listing.

Share Pledge: Nil

Management details

KNR is founded by Mr K.Narasimha Reddy, who is also the managing director. Mr. Reddy had started his career in 1968 and has c. 50 years of experience in highway sector. He is responsible for project planning, scheduling and cost controls. Mr K Jalandhar Reddy, also from the promoter group is an executive director and has c.25 years of experience in highway and infrastructure sector. Mr Jalandhar Reddy is responsible for tendering and bidding activities. The board consists of five members, with two non-executive independent directors and a non-executive, non-independent director in addition to the promoters-Mr K Narasimha Reddy and Mr. K Jalandhar Reddy. Independent directors do not chair any other board of listed entities other than KNR.

Annexure

xhibit 63. HAM Project status (INR mn)										
HAM Status	Project Cost	Total Project Cost	Debt	Equity	Grant	Financial Closure	Appointed date	Stake sale	KNR's equity commitment	Receipt at deal closure
Trichy-kallagam (KNR Srirangam Infra Pvt Ltd)	10,206	9,100	3,820	962	4,318	04-Jan-19	Pending		491	736.1
Meensurutti-Chidambaram (KNR Chidambaram Infra Pvt Ltd)	4,820	4,316	1,820	455	2,041	04-Jan-19	Pending	Share purchase agreement signed	232.1	364.6
Chittoor-Mallavaram (KNR Thirumala Infra Pvt Ltd)	17,301	14,555	5,730	1,433	7,393	04-Jan-19	Received - 04 Jan'19		730.6	1520.6
Ramsanpalle-Mangloor (KNR Shankarampet Projects Pvt Ltd)	12,340	10,456	4,169	1,042	5,245	04-Jan-19	Pending		N/A	
Magadi-Somwarpeth	11,445	10,153	2,134	534	7,485	Pending	Pending		IVA	
Total	56,112	48,580	17,673	4,426	26,481					

Financial Tables (Standalone)

Income Statement				(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Net Sales	15,411	19,317	19,009	24,746	30,832
Sales Growth	70.7%	25.3%	-1.6%	30.2%	24.6%
Other Operating Income	0	0	0	0	0
Total Revenue	15,411	19,317	19,009	24,746	30,832
Cost of Goods Sold/Op. Exp	13,115	15,455	15,401	20,722	25,804
Personnel Cost	0	0	0	0	0
Other Expenses	0	0	0	0	0
EBITDA	2,296	3,861	3,608	4,024	5,028
EBITDA Margin	14.9%	20.0%	19.0%	16.3%	16.3%
EBITDA Growth	50.1%	68.2%	-6.6%	11.5%	24.9%
Depn. & Amort.	639	1,341	1,660	1,500	1,793
EBIT	1,657	2,520	1,948	2,524	3,235
Other Income	303	393	620	400	400
Finance Cost	219	231	303	297	276
PBT before Excep. & Forex	1,741	2,682	2,265	2,627	3,359
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	1,741	2,682	2,265	2,627	3,359
Taxes	60	-39	272	420	739
Extraordinary Inc./Loss(-)	-109	0	0	0	0
Assoc. Profit/Min. Int.(-)	0	0	0	0	0
Reported Net Profit	1,572	2,721	1,993	2,207	2,620
Adjusted Net Profit	1,681	2,721	1,993	2,207	2,620
Net Margin	10.9%	14.1%	10.5%	8.9%	8.5%
Diluted Share Cap. (mn)	140.6	140.6	140.6	140.6	140.6
Diluted EPS (INR)	12.0	19.3	14.2	15.7	18.6
Diluted EPS Growth	-79.1%	61.9%	-26.7%	10.7%	18.7%
Total Dividend + Tax	0	85	85	85	85
Dividend Per Share (INR)	0.0	0.5	0.5	0.5	0.5

Balance Sheet					(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Shareholders' Fund	8,955	11,578	13,487	15,609	18,144
Share Capital	281	281	281	281	281
Reserves & Surplus	8,674	11,297	13,206	15,328	17,863
Preference Share Capital	0	0	0	0	0
Minority Interest	0	0	0	0	0
Total Loans	1,303	2,118	2,618	1,618	1,818
Def. Tax Liab. / Assets (-)	-863	-1,497	-1,497	-1,497	-1,497
Total - Equity & Liab.	9,395	12,200	14,608	15,731	18,466
Net Fixed Assets	2,622	3,314	3,654	3,454	5,161
Gross Fixed Assets	6,402	8,173	10,173	11,473	14,973
Intangible Assets	0	0	0	0	0
Less: Depn. & Amort.	3,795	4,859	6,519	8,019	9,812
Capital WIP	15	0	0	0	0
Investments	1,425	1,122	3,114	3,814	4,020
Current Assets	11,269	13,725	13,707	16,100	18,800
Inventories	574	712	701	912	1,136
Sundry Debtors	1,640	2,320	2,283	2,972	3,703
Cash & Bank Balances	164	371	473	444	435
Loans & Advances	4,972	5,203	5,212	5,213	5,354
Other Current Assets	3,920	5,120	5,039	6,559	8,173
Current Liab. & Prov.	5,922	5,962	5,867	7,637	9,516
Current Liabilities	1,427	2,184	2,150	2,798	3,487
Provisions & Others	4,495	3,777	3,717	4,839	6,029
Net Current Assets	5,348	7,764	7,840	8,462	9,284
Total – Assets	9,395	12,200	14,608	15,730	18,466

Source: Company, JM Financial

Source: Company, JM Financial

Cash Flow Statement				(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Profit before Tax	1,632	2,682	2,265	2,627	3,359
Depn. & Amort.	639	1,341	1,660	1,500	1,793
Net Interest Exp. / Inc. (-)	165	128	-317	-103	-124
Inc (-) / Dec in WCap.	730	-2,329	35	-650	-690
Others	74	-17	0	0	0
Taxes Paid	-75	-237	-272	-420	-739
Operating Cash Flow	3,165	1,568	3,371	2,953	3,599
Capex	-1,383	-2,009	-2,000	-1,300	-3,500
Free Cash Flow	1,782	-440	1,371	1,653	99
Inc (-) / Dec in Investments	-1,568	-9	-1,991	-700	-206
Others	-144	166	611	399	259
Investing Cash Flow	-3,095	-1,851	-3,380	-1,601	-3,447
Inc / Dec (-) in Capital	0	0	0	0	0
Dividend + Tax thereon	0	-85	-85	-85	-85
Inc / Dec (-) in Loans	273	763	500	-1,000	200
Others	-220	-189	-303	-297	-276
Financing Cash Flow	53	490	112	-1,381	-161
Inc / Dec (-) in Cash	123	206	103	-29	-9
Opening Cash Balance	41	164	370	473	444
Closing Cash Balance	164	370	473	444	435

Dupont Analysis					
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Net Margin	10.9%	14.1%	10.5%	8.9%	8.5%
Asset Turnover (x)	1.8	1.8	1.4	1.6	1.8
Leverage Factor (x)	1.0	1.1	1.1	1.0	1.0
RoE	20.6%	26.5%	15.9%	15.2%	15.5%

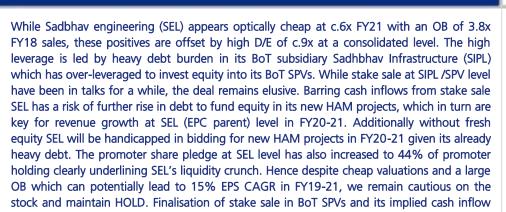
Key Ratios					
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
BV/Share (INR)	63.7	82.3	95.9	111.0	129.0
ROIC	20.2%	24.5%	13.9%	16.6%	17.7%
ROE	20.6%	26.5%	15.9%	15.2%	15.5%
Net Debt/Equity (x)	0.1	0.2	0.2	0.1	0.1
P/E (x)	18.2	11.3	15.4	13.9	11.7
P/B (x)	3.4	2.6	2.3	2.0	1.7
EV/EBITDA (x)	13.9	8.4	9.1	7.9	6.4
EV/Sales (x)	2.1	1.7	1.7	1.3	1.0
Debtor days	39	44	44	44	44
Inventory days	14	13	13	13	13
Creditor days	40	52	51	49	49

Source: Company, JM Financial

can lead to a re-rating for SEL stock.

Sadbhav Engineering | HOLD

EPC strength burdened by ballooning debt / delayed BoT sale



- Strong OB: SEL's OB stands at c.INR 128bn (c.3.7x FY18 sales), largely driven by robust OI's of c.INR 86bn in FY18. Roads form 78% of its OB of which c.50% is contributed by HAM projects (received from SIPL). Of total OB, SEL had secured c.INR31bn of OIs in 9MFY19 but given a slowdown in NHAI's pace of awards and SEL's own debt related challenges (details below), incremental OI (especially HAM) is challenging.
- Delay in FC/Appointed dates: As per management's 3QFY19 concall, appointed dates for 3 HAM projects constituting c.24% of OB are expected only beyond 4QFY19. Also, project execution for another 22% of OB is expected to start in 4QFY19 (details on page 35). Therefore, execution of c.46% of OB is pending as evident in the muted performance (2% YoY sales growth) in 9MFY19.
- Equity Shortfall: For the 12 new HAM projects, SIPL, the BOT arm of Sadbhav Engineering needs to infuse c.INR 13bn of gross equity in its HAM projects of which, c.INR 3.4bn is already infused as of 9MFY18. We estimate a shortfall of c.INR 5bn after accounting for internal accruals (SIPL SA& BOT subsidiaries). While the company has a) c.INR5bn of proceeds from securitisation of Maharashtra border check post (of which c.INR 1.5bn is drawdown in 2QFY19) and b) c.INR 6bn of debt raised recently (as per media reports), that can bridge the gap, going ahead we believe it's a tightrope walk
- D/E at c9x in FY18: SEL has reduced its FY18 D/E to c.0.7x in FY18 (vs. c.1.1x in FY17), however the borrowing increased by c.INR 1.27bn in 9MFY19 as it had raised c.INR 1.9bn through NCD's. While at consolidated level FY18 D/E stood at 8.8x in FY18 which despite internal accruals will remain high at c.8.3x even till FY21 due to debt obligation for new HAM projects. We believe this high leverage will inhibit SEL's ability to bid for more PPP projects as obtaining financial closure for these projects will be difficult, particularly now given the stress in banking/NBFC

JM	FINANCIAL

Subhadip Mitra

subhadip.mitra@jmfl.com | Tel: (91 22) 66303128

Koundinya Nimmagadda

koundinya.nimmagadda@jmfl.com | Tel: (91 22) 66303574

Recommendation and Price Target	
Current Reco.	HOLD
Previous Reco.	HOLD
Current Price Target (12M)	205
Upside/(Downside)	-0.9%
Previous Price Target	310
Change	-34%

Key Data – SADE IN	
Current Market Price	INR207
Market cap (bn)	INR35.5/US\$0.5
Free Float	48%
Shares in issue (mn)	171.5
Diluted share (mn)	171.5
3-mon avg daily val (mn)	INR44.6/US\$0.6
52-week range	408/162
Sensex/Nifty	36,064/10,864
INR/US\$	70.9

Price Performance			
%	1M	6M	12M
Absolute	5.5	-27.5	-48.0
Relative*	7.0	-23.3	-50.9
* To the BSE Sensor			

Value/share
94
47
214
-56
158
205

Source: JM Financial

Financial Summary					(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Net Sales	33,203	35,051	38,666	44,240	51,485
Sales Growth (%)	4.2	5.6	10.3	14.4	16.4
EBITDA	3,556	4,151	4,601	5,265	6,127
EBITDA Margin (%)	10.7	11.8	11.9	11.9	11.9
Adjusted Net Profit	1,878	2,207	2,544	3,106	3,384
Diluted EPS (INR)	11.0	12.9	14.8	18.1	19.7
Diluted EPS Growth (%)	24.0	17.5	15.3	22.1	8.9
ROIC (%)	10.1	11.8	11.2	12.0	12.6
ROE (%)	11.9	12.5	12.9	14.0	13.5
P/E (x)	18.9	16.1	14.0	11.4	10.5
P/B (x)	2.1	1.9	1.7	1.5	1.3
EV/EBITDA (x)	15.0	11.8	10.8	9.4	8.2
Dividend Yield (%)	0.3	0.8	0.8	0.8	0.8

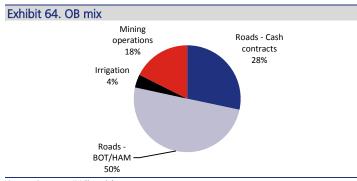
Source: Company data, JM Financial. Note: Valuations as of 01/Mar/2019

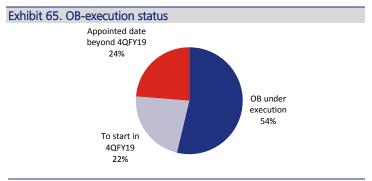
JM Financial Research is also available on: Bloomberg - JMFR <GO>, Thomson Publisher & Reuters S&P Capital IQ and FactSet

Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

Investment Rationale - EPC strength outweighed by high leverage

Strong OB: SEL's OB stands at c.INR 128bn (c.3.7x FY18 sales), largely driven by robust OI's of c.INR 86bn in FY18. Roads form 78% of its OB of which c.50% is contributed by HAM projects (received from SIPL). Of total OB, SEL had secured c.INR31bn of OIs in 9MFY19 but given a slowdown in NHAI's pace of awards and SEL's own debt related challenges (details below), incremental OI (especially HAM) is challenging.

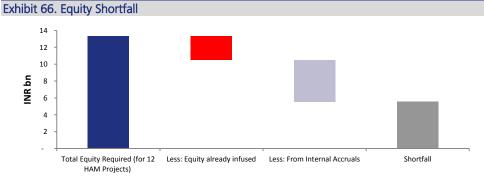




Source: Company, JM Financial

Source: Company, JM Financial

- HAM-Portfolio: SIPL has recently won 5 new HAM projects taking its total HAM portfolio to 12. Of the older 7 HAM projects execution has been steady barring 2 projects (Una-Kodinar and Rampur-II) which witnessed de-scoping on land acquisition issues. Among 5 new HAM projects, 2 projects (Bhimasur-Bhuj & Jodhpur ring road) have achieved FC but only Jodhpur Ring Road has received AD. For 2 of the balance 3 projects (Vadodara-Kim and Tumkur-Shivmoga) SEL has received loan sanctions while its Vizag Port Road project has received in-principal approval for debt. Given the recent stress in banking/NBFC's there could be a risk of delay in disbursements and hence in execution.
- Delay in FC/Appointed dates: As per management's 3QFY19 concall, appointed dates for 3 HAM projects (Bhimasur-Bhuj, Tumkur-Shivmoga, Vizag Port road) and the Gadag Honnali (KSHIP) project which constitute c.24% of OB are expected only beyond 4QFY19. Further another 22% of OB comprising a) Kim-Ankleshwar (subject to FC), b) Mumbai Nagpur expressway and c) Chitradurga branch are also expected to start by 4QFY19. Therefore, execution is yet to start in c.46% of SEL's OB which explains the muted performance (2% YoY sales growth) in 9MFY19. While the start of execution in its 3 new projects would help SEL register earnings growth. Financial closure/appointed dates are key monitorables going ahead as a quarter of OB is dependent on these.
- Equity Shortfall: With the receipt of 12 new HAM projects, SIPL needs to infuse c.INR 13bn of gross equity in its HAM projects of which, c.INR 3.4bn is already infused as of 9MFY18. We estimate a shortfall of c.INR 5bn even after accounting for internal accruals which will be funded through a) c.INR5bn of proceeds from securitisation of Maharashtra border check post (c.INR 1.5bn drawn in 2QFY19) and b) c.INR 6bn of debt sanctions (as per media reports).



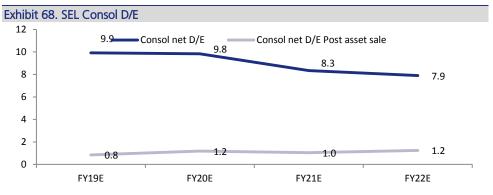
Consol D/E remains- a constraint: SEL has reduced its FY18 D/E to c.0.7x in FY18 (vs c.1.1 in FY17), however the borrowing increased by c.INR 1.27bn 9MFY19 as it had raised c.INR 1.9bn through NCD's. Burdened by the high leverage of BOT assets, SEL's Consol net D/E stood at c.8.8x in FY18 (Exhibit- 67). With incremental funding requirement of the HAM projects, we find Consol D/E to remain high at c.8.3x even in FY21. We believe this high leverage will inhibit SEL's ability to bid for more HAM projects.

Exhibit 67. Consol Snapshot										
INR mn	FY17	FY18	FY19E	FY20E	FY21E					
EBITDA	11,899	14,767	15,222	17,048	19,159					
Net Worth (incl. Minority Interest)	12,544	11,218	11,753	13,154	16,131					
Net Debt	99,681	99,229	1,16,572	1,29,374	1,34,505					
Net D/E (x)	7.9	8.8	9.9	9.8	8.3					
Net Debt/EBITDA (x)	8.38	6.72	7.66	7.59	7.02					
EBITDA/Interest (x)	1.00	1.12	1.39	1.43	1.53					

Source: Company, JM Financial

Asset monetisation – the key trigger

- As per the management's 3QFY19 concall and media articles (see link), Sadbhav Infrastructure Projects Ltd (SIPL) - the BOT arm of SEL is in the process of monetising its BOT-toll / annuity projects.
- A high Consol D/E at c.8.8x and constraints on growth capital would mean that the asset sale is of crucial importance. Assuming the BoT sale results in cash inflow of INR 28bn (implied SIPL value of INR80/share at par with CMP), we find SEL's Consol D/E falls to c.1x before inching up again as new debt flows in for HAM projects. A fall in D/E would increase SEL's ability to bid for PPP mode of projects and hence, OI's which would warrant a re-rating.



Source: Company, JM Financial

■ BOT Portfolio: After the revival seen in traffic flows into its BOT projects in 2HFY18 to 1HFY19, traffic growth has again slowed down to c.4.5% in 3QFY19 mainly in Dec'18. We factor c.9% revenue growth for the BOT portfolio and find the portfolio generating positive cash PAT except for 2 projects burdened with high debt. This is also evident from SIPL reporting a cash PAT>INR 1bn for the third successive quarter. However, debt levels are particularly high in 2 BOT projects, resulting in a loss at consolidated PAT level. A slower than expected tariff growth significantly impacts SIPL and hence SEL SOTP valuations.

Key Risks

■ Delay in FC / Appointed dates: Appointed dates for 3 HAM projects (Bhimasur-Bhuj, Tumkur-Shivmoga, Vizag Port road) and the Gadag Honnali (KSHIP) project which constitute c.24% of OB are expected beyond 4QFY19 only. Also, SIPL's Kim-Ankleshwar (FC documents submitted) project execution is expected to start in 4QFY19 along with the Mumbai-Nagpur expressway and Chitradurga branch canal. Together these projects constitute c.22% of OB. Therefore, execution is yet to start in c.46% of SEL's which explains the muted performance (2% YoY sales growth) in 9MFY19. While start of execution in its three new projects would help SEL register earnings growth, financial closure / appointed dates are monitorable going ahead as a quarter of OB is yet to start contributing to earnings.

Consol D/E remains- a constraint: Burdened by the high leverage of BOT assets, SEL's Consol net D/E stood at c.8.8x in FY18. With incremental funding requirement of the HAM projects, we find Consol D/E to be c.8.3x by FY21. We believe this high leverage will inhibit SEL's ability to bid for more PPP projects as obtaining financial closure for these projects will be difficult, particularly now given the stress in banking/NBFC.

Valuation

■ We factor **a)** Nil / c.54bn of Ols in 4QFY19/FY20, **b)** EBITDA margins at c.11.9% (vs. guidance of c.12%) to account for increased competition for EPC orders which is the potential opportunity for SEL in near term and find SEL's EPC business delivering EPS CAGR of c.18.5% and c.15.7% over FY18-20E and FY19-21E respectively. We factor c.9% revenue growth for the BOT portfolio and find the portfolio generating positive cash PAT except for a couple of projects burdened with high debt.

E	Exhibit 69. Earnings snapshot											
	СМР	Implied P/E Im		Implied P	Implied P/E (adj)		Implied EV/EBITDA		V/EBITDA dj)	SA EPS CAGR		
		FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21	FY19-21		
	Price 207	11.4	10.4	6.3	5.7	9.3	8.2	6.3	5.7	16%		

Source: Company, JM Financial

- We value SEL at 6x FY21 EV/EBITDA (50% discount to L&T) for the EPC business and the BOT at 50% discount to NPV Value to arrive at TP of INR 205 (CMP INR 207/share), factoring c.9% toll revenue growth.
- At 6xFY21 EV/EBITDA, we find the EPC business' value at of c.INR 158/share. At CMP of c.INR 173/share, this would imply only c.INR49/share to its BOT assets .This discount is driven by a) net losses at SIPL consolidated level, b) delay in the BOT sale and c) a muted operational performance of BOT portfolio in 3QFY19 registering (c.4.5% /c.6.2% growth in traffic / toll revenue).

Exhibit 70. SOTP				
Particulars	Basis Multiple		Value/share	% of TP
Road BOTs				
Operational	Mar-20 NPV	68.64% stake	123	
Under construction	Mar-20 NPV	68.64% stake	24	
Less: Net Debt (ex- projects specific)			-53	
Total BOT Value			94	
Total BOT Value at 50% discount (A)			47	23%
EPC				
Construction	Mar-21 EV/E (x)	6.0	214	
Less: Net Debt (ex SIPL L&A)			-56	
Total EPC Value (B)			158	77%
Total Fair Value (A + B)			205	100%
Course: IM Financial				

Source: JM Financial

Exhibit 71. SOTP sensitivity									
		Traffic growth rate (YoY %)							
	205	0.5%	2.0%	3.5%	5.0%	6.5%	8.0%		
	2.0%	157	168	179	192	207	223		
Toll rate growth rate (YoY%)	3.0%	162	173	185	199	214	231		
Toll fate growth fate (101 70)	4.0%	166	178	191	205	221	239		
	5.0%	171	184	197	212	229	249		
	6.0%	177	190	204	220	238	259		

Source: JM Financial

Company Background and brief history

SEL was established in 1988 and today has an OB of c.90bn EPC contracts spread across transport (roads), irrigation and mining industries. c.46% of the company's shares is held by its Promoters, 22% by Mutual Funds and 16% by FPIs. The company also holds a 69% stake in SIPL, which holds its BOT-toll portfolio. SEL's portfolio is spread across 14 states.

Management Details

- SEL is promoted by the late Mr Vishnubhai Patel. His son Mr Shashin V Patel is the current chairman and managing director. Mr Shashin Patel holds a master's degree in business administration and has worked at the company since May 2000. The Board consists of four executive directors and five independent directors, who have vast experience in project execution, consulting and related fields.
- Share Pledge

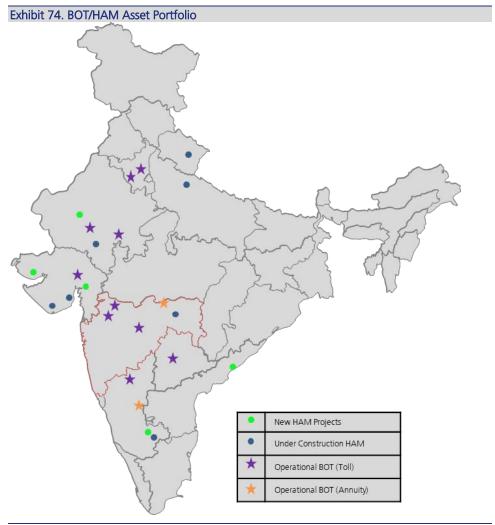
Exhibit 72. Share Pledge at the end of 3QFY19							
Promoter Holding	Shares pledged						
Promoter Holding	As a percentage of promoter holding	As a percentage of Total no of shares					
46.5%	43.6%	20.3%					

Annexure-A: HAM Portfolio snapshot

Exhibit 73. HAM Portfolio snapshot (INR bn)

Project	Bid Projec Cost	t Capital Grant-NHAI	Equity	Debt	Financial Closure	Appointed Date	Scheduled COD	Construction Progress as or Dec'18	Other Remarks
Bhavnagar - Talaja	8.2	3.6	1.1	4.3	Dec-16	Feb-17	Aug-19	62%	• 2nd grant received as of 2QFY19
BRT Tiger	10.1	4.4	1.2	4.8	May-17	Aug-17	Aug-19	64%	2nd grant received as of 2QFY19
Rampur - Kathgodam (Package-1)	7.4	3.3	0.9	3.5	Nov-16	Mar-17	Mar-19	60%	• 2nd grant received as of 2QFY19
Rampur - Kathgodam (Package-2)	6.6	3.0	0.8	3.2	Nov-16	Oct-17	Oct-19	25%	 6.25km - de-scoping (Total length 49km; Reduction in EPO work-c. INR 730mn)
Una - Kodinar	6.2	2.8	0.8	3.4	Dec-16	Feb-17	Aug-19	40%	 1st Grant Received as of 2QFY19. 6.5km de-scoping. (Total project length 40km)
Udaipur Bypass	8.9	3.8	1.1	4.3	Oct-17	Nov-17	Nov-19	55%	 2nd grant received as of 2QFY19
Waranga-Mahagaon	10.7	4.7	1.3	5.2	Nov-17	May-18	Mar-20	32%	1st Grant Received as of 2QFY19
Bhimasur-Bhuj	10.5	4.6	1.3	5.1	Oct-18*		Apr-21		Draft financing documents submitted
Jodhpur Ring Road	11.1	4.8	1.3	5.3	Jul-18	<u>Dec-18</u>	Jul-20	8%	
Tumkur III	10.1	4.4	1.2	4.9			Oct-20		Received sanctions
Vadodara	14.0	6.1	1.7	6.8			Oct-20		Received sanctions
Vishakhapatnam	5.3	2.3	0.6	2.5			Apr-20		 In-principal approval received as per management
Total	109.0	47.7	13.4	53.3					

Annexure-B: Asset Portfolio



Financial Tables (Standalone)

Income Statement				(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Net Sales	33,203	35,051	38,666	44,240	51,485
Sales Growth	4.2%	5.6%	10.3%	14.4%	16.4%
Other Operating Income	0	0	0	0	0
Total Revenue	33,203	35,051	38,666	44,240	51,485
Cost of Goods Sold/Op. Exp	29,647	30,899	34,065	38,976	45,358
Personnel Cost	0	0	0	0	0
Other Expenses	0	0	0	0	0
EBITDA	3,556	4,151	4,601	5,265	6,127
EBITDA Margin	10.7%	11.8%	11.9%	11.9%	11.9%
EBITDA Growth	6.2%	16.7%	10.8%	14.4%	16.4%
Depn. & Amort.	1,000	979	992	1,083	1,259
EBIT	2,556	3,172	3,609	4,181	4,868
Other Income	875	897	500	550	268
Finance Cost	1,534	1,907	1,137	1,158	1,243
PBT before Excep. & Forex	1,897	2,163	2,972	3,573	3,893
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	1,897	2,163	2,972	3,573	3,893
Taxes	18	-44	428	467	509
Extraordinary Inc./Loss(-)	0	0	0	0	0
Assoc. Profit/Min. Int.(-)	0	0	0	0	0
Reported Net Profit	1,878	2,207	2,544	3,106	3,384
Adjusted Net Profit	1,878	2,207	2,544	3,106	3,384
Net Margin	5.7%	6.3%	6.6%	7.0%	6.6%
Diluted Share Cap. (mn)	171.5	171.5	171.5	171.5	171.5
Diluted EPS (INR)	11.0	12.9	14.8	18.1	19.7
Diluted EPS Growth	24.0%	17.5%	15.3%	22.1%	8.9%
Total Dividend + Tax	140	350	350	350	350
Dividend Per Share (INR)	0.7	1.8	1.8	1.8	1.8

Balance Sheet					(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Shareholders' Fund	16,609	18,668	20,862	23,618	26,653
Share Capital	172	172	172	172	172
Reserves & Surplus	16,437	18,496	20,690	23,447	26,481
Preference Share Capital	0	0	0	0	0
Minority Interest	0	0	0	0	0
Total Loans	17,771	13,326	14,316	13,778	14,900
Def. Tax Liab. / Assets (-)	-477	-994	-1,238	-1,238	-1,238
Total - Equity & Liab.	33,904	31,000	33,941	36,159	40,315
Net Fixed Assets	5,229	5,028	4,736	4,352	5,094
Gross Fixed Assets	6,689	7,282	7,982	8,682	10,682
Intangible Assets	0	0	0	0	0
Less: Depn. & Amort.	1,530	2,278	3,270	4,353	5,612
Capital WIP	69	23	23	23	23
Investments	5,694	5,775	5,775	5,775	5,775
Current Assets	28,804	31,910	36,348	40,808	46,638
Inventories	1,234	1,643	1,993	2,280	2,654
Sundry Debtors	17,010	16,280	20,654	23,631	27,501
Cash & Bank Balances	25	127	141	116	116
Loans & Advances	5,381	6,882	5,092	5,092	5,092
Other Current Assets	5,155	6,978	8,468	9,689	11,275
Current Liab. & Prov.	5,823	11,713	12,918	14,776	17,192
Current Liabilities	5,803	5,990	6,608	7,561	8,799
Provisions & Others	20	5,722	6,310	7,216	8,393
Net Current Assets	22,981	20,197	23,430	26,032	29,447
Total – Assets	33,904	31,000	33,941	36,159	40,315

Source: Company, JM Financial

Source: Company, JM Financial

Cash Flow Statement				(INR mn)
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Profit before Tax	1,878	2,207	2,972	3,573	3,893
Depn. & Amort.	1,000	979	992	1,083	1,259
Net Interest Exp. / Inc. (-)	788	1,097	1,137	1,158	1,243
Inc (-) / Dec in WCap.	-4,417	3,107	-3,219	-2,627	-3,415
Others	7	-35	-743	-550	-268
Taxes Paid	235	-822	-428	-467	-509
Operating Cash Flow	-508	6,532	711	2,170	2,203
Capex	-322	-780	-700	-700	-2,000
Free Cash Flow	-830	5,753	11	1,470	203
Inc (-) / Dec in Investments	386	-1,582	0	0	0
Others	747	809	500	550	268
Investing Cash Flow	811	-1,552	-200	-150	-1,732
Inc / Dec (-) in Capital	2	0	0	0	0
Dividend + Tax thereon	-145	-155	-350	-350	-350
Inc / Dec (-) in Loans	1,324	-2,924	990	-538	1,122
Others	-1,534	-1,799	-1,137	-1,158	-1,243
Financing Cash Flow	-353	-4,879	-497	-2,046	-471
Inc / Dec (-) in Cash	-50	102	14	-25	0
Opening Cash Balance	75	25	127	141	116
Closing Cash Balance	25	127	141	116	116

Dupont Analysis					
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
Net Margin	5.7%	6.3%	6.6%	7.0%	6.6%
Asset Turnover (x)	1.1	1.1	1.2	1.3	1.3
Leverage Factor (x)	1.9	1.8	1.6	1.6	1.5
RoE	11.9%	12.5%	12.9%	14.0%	13.5%

Key Ratios					
Y/E March	FY17A	FY18A	FY19E	FY20E	FY21E
BV/Share (INR)	96.8	108.8	121.6	137.7	155.4
ROIC	10.1%	11.8%	11.2%	12.0%	12.6%
ROE	11.9%	12.5%	12.9%	14.0%	13.5%
Net Debt/Equity (x)	1.1	0.7	0.7	0.6	0.6
P/E (x)	18.9	16.1	14.0	11.4	10.5
P/B (x)	2.1	1.9	1.7	1.5	1.3
EV/EBITDA (x)	15.0	11.8	10.8	9.4	8.2
EV/Sales (x)	1.6	1.4	1.3	1.1	1.0
Debtor days	187	170	195	195	195
Inventory days	14	17	19	19	19
Creditor days	71	71	71	71	71

Source: Company, JM Financial

% Chg.

310

History of Earnings	Estimate and	Target Price
Date	Recommendation	Target Price

Hold

24-Oct-17

Recommendation History



APPENDIX I

JM Financial Institutional Securities Limited

(formerly known as JM Financial Securities Limited)

Corporate Identity Number: U67100MH2017PLC296081

Member of BSE Ltd., National Stock Exchange of India Ltd. and Metropolitan Stock Exchange of India Ltd. SEBI Registration Nos.: Stock Broker - INZ000163434, Research Analyst - INH000000610 Registered Office: 7th Floor, Cnergy, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India. Board: +9122 6630 3030 | Fax: +91 22 6630 3488 | Email: jmfinancial.research@jmfl.com | www.jmfl.com Compliance Officer: Mr. Sunny Shah | Tel: +91 22 6630 3383 | Email: sunny.shah@imfl.com

Definition of ratings			
Rating	Meaning		
Buy	Total expected returns of more than 15%. Total expected return includes dividend yields.		
Hold	Price expected to move in the range of 10% downside to 15% upside from the current market price.		
Sell	Price expected to move downwards by more than 10%		

Research Analyst(s) Certification

The Research Analyst(s), with respect to each issuer and its securities covered by them in this research report, certify that:

All of the views expressed in this research report accurately reflect his or her or their personal views about all of the issuers and their securities; and

No part of his or her or their compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

Important Disclosures

This research report has been prepared by JM Financial Institutional Securities Limited (JM Financial Institutional Securities) to provide information about the company(ies) and sector(s), if any, covered in the report and may be distributed by it and/or its associates solely for the purpose of information of the select recipient of this report. This report and/or any part thereof, may not be duplicated in any form and/or reproduced or redistributed without the prior written consent of JM Financial Institutional Securities. This report has been prepared independent of the companies covered herein.

JM Financial Institutional Securities is registered with the Securities and Exchange Board of India (SEBI) as a Research Analyst and a Stock Broker having trading memberships of the BSE Ltd. (BSE), National Stock Exchange of India Ltd. (NSE) and Metropolitan Stock Exchange of India Ltd. (MSEI). No material disciplinary action has been taken by SEBI against JM Financial Institutional Securities in the past two financial years which may impact the investment decision making of the investor.

JM Financial Institutional Securities renders stock broking services primarily to institutional investors and provides the research services to its institutional clients/investors. JM Financial Institutional Securities and its associates are part of a multi-service, integrated investment banking, investment management, brokerage and financing group. JM Financial Institutional Securities and/or its associates might have provided or may provide services in respect of managing offerings of securities, corporate finance, investment banking, mergers & acquisitions, broking, financing or any other advisory services to the company(ies) covered herein. JM Financial Institutional Securities and/or its associates might have received during the past twelve months or may receive compensation from the company(ies) mentioned in this report for rendering any of the above services.

JM Financial Institutional Securities and/or its associates, their directors and employees may; (a) from time to time, have a long or short position in, and buy or sell the securities of the company(ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) covered under this report or (c) act as an advisor or lender/borrower to, or may have any financial interest in, such company(ies) or (d) considering the nature of business/activities that JM Financial Institutional Securities is engaged in, it may have potential conflict of interest at the time of publication of this report on the subject company(ies).

Neither JM Financial Institutional Securities nor its associates or the Research Analyst(s) named in this report or his/her relatives individually own one per cent or more securities of the company(ies) covered under this report, at the relevant date as specified in the SEBI (Research Analysts) Regulations, 2014.

The Research Analyst(s) principally responsible for the preparation of this research report and members of their household are prohibited from buying or selling debt or equity securities, including but not limited to any option, right, warrant, future, long or short position issued by company(ies) covered under this report. The Research Analyst(s) principally responsible for the preparation of this research report or their relatives (as defined under SEBI (Research Analysts) Regulations, 2014); (a) do not have any financial interest in the company(ies) covered under this report or (b) did not receive any compensation from the company(ies) covered under this report, or from any third party, in connection with this report or (c) do not have any other material conflict of interest at the time of publication of this report. Research Analyst(s) are not serving as an officer, director or employee of the company(ies) covered under this report.

While reasonable care has been taken in the preparation of this report, it does not purport to be a complete description of the securities, markets or developments referred to herein, and JM Financial Institutional Securities does not warrant its accuracy or completeness. JM Financial Institutional Securities may not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. This report is provided for information only and is not an investment advice and must not alone be taken as the basis for an investment decision.

The investment discussed or views expressed or recommendations/opinions given herein may not be suitable for all investors. The user assumes the entire risk of any use made of this information. The information contained herein may be changed without notice and JM Financial Institutional Securities reserves the right to make modifications and alterations to this statement as they may deem fit from time to time.

This report is neither an offer nor solicitation of an offer to buy and/or sell any securities mentioned herein and/or not an official confirmation of any transaction.

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 JM Financial Institutional Securities and/or its affiliated company(ies) 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 a certain category of investors. Persons in whose possession this report may come, are required to inform themselves of and to observe such restrictions.

Persons who receive this report from JM Financial Singapore Pte Ltd may contact Mr. Ruchir Jhunjhunwala (ruchir.jhunjhunwala@jmfl.com) on +65 6422 1888 in respect of any matters arising from, or in connection with, this report.

Additional disclosure only for U.S. persons: JM Financial Institutional Securities has entered into an agreement with JM Financial Securities, Inc. ("JM Financial Securities"), a U.S. registered broker-dealer and member of the Financial Industry Regulatory Authority ("FINRA") in order to conduct certain business in the United States in reliance on the exemption from U.S. broker-dealer registration provided by Rule 15a-6, promulgated under the U.S. Securities Exchange Act of 1934 (the "Exchange Act"), as amended, and as interpreted by the staff of the U.S. Securities and Exchange Commission ("SEC") (together "Rule 15a-6").

This research report is distributed in the United States by JM Financial Securities in compliance with Rule 15a-6, and as a "third party research report" for purposes of FINRA Rule 2241. In compliance with Rule 15a-6(a)(3) this research report is distributed only to "major U.S. institutional investors" as defined in Rule 15a-6 and is not intended for use by any person or entity that is not a major U.S. institutional investor. If you have received a copy of this research report and are not a major U.S. institutional investor, you are instructed not to read, rely on, or reproduce the contents hereof, and to destroy this research or return it to JM Financial Institutional Securities or to JM Financial Securities.

This research report is a product of JM Financial Institutional Securities, which is the employer of the research analyst(s) solely responsible for its content. The research analyst(s) preparing this research report is/are resident outside the United States and are not associated persons or employees of any U.S. registered broker-dealer. Therefore, the analyst(s) are not subject to supervision by a U.S. broker-dealer, or otherwise required to satisfy the regulatory licensing requirements of FINRA and may not be subject to the Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

JM Financial Institutional Securities only accepts orders from major U.S. institutional investors. Pursuant to its agreement with JM Financial Institutional Securities, JM Financial Securities effects the transactions for major U.S. institutional investors. Major U.S. institutional investors may place orders with JM Financial Institutional Securities directly, or through JM Financial Securities, in the securities discussed in this research report.

Additional disclosure only for U.K. persons: Neither JM Financial Institutional Securities nor any of its affiliates is authorised in the United Kingdom (U.K.) by the Financial Conduct Authority. As a result, this report is for distribution only to persons who (i) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"), (ii) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc.") of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000) in connection with the matters to which this report relates may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This report is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this report relates is available only to relevant persons and will be engaged in only with relevant persons.

Additional disclosure only for Canadian persons: This report is not, and under no circumstances is to be construed as, an advertisement or a public offering of the securities described herein in Canada or any province or territory thereof. Under no circumstances is this report to be construed as an offer to sell securities or as a solicitation of an offer to buy securities in any jurisdiction of Canada. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the registration requirement in the relevant province or territory of Canada in which such offer or sale is made. This report is not, and under no circumstances is it to be construed as, a prospectus or an offering memorandum. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon these materials, the information contained herein or the merits of the securities described herein and any representation to the contrary is an offence. If you are located in Canada, this report has been made available to you based on your representation that you are an "accredited investor" as such term is defined in National Instrument 45-106 Prospectus Exemptions and a "permitted client" as such term is defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Under no circumstances is the information contained herein to be construed as investment advice in any province or territory of Canada nor should it be construed as being tailored to the needs of the recipient. Canadian recipients are advised that JM Financial Securities, Inc., JM Financial Institutional Securities Limited, their affiliates and authorized agents are not responsible for, nor do they accept, any liability whatsoever for any direct or consequential lo