

Bharat Earth Movers (BEML)

Metro + Mining Equip. + Defense = All triggers in place...

Metro: The Metro investment cycle in the country is to pick up with over ₹15,000cr worth of Rolling Stock to be awarded during FY2016-20E. BEML being a low cost player (vis-a-vis Bombardier and Alstom India), is well positioned to gain the most from this opportunity.

Mining Equipment: 70-80% of BEML's mining equipment sales come from Coal India (CIL) and other PSUs. We envisage strong mining equipment award activity from CIL (as per CIL's internal projections, it intends to procure 5,263 equipments during FY2016-20E) and other PSUs (SAIL, NMDC) which are on a capex spree. This augurs well for growth prospects of BEML's Mining & Construction Equipment (MCE) segment.

Defense: BEML has a monopolistic position for supplying Tatra trucks to the Indian Army. Removal of ban on Tatra trucks coupled with higher budgetary allocations towards the Defense sector indicate strong growth prospects for BEML's Defense segment.

Poised to report strong growth; some early signs already visible: Higher Budgetary allocations towards urban infrastructure (especially metros) and defense sector, coupled with recent mining sector announcements, strengthen our view that good times are ahead for BEML. We expect BEML to post a 19% top-line CAGR during FY2015-17E to ₹4,006cr. Demand recovery, strong market positioning (almost virtual monopoly), coupled with execution of cost cutting initiatives, strengthen our view that BEML would experience strong margin recovery. Accordingly, EBITDA margins are expected to expand from 2.5% in FY2015 to 8.9% in FY2017E. With Management highlighting that it does not foresee any major capex for FY2016-17E, we expect entire benefits of EBITDA margin expansion to flow down to PAT level (PAT margins would grow from 0.2% in FY2015 to 6.7% in FY2017E).

Valuations: At the current market price of ₹1,218/share, BEML is trading at FY2017E P/E multiple of 19.0x. Historically, since Feb-2001, BEML's stock has traded at 1-year forward P/E multiple of 27x (excluding the time when BEML made losses). On assigning P/E multiple of 22.0x to our FY2017E EPS estimate of ₹64/share, we arrive at price target of ₹1,414, estimating 19% top-line and 529% bottom-line CAGR during FY2015-17E. Alternatively, BEML's stock at ₹1,218 is trading at FY2017E EV/sales of 1.3x. At the implied price target of ₹1,414/share, BEML would trade at FY2017E EV/sales of 1.5x, which is at ~12% discount to its long-term average. Given the 16% upside from current levels, **we initiate coverage on BEML with Buy rating.**

Key Financials

Y/E March (₹ cr)	FY13	FY14	FY15P	FY16E	FY17E
Net Sales	2,809	2,912	2,809	3,277	4,006
% chg	3.0	3.7	(3.5)	16.7	22.2
Net Profit	(80)	5	7	122	268
% chg	NMF	NMF	44.8	1699.6	120.0
EBITDA (%)	(1.6)	3.9	2.5	6.0	8.9
EPS (₹)	(19.2)	1.1	1.6	29.2	64.3
P/E (x)	NMF	NMF	NMF	41.7	19.0
P/BV (x)	2.4	2.4	2.4	2.3	2.1
RoE (%)	(4.3)	0.4	0.3	5.7	11.7
RoCE (%)	(2.8)	1.8	0.6	4.9	10.2
EV/Sales (x)	2.2	2.1	2.0	1.6	1.3
EV/EBITDA (x)	NMF	52.7	79.0	27.3	14.4

Source: Company, Angel Research; Note: NMF- Not Meaningful, CMP as of June 26, 2015

BUY

CMP ₹1,218
Target Price ₹1,414

Investment Period 12 Months

Stock Info

Sector	Capital Goods
Market Cap (₹ cr)	5,038
Net debt (₹ cr)	448
Beta	1.3
52 Week High / Low	1,289/515
Avg. Daily Volume	75,345
Face Value (₹)	10
BSE Sensex	27,812
Nifty	8,381
Reuters Code	BEML.BO
Bloomberg Code	BEML@IN

Shareholding Pattern (%)

Promoters	54.0
MF / Banks / Indian Fls	20.1
FII / NRIs / OCBs	6.8
Indian Public / Others	19.1

Abs. (%)	3m	1yr	3yr
Sensex	2.3	10.8	63.9
BEML	31.0	50.9	221.3

3-Year Daily price chart



Source: Company, Angel Research

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Rail & Metro- massive growth opportunity....

With Metro investment cycle likely to see uptick, BEML being a low cost manufacturer (vis-a-vis Bombardier and Alstom India, the only two other players having Rolling Stock plants in India) is likely to gain the most. We estimate BEML to report 18% revenue and 383% EBIT CAGR during 2015-17E.

Strong growth outlook for domestic Metro Industry

Considering the government's increased thrust towards Metros in urban areas, we are of the view that we are at the beginning of a multi-year investment cycle in Metro projects, the first indicator being 36% higher allocation towards Urban Metro Projects in the last budget to ₹8,193cr vs ₹6,019cr in FY2014-15.

Exhibit 1: Budgetary Allocation towards Urban Metro

(₹ in cr)

	Actual 2013-2014			Budget 2014-2015			Revised 2014-2015			Budget 2015-2016		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
Delhi Metro Rail Corp.	2,485	0	2,485	3,324	0	3,324	3,073	0	3,073	4,134	0	4,134
Bangalore Metro Rail Corp.	845	0	845	948	0	948	1,372	0	1,372	996	0	996
Kolkata Metro Rail Corp.	10	0	10	20	0	20	0	0	0	30	0	30
Chennai Metro Rail Ltd.	1,992	0	1,992	1,866	0	1,866	1,007	0	1,007	1,024	0	1,024
Mumbai Metro	0	0	0	876	0	876	0	0	0	109	0	109
Jaipur Metro	0	0	0	234	0	234	0	0	0	421	0	421
Kochi Metro	125	0	125	462	0	462	541	0	541	599	0	599
Ahmedabad Metro	0	0	0	50	0	50	0	0	0	427	0	427
Pune Metro	0	0	0	0	0	0	0	0	0	127	0	127
Lucknow Metro	0	0	0	50	0	50	15	0	15	173	0	173
Vizag Metro	0	0	0	10	0	10	1	0	1	6	0	6
Vijayawada Metro	0	0	0	10	0	10	1	0	1	6	0	6
Nagpur Metro	0	0	0	0	0	0	10	0	10	144	0	144
Investment in Public Enterprises	5,457	0	5,457	7,850	0	7,850	6,019	0	6,019	8,193	0	8,193

Source: Budget Docs, Angel Research

In addition to the above mentioned (Exhibit 1) Metro projects, which are at various stages of execution, Detailed Project Report (DPR) and preliminary studies have also been prepared/ conducted across Thiruvananthapuram, Kozhikode, Varanasi, Agra, Meerut, Patna and Kanpur.

New Orders from existing Metro projects to be awarded

Of the total ongoing works across 9 Metro projects, 2 of them are at very early stages of implementation. Of the remaining 7 ongoing Metro projects, we expect 6 of them to come-up with the next round of Rolling Stock orders during FY2016-18E.

Exhibit 2: Ongoing Metro Project Details

Metro Project details	Total Project Cost (₹ cr)	Comments
Delhi Metro Rail Corp. (Phase I-III)	64,600	Phase I and II are completed (total cost of ₹29,600cr); Phase III at cost of ₹35,000cr is under construction (66% works done; to be completed by Dec-2016); 486 train coaches worth ₹4,000cr were awarded to Hyundai Rotem (120 coaches to be made in South Korea and 366 coaches in Bengaluru);
Bangalore Metro Rail Corp. (Phase I-II)	40,300	Phase I is partly operational; 38.3km of the total 42.3km to be finished by Dec-2015; Phase II with outlay of ₹26,405cr (on FY2012 no's) is under planning; Rolling stock for Phase I has been awarded; Phase II is yet to be awarded (worth ₹918cr).
Kolkata Metro Rail Corp. (Phase I-IV)	Phase II (only) 5,000	Phase I is operational; Phase II-IV are under various stages of implementation; Rolling stock for Phase II has been procured from CAF-Melco JV; Rolling stock for Phase III worth ₹714cr is yet to be ordered.
Chennai Metro Rail Ltd. (Phase I only)	Phase II (only)- 20,000	TPC for Phase I is at ₹20,000cr; DPR for Phase II has been submitted, with estimated project cost of ₹36,000cr; Commissioner of Railway Safety checked trial runs for Phase I; First set of Phase I operations to start in H1FY2016E; Of the total 42 trains (worth ₹1,478cr) ordered- 9 from Brazil and 12 from Sri City have been procured; for the remaining, work is in progress.
Mumbai Metro (Phase I-III)	Phase II & III- 34,136	Phase I is operational, Phase II is under planning stages and Phase III tenders for underground structure/ Car depot have been floated; final selection of construction firm is awaited; Rolling stock worth ₹3,755cr is to be awarded for Phase II & III.
Jaipur Metro (Phase IA & IB)	4,175	Phase IA (Mansarovar-Chandpole station) has commenced operations; ₹1,126cr for Phase IB has been spent towards civil works, depot, rolling stock (₹100cr), substations and systems; BEML was awarded ₹318cr of Rolling Stock (including order for Phase IB worth ₹100cr); BEML expects another follow-on order worth ₹60cr.
Kochi Metro (Phase I)	5,189	51% of the civil works at stretch 1A and 17% of the civil works at stretch IB have been executed; Stretch IA of Phase I to commence operations from early 2016E; Alstom was awarded the project to supply rolling stock (worth ₹630cr); Contract with Alstom also includes the option to supply another 25 train sets.
Ahmedabad Metro (Phase I)	10,773	J Kumar was awarded ₹278cr order for works across Vastral-Apparel park stretch of Phase I; First 6km route of Tahltej-Vastral Phase I to be completed by Sep-2016 at a cost of ₹611cr; Phase I to get commissioned by 2018; Already ₹565cr spent till May 30, 2014 for Phase I works; Rolling stock worth ₹960cr to be awarded.
Lucknow Metro	8,000	Works between Airport-Charbagh station have started; In Dec-2014, global tenders for coaches were floated; DPR assumes rolling stock cost at ₹1,200cr; Tenders for 80 rolling stock have been floated, these are to open anytime.
Total Investment in Metro Projects	133,037	

Source: Company, Metro DPRs, pib.nic.in

With more announcements expected towards Greenfield Metros, we expect the opportunity from Metros to get bigger during FY2016-20E.

Over ₹15,000cr of Rolling stock orders in pipeline...

Based on a report by BB&J Consulting and our internal assessment of domestic Metros' DPRs, we are of the view that Rolling stock cost as % of the Total Project Cost (TPC) stands at somewhere between 15-25%.

Based on the DPRs prepared and the budgeted allocations towards Rolling stock, we are of conservative view that award activity for over ₹15,000cr worth of Rolling stock would be made during FY2016-20E.

Exhibit 3: Rolling Stock cost as % of Metro Project Cost

Sl. No.	International Metro's	Rolling Stock as % of Project Cost
1	Mexico City Line B	36.2
2	Caracas Line 3	15.7
3	Santiago Line 5	24.8
4	Santiago Line 5 Extension	21.4
5	Delhi Metro (Phase I and II)	24.2
6	Madrid Extension (excl. Arganda)	15.4

Source: BB&J Consult (2000), Angel Estimates

BEML enjoys 'lowest cost maker' tag....well positioned to gain

Currently, there are only 3 major players Rolling Stock manufacturers for Metros in India, with yearly capacity of ~660 units, namely, BEML, Bombardier and Alstom India. BEML has tied-up with Hyundai-Rotem for technology part to manufacture AC Metro coaches.

Exhibit 4: Metro Industry- Competitive Analysis

Sl. No.	Rolling Stock Manufacturers	Plant Location	Installed Capacity (p.a.)	Capacity Utilized (p.a.)	Orders Booked for (yrs.)	Ongoing projects & Comments
1	BEML	Bengaluru, Karnataka	190	190	Over 2 years	Delhi Metro Projects ongoing; BEML has one of the lowest cost/ unit vs. peers, at ₹8-8.5cr/unit;
2	Bombardier India	Savli, Gujarat	350	350	Over 2 years	Supply 450 units to Australia; Exports to Australia from India to begin from CY15-end; Working on projects from Brazil & Saudi Arabia; Currently working on the supply of 72 rakes for Mumbai's Sub-Urban Rail Network
3	Alstom India	SriCity, Andhra Pradesh	120	120	Over 2 years	To supply 135 units to Australia; On Single shift basis, on shifting to double shift installed capacity could increase to 250 units; In next 2-3 yrs, Alstom plans to export 50%+ of domestically manufactured Rolling Stock to Australia, APAC and Americas; Some part of the Kochi Metro Order has been sub-contracted to Faiveley Transport

Source: BEML, Alstom India, Media Articles (published in CY2015), Angel Research

In addition to these 3 players, BEML also faces competition from international players like Siemens, Mitsubishi, Kawasaki, and Band Changchun, who do not have any manufacturing presence in India.

Based on our channel checks and Management commentary, the cost of manufacturing a Metro coach ranges from ₹8cr-12cr. Amongst the three companies, BEML with higher indigenization, enjoys the most favorable cost structure. Also, these MNCs have lower indigenization component and their inputs comprise of relatively higher proportion of imports; going forward the unfavorable

rupee movement against the dollar may force them to bid at higher quotes vs BEML's quotes. Both the MNC players are also using their Indian subsidiaries to execute their global orders. This, coupled with their current higher plant utilization suggests that they may not bid aggressively for upcoming projects in near-term.

Recent order wins give order book and revenue growth visibility

BEML, in recent times, has reported 2 Rolling stock orders from Delhi Metro Rail Corp. (DMRC). The first order is worth ₹570cr to supply 70 cars, and the second order is worth ₹645cr to supply 74 cars.

BEML, as of FY2015-end, was sitting on strong order book of ₹1,588cr, executable over next 12-18 months. Strong market positioning, coupled with improvement in the award activity environment, gives strong revenue growth visibility for next few years.

On a whole....Rail & Metro segment poised for strong growth

At the backdrop of emerging opportunity for Rolling Stock coaches, coupled with BEML's strong market positioning, indicates that BEML is likely to emerge as one of the beneficiaries from revival in Indian Railway (IR) and Metro award activity. Considering BEML's outstanding order book of ₹1,588cr and strong execution, we expect BEML's Rail & Metro segment (35% of FY2015 revenues) to report 18% top-line and 383% EBIT CAGR during FY2015-17E to ₹1,371cr and ₹70cr, respectively.

Defense- removal of Tatra ban to drive earnings

With removal of ban on Tatra trucks and BEML being the only supplier of Tatra trucks to Indian Army, we believe BEML's Defense segment is well positioned to report 105% revenue CAGR and turnaround in its EBIT during 2015-17E.

Removal to Tatra trucks ban...positive for the company

BEML's Defense segment derives a major chunk of its revenues from (1) Tatra vehicles which are used for carrying various types of missiles and rocket launchers and (2) Armored Recovery Vehicles. Since 1986, BEML has supplied close to 7,000 Tatra trucks to the Indian Army. Currently, BEML is the only domestic player eligible to procure/make Tatra trucks in India, thereby giving it a monopolistic position.

In 4QFY2015, BEML was allowed to supply spare parts as well as Tatra trucks to Indian Army on fulfillment of key conditions, such as, no direct dealing with any of the banned entities. The removal of ban in a monopolistic scenario augurs well for the growth prospects of BEML's Defense segment. Given BEML's higher dependency on Tatra trucks, the lifting of ban should lead to strong revival in the Defense business, going forward.

Recent announcements hint at govt. increasing Defense spending

The government in recent times has made positive announcements, which indicate revival in Defense investment cycle. To encourage domestic manufacturing, the government has (1) increased the FDI cap in the Defense sector (from 26% to 49%), (2) launched 'Make in India' theme, where greater emphasis has been laid on procurement of locally made parts/ machines/ equipments, and (3) increased budgetary allocation towards the Defense sector by 15.4% yoy to ₹94,588cr. Also, in order to encourage better technical know-how, the government is applying for permanent membership in the Missile Technology Control Regime (MTCR).

Defense Order book of ₹2,483cr, gives better revenue visibility

BEML, as of FY2015-end, is sitting on an order book of ₹2,483cr, executable over the next 18-24 months. With an almost virtual monopoly, coupled with removal of ban on Tatra trucks, gives better revenue visibility for FY2016-17E.

On a whole....Defense segment to see strong business recovery

Higher budgetary allocations coupled with surge in bid pipeline indicate that higher Defense spending by government is real and likely to pan-out. Given that Tatra vehicles are used for carrying various missiles and rocket launchers, uptick in Defense spending by government would also reflect higher spending towards Tatra vehicles and Armored Recovery Vehicles (ARVs). On a whole, we expect the Defense segment (accounted for 6% of FY2015 revenues) to report 105% top-line CAGR over FY2015-17E to ₹678cr. Further, we expect turn-around in Defense segment EBIT in FY2016E to ₹21cr, which should further increase to ₹41cr in FY2017E.

Mining & Con. Equip. segment - growth & margins to revive

Coal India (CIL) and other PSUs account for 70-80% of BEML's mining equipment sales. Any revival in capex cycle at CIL augurs well for the growth prospects of BEML's MCE segment. We expect the MCE segment to report 9% revenue and 25% EBIT CAGR during 2015-17E.

CIL's increased production target to spur Mining Equip. ordering

The government in recent times (1) set an ambitious 1bn tonne output target for CIL by 2020, (2) auctioned coal mines (Schedule I and II done, Schedule III to be awarded) to private players, and (3) shared clarity on e-auction of various minerals and metals. All these initiatives are a precursor to accelerate the Mining sector, which in turn should revive the demand for mining equipments.

Exhibit 5: Coal India Machinery Procurement plans (for FY2016-20E)

	2014	2015	2016E	2017E	2018E	2019E	2020E
Coal Prod. Act./ Guidance (mn tn)	462	494	548	598	661	774	908
Incremental Production (mn tn)	10	32	54	50	63	113	134
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Shovel (5-42 m ³)	715	732					
Replacement & New demand			159	175	193	156	178
Dumper (35-240 T)	3,109	2,977					
Replacement & New demand			520	992	1,082	329	521
Crawler Dozer (320-850 hp)	972	977					
Replacement & New demand			123	121	149	70	46
Grader (280-500 hp)							
Replacement & New demand			1	9	5	5	12
SDL (1.5 m ³ to 3.5 m ³)	669	668					
Replacement & New demand			45	110	44	14	42
LHD (1.5 m ³ to 3.5 m ³)	342	340					
Replacement & New demand			19	22	22	21	32
Continuous Miner (4.8 m)	8	8					
Replacement & New demand			22	9	7	6	2
Total Equipments (o/s at CIL)	5,815	5,702					
Replacement & New demand			889	1,438	1,502	601	833

Source: CIL, Angel Research

In order to attain its FY2020 output target, CIL in its presentation to the Power Ministry in Jan-2015 highlighted that it has started focusing on strategies to improve its efficiency, like switching from current low capacity to high capacity mining equipments, and implement new mining technologies. In this regard CIL, along with its subsidiaries, has outlined higher capex outlay (intends to procure 5,263 Mining equipments). Exhibit 5 highlights capex outlay for various key types of mining equipments, CIL intends to purchase during FY2016-20E.

Pent-up demand from CIL to come-up for awarding...

CIL during FY2013-15 has increased its production by 42mn tonne to 494mn tonne. Based on our analysis, Mining Equipment outstanding at CIL during the

period has been on a declining trend (total Mining Equipments in use declined from 6,012 units in FY2013 to 5,815 units in FY2014 and 5,702 units in FY2015). This disconnect in number of Mining Equipments used to increase production numbers, indicates that demand for new Mining Equipments has been postponed for some time now. This coupled with CIL's ambitious growth plans (to increase the production from 494mn tonne in FY2015 to 1bn tonne by 2020), along with its cash balance of ₹53,092cr (as of FY2015 end), indicate that awarding of new mining equipments by CIL is inevitable. Accordingly, we expect tenders for this pent-up demand to come-up in FY2016-17E, which translates to strong demand uptick for BEML's Mining Equipments.

PSUs too pursuing the next round of capex...

In addition to CIL, SAIL and NMDC are also on an expansion spree, which indicate higher capex outlay towards Mining Equipment. This can be seen from the point that SAIL intends to expand its hot metal installed capacity from 14.4mn tonne in FY2015 to 20.2mn tonne by FY2017E. Whereas, NMDC on the other hand, intends to increase its Iron ore installed capacity from 31.0mn tonne in FY2015 to 37.9mn tonne by FY2017E.

Well leveraging on its existing client relationships..

BEML has well leveraged on its relationship with CIL and other PSUs, by setting-up 9 spare parts regional depots and 5 district offices, situated at client premises for after-sales service support. This post sale support network, has led CIL to be highly dependent on BEML (>75% of CIL's mining equipments are procured from BEML). This strategy helps CIL in cutting down any cost overruns and time delays, arising due to machinery break-down. Also BEML stands to gain by understanding the client requirements and encash on them. Notably, no other private player as of now has set up spare part depot/ after sales service office on CIL premises.

In order to maintain CIL's dependency for its mining equipment and leaving no space for competition to step in, BEML is proactively trying to fulfill CIL's machinery needs. Attempting to do so, it has gone a step ahead by adopting measures like (1) establishing training centers at Nagpur, KGF and Mysore to impart training to O&M staff of coal mining companies, (2) signed "model depot agreement" with NCL, Singrauli, where detailed advance annual coal projections along with requirement for genuine spare parts are shared, (3) Offer MARC/ GPCC/ Cost Cap contracts for higher output (leading to more equipments being taken up), (4) regularly launch new product variants, which are efficient and technologically advanced, and (5) widen product offerings to cater to client requirements (started sale of underground mining equipments). These initiatives in our view are an attempt by BEML to service CIL better and avert any competition. BEML almost enjoys a virtual monopoly in providing operating mining machinery to CIL, with no other noteworthy player competing.

Exhibit 6: BEML- After Sale & Parts Support network at CIL

CIL Subsidiary	Regional Office	District Office	Consignment Store	Service Centre
NCL	Singrauli with Parts Depot			Singrauli
SECL	Bilaspur with Parts Depot			Bilaspur
WCL	Nagpur	Chandrapur with Parts Depot		Nagpur Service-HQ
MCL	Sambalpur with Parts Depot			Bilaspur
CCL	Ranchi with Parts Depot			
BCCL	Dhanbad with Parts Depot			Kolkata
ECL	Kolkata	Asansol with Parts Depot	Rajmahal	
SCCL	Hyderabad	Kothagudem Ramagundam		Hyderabad
NLC	Chennai	Neyveli		

Source: CIL, BEML, Angel Research

Not easy for MNCs to encroach into BEML's market share...

Even though CIL depends heavily on BEML for its mining equipment requirement, international players like, Komatsu, Caterpillar, Hyundai, and Volvo have shown interest in being allowed to supply mining equipments to CIL and PSUs. MNCs lack the bid criterions in most cases, hence are not qualified to supply equipments to CIL and other PSUs. While comparing BEML's products with its international peers, BEML lags behind international players on some of the Equipment efficiency parameters, whereas on the other hand, BEML enjoys better pricing and post sale support network, over its international peers.

Also, CIL and PSU manpower needs to be trained to operate MNC players' equipments. This aspect, in our view, could act as a deterrent for CIL and PSUs to switch to using MNCs' mining equipments.

A strong case for business recovery in sight for MCE segment....

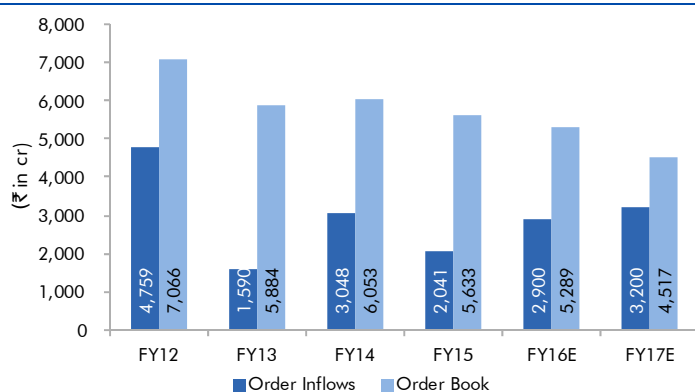
Considering uptick in overall Mining sector (especially demand emanating from CIL and its subsidiaries), we expect BEML's MCE segment revenues to report 9% top-line and 25% EBIT CAGR during FY2015-17E to ₹1,919cr and ₹188cr, respectively. Our growth estimates capture the longer duration of CIL's tendering cycle and possible loss of market share to international peers.

Investment Rationale

Order book set to expand...

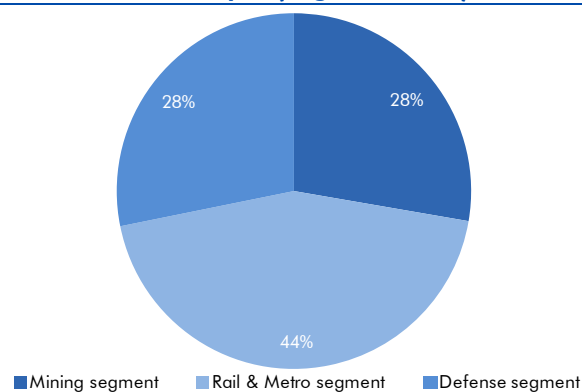
As of FY2015-end, BEML is sitting on an order book of ₹5,633cr, which gives revenue visibility for 18+ months. Further, if we look into order book details, a major chunk of it is from the Defense segment (28% of total order book), followed by Rail & Metro segment (44% of total order book), and Mining segment (28% of total order book).

Exhibit 7: Order Inflow & Order Book movement



Source: Company, Angel Research

Exhibit 8: Order Book split (segment-wise)



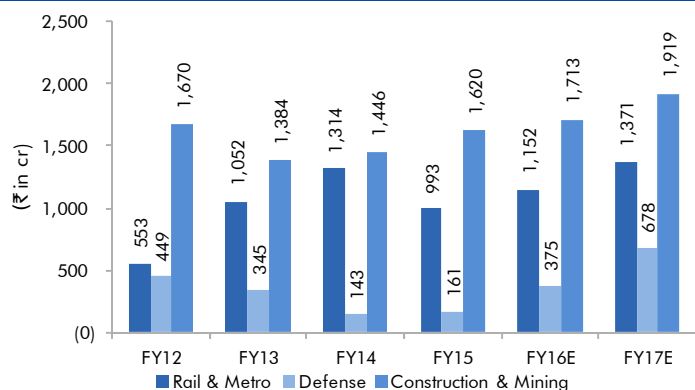
Source: Company, Angel Research

The government's increased thrust towards Mining, Defense and Metro amongst other verticals, when coupled with BEML's strong market positioning across the segments, strengthens our view that BEML should report 25% CAGR in its order inflow during FY2015-17E to ₹3,200cr. This, on the back of strong execution, strengthens our view that the order book would de-grow by 11% CAGR during FY2015-17E to ₹4,517cr.

Expect strong 19% top-line CAGR during FY2015-17E...

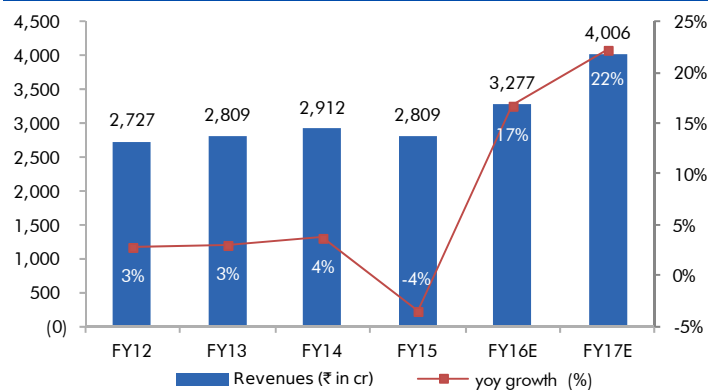
At the backdrop of strong revival in the order inflow environment (across all the three business segments), we expect BEML to ramp-up its execution, going forward. We expect BEML to report strong growth across two of its business segments, ie Rail & Metro and Defense, which have been under pressure in the last 2-3 years (on lower revenue base). The government's thrust towards Metro development and expansion across 15+ cities will create huge demand for Rolling stock, which in turn should benefit BEML the most, with it being one of the low cost Metro coach manufacturers. We expect the Rail & Metro segment of the company to report 18% top-line CAGR during FY2015-17E to ₹1,371cr. Further, with the removal of ban on Tatra trucks, growth prospects for BEML's Defense segment look strong. We expect the Defense segment to report 105% top-line CAGR during FY2015-17E to ₹678cr. Our view of strong growth in the Defense segment is owing to (1) higher budgetary allocation made towards the Defense sector and (2) considering that BEML is the single supplier of Tatra trucks to Indian defense. Also, their MCE segment is expected to report 9% top-line CAGR during FY2015-17E to ₹1,919cr. Growth across the MCE division would be driven by strong new equipment demand and replacement demand emanating from CIL, SAIL and NMDC's capex cycle (as all of them are pursuing strong capex).

Exhibit 9: Segment-wise Revenue movement



Source: Company, Angel Research

Exhibit 10: Revenue & yoy growth



Source: Company, Angel Research

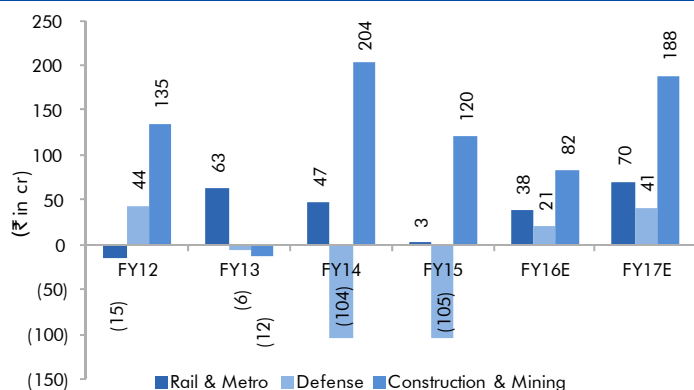
Strong execution to fuel the much required turnaround...

Higher fixed cost base across business segments and almost stagnated revenue base has put BEML in a tough spot. BEML reported negative EBITDA margins in FY2013 (-1.6%) and 1HFY2015 (-10.3%); margins for 1HFY2015 are the worst in the company's recent history. But on the back of stronger execution, 2HFY2015 witnessed a turn-around.

Further, if we look into segment-wise details, Defense segment reported margins in red during FY2015 (reflecting weak execution). Also, Mining Equipment and Rail & Metro segments witnessed margin contraction on account of higher fixed cost base.

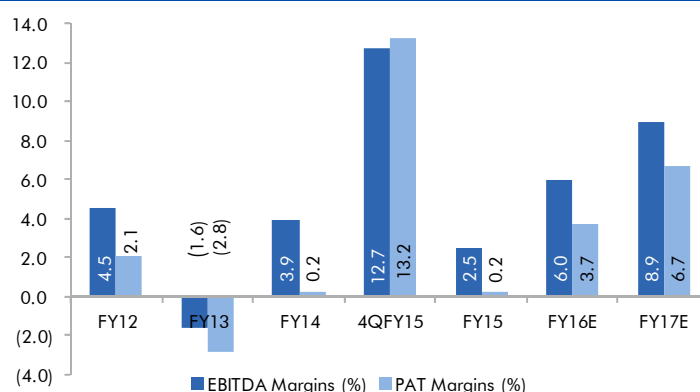
Led by revival across business segments (as highlighted above), we expect BEML to report a strong 19% top-line CAGR during FY2015-17E to ₹4,006cr. BEML at FY2015-end had 10,328 employees. Considering revenue growth potential during FY2016-17E, when coupled with (1) ~800 employees retiring during the same period, (2) control over admin. and marketing expenses, (3) cost control initiatives at the shop floor level, and (4) next pay commission hike coming in to effect from Jan-2018 only, we are of the view that BEML would be well positioned to absorb fixed costs, which in turn should translate into margin expansion. We expect BEML to extend its FY2015 EBITDA level turnaround to FY2016 (at 6.0%) and further expand margins during FY2017E (to 8.9%).

Exhibit 11: Segment-wise EBIT



Source: Company, Angel Research

Exhibit 12: Company level EBITDA & PAT Margins



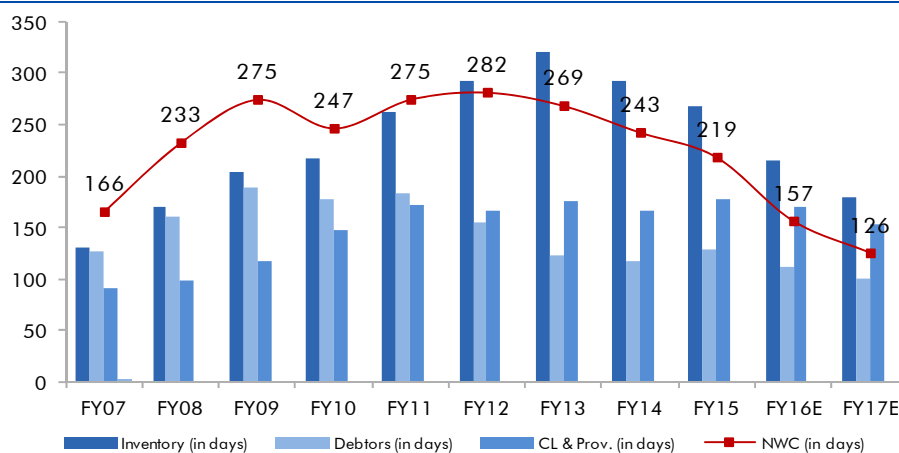
Source: Company, Angel Research

With EBITDA level turnaround already seen, we expect the entire benefits to flow down to PAT level. This, when coupled with ease in working capital cycle and lower interest rate cycle, should help BEML report PAT level margin expansion. On the whole, we expect PAT margins to improve from 0.2% in FY2015 to 6.7% in FY2017 (reflecting sharp PAT growth from ₹7cr in FY2015 to ₹268cr in FY2017E).

Working Capital cycle to ease going forward...

BEML is well geared to capitalize on the emerging opportunities across its business segments. Slowdown in the capex cycle across business segments had taken a toll on the company's growth prospects. Anticipation of sharp demand from MCE segment led BEML build higher inventories, which contributed majorly to the stretch in the Net Working Capital (NWC) cycle.

Exhibit 13: Decline in Inventory days to ease NWC cycle...



Source: Company, Angel Research

However, with early indications of capex cycle revival across Mining sector, mainly led by Coal India, we are optimistic that BEML should be able to further lower its NWC days (from 282 days in FY2012 to 126 days in FY2017E).

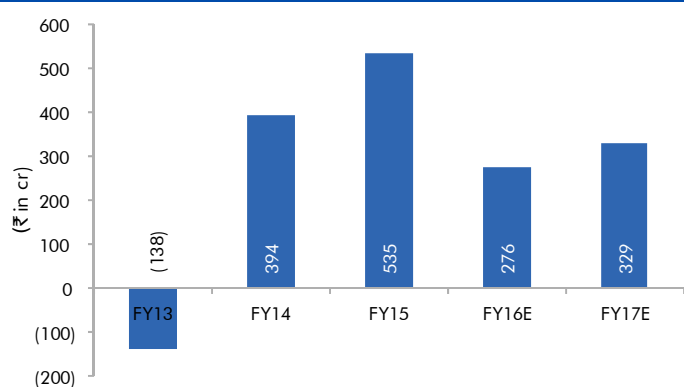
Ease in the NWC cycle of BEML, in our view would lead to decline in the overall debt levels of the company. As a result, the debt of BEML would decline from ₹592cr (as of FY2015-end) to ₹317cr by FY2017E. Simultaneously, the Net D/E ratio would decline from 0.2x as of FY2015-end to 0.0x by FY2017-end.

Upcoming business phase to see strong CFO generation...

BEML is well geared to capitalize on the emerging opportunities across its business segments. Slowdown in the capex cycle across business segments in the past couple of years had taken a toll on the company's growth prospects.

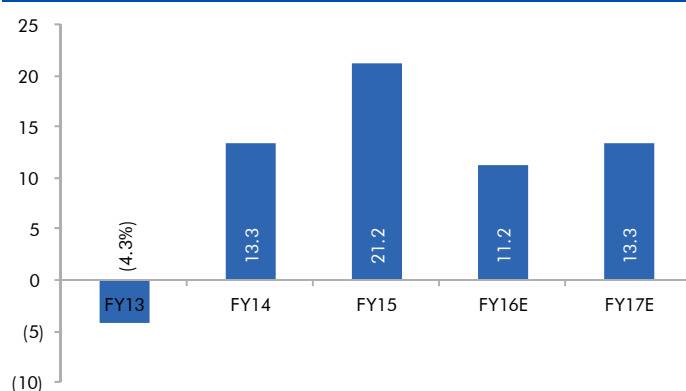
Currently, all of the 9 assembly units/ plants are unable to absorb the higher fixed cost base. At the backdrop of demand uptick across all the business segments, and improvement in WC cycle (in terms of no. of days) when coupled with minimal capex outlay requirements (except for maintenance capex part), lead to our view getting strengthened that BEML is expected to report strong cash flow from operations (CFO), going forward. We expect BEML to generate ₹1,140cr of cash flow from operations during FY2015-17E, which could be used to either reinvest back into the business or reward shareholders with higher dividend.

Exhibit 14: Cash flow from Operations



Source: Company, Angel Research

Exhibit 15: OCF Yield



Source: Company, Angel Research

BEML's yield on Operating Cash Flows (OCF) for FY2015 stood at 21.2%, which is very impressive. We expect BEML to report OCF yield of 11.2% and 13.3% for FY2016E and FY2017E, which again is noteworthy.

About the Company

BEML is a Mini-Ratna Category-1 public sector undertaking (PSU) under the control of Ministry of Defence (MoD), operating in three distinct business segments namely, Mining & Construction Equipment, Defence, and Rail & Metro.

Having commenced operations in 1964, with the transfer of Railway Coach Manufacturing facilities from Hindustan Aeronautics Ltd, BEML has over the years diversified into manufacturing various types of mining and construction equipments, Metro coaches and specialised defence vehicles/ products.

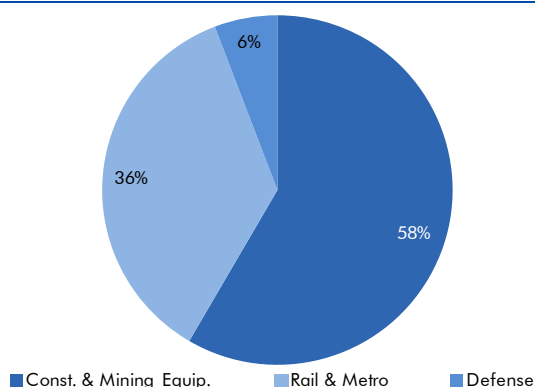
Exhibit 16: Business Segment Details

Business Segments	Production/ Assembling of
Mining & Construction Equip. (MCE)	Dumpers, Bulldozers, Hydraulic Excavators, Rope Shovels, Hydraulic Excavators, Wheel/ Backhoe Loaders, Tyre Handlers
Rail & Metro	Integrated Rail Coaches, Electrical Multiple Units (EMUs), Main Line Electrical Multiple Units (MEMUs), Stainless Steel EMU
Defense Products	Tatra Trucks, Armored Recovery Vehicles, Ammunition Loader Vehicles, Bheema

Source: Company, Angel Research

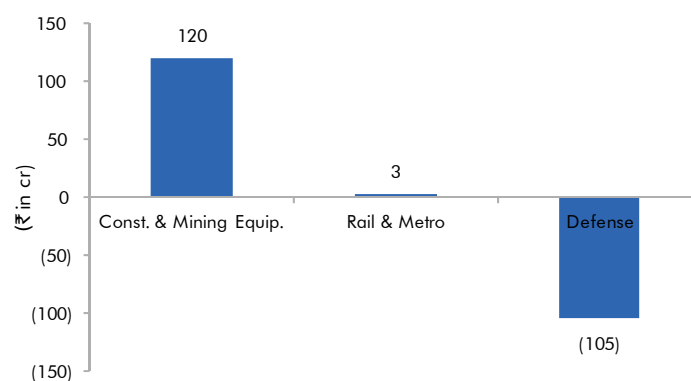
In the back-drop of down cycle seen across MCE and Rail & Metro segments, and ban on Tatra Trucks affecting the Defense segment performance, BEML reported a flat top-line CAGR during FY2013-15 to ₹2,809cr. Shift in mix, and recent cost cutting initiatives led BEML report a turn-around from ₹80cr of net loss in FY2013 to ₹7cr of net profit in FY2015.

Exhibit 17: Revenue mix (segment-wise; FY15)



Source: Company, Angel Research

Exhibit 18: EBIT mix (segment-wise; FY15)



Source: Company, Angel Research

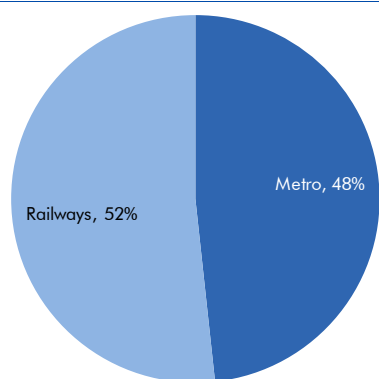
Noticeably, BEML has witnessed a turn-around in the last quarters' results, mainly driven by recent cost cutting initiatives at the shop floor level, lower dependency on imports, and cut in admin and marketing expenses.

(A) Metro & Railways segment under pain

Poor Wagon ordering affected the Railways sub-segment

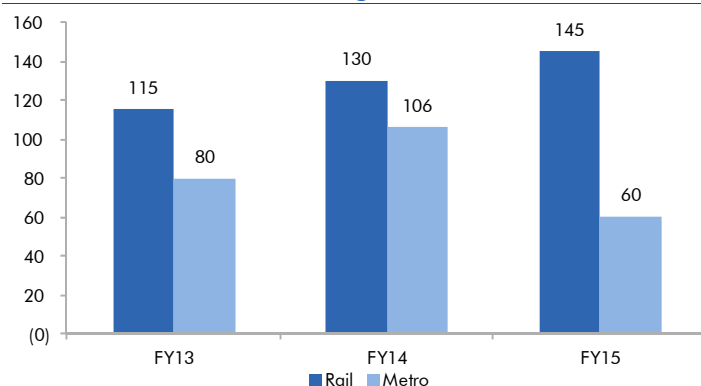
For wagon supplies, BEML only bids for Indian Railways (IR)' tenders. Prior to FY2013, IR annually procured ~600-700 rail coaches from BEML. However, during FY2014/15, BEML only made 130/145 coaches for IR. Decline in BEML's railways business was owing to (1) lower tendering by IR with ~25,000 wagons tendered during FY2012-15 vs annual procurement activity of ~18,000-20,000 wagons during FY2009-12 in a highly crowded market (industry capacity stands at ~30,000 wagons annually), and with (2) BEML intentionally abstaining from tendering for wagons, given that wagon works are highly labor intensive.

Exhibit 19: Rail & Metro Segment Revenue split



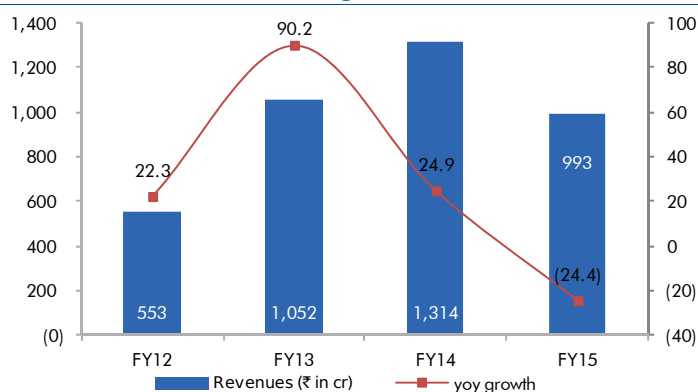
Source: Company, Angel Research

Exhibit 20: Rail & Metro Wagon/ Coach Sale volumes



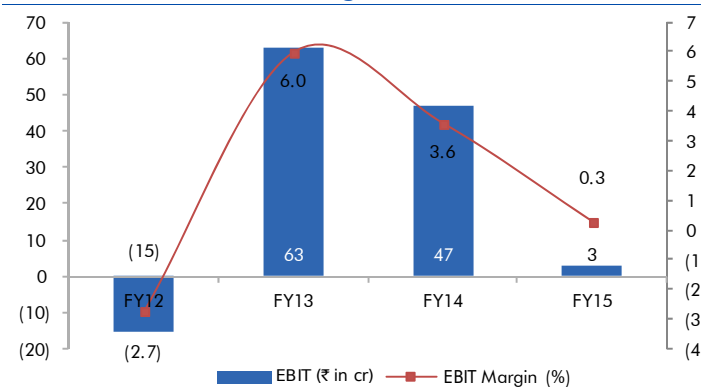
Source: Company, Angel Research

Exhibit 21: Rail & Metro Segment Revenue



Source: Company, Angel Research

Exhibit 22: Rail & Metro Segment EBIT



Source: Company, Angel Research

Muted award activity led to poor execution at Metro business

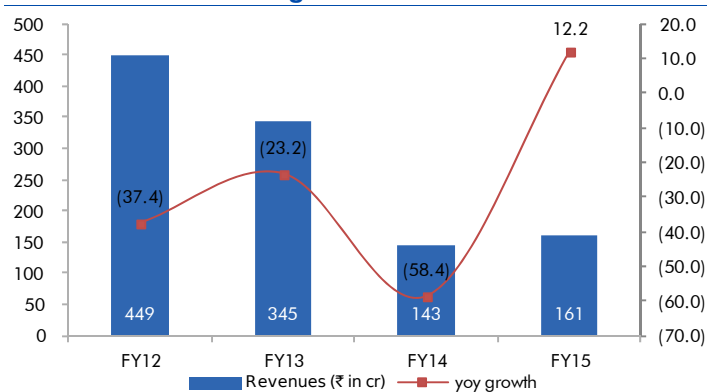
Having entered the Metro space in 2009, BEML to-date has delivered ~800 Metro coaches for Jaipur, Bengaluru and Delhi Metro projects. In addition to the 3 above mentioned projects, given the limited award activity in Metro space during FY2013-15, BEML witnessed revenue decline in this sub-segment.

In the back-drop of weak award activity and higher fixed cost base, Rail and Metro segment reported negative 3% revenue and negative 78% EBIT CAGR during FY2013-15.

(B) Defense segment adversely impacted since Tatra Scam..

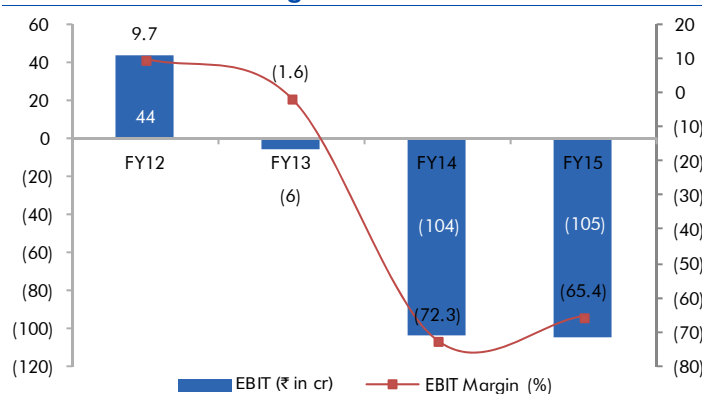
Since the Tatra scam broke-out in 2012, Defense segment revenues have been on a declining trend (from the highs of ₹717cr in FY2011 to ₹161cr in FY2015).

Exhibit 23: Defense Segment Revenue



Source: Company, Angel Research

Exhibit 24: Defense Segment EBIT



Source: Company, Angel Research

Historically, BEML derives a major chunk of the Defense segment revenues from (1) Tatra Vehicles, which are used for carrying various types of missiles and rocket launchers), and (2) Armored Recovery Vehicles. BEML has played an important role in integrated guided missile development projects by supplying ground support vehicles. It has also manufactured aggregates for Akash missile, and designed and manufactured Armored Repair and Recovery Vehicle (ARRV) for Combat Vehicles Research & Development Establishment (CVRDE). Since 1986, BEML has supplied over 7,000 Tatra trucks to the Indian Army.

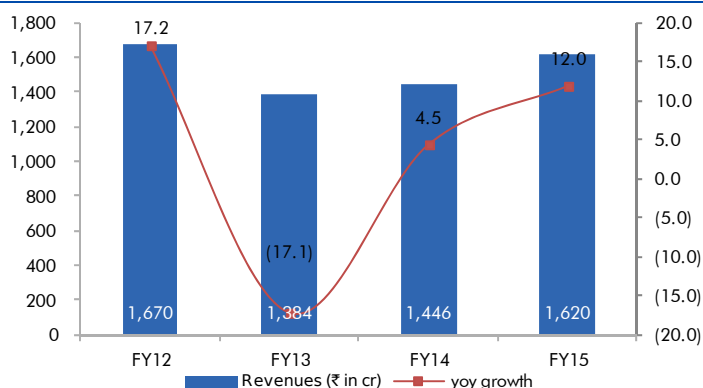
The Defense segment reported negative 32% revenue CAGR during FY2013-15 to ₹161cr. The segment level EBIT losses widened from ₹6cr in FY2013 to ₹105cr in FY2015, reflecting inability to absorb higher fixed costs.

(C) Spare sales & Servicing support MCE segment growth

BEML derives 70-80% of MCE segment revenues from Coal India (and subsidiaries), SAIL and NMDC, indicating high dependency on Mining Equipment sub-segment and less on the Construction Equipments. Again within Mining Equipments, a major chunk of revenues are from the sale of Dozers and Dumpers which account for ~500-650 units of the total ~600-850 units of equipments sold annually.

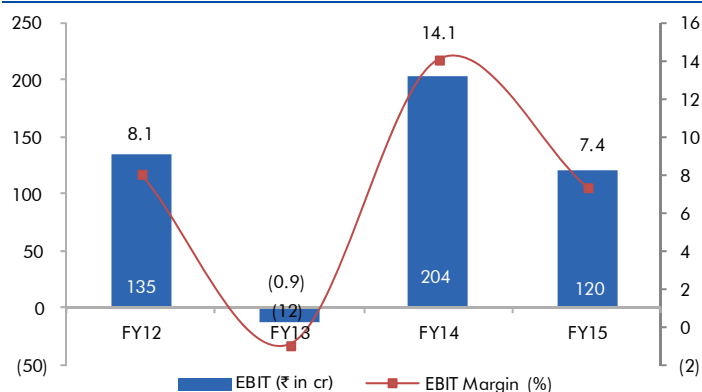
Issues disconcerting the Mining cycle have adversely impacted the MCE segment of the company in the last few years. During the years FY2011-15, the segment sales have been hovering at ~1,700cr, where every year, loss of equipment sales have been compensated by either higher exports, equipment servicing, or spare part sales. Also, it is to be noted that mining companies tend to club their requirements of several years and invite periodic tenders for mining equipments, which further take several months to process. Often the actual delivery of machines spans over a number of years. Therefore sales in any particular year do not necessarily represent that year's demand, so market growth is best interpreted over a longer time horizon only.

Exhibit 25: MCE segment Revenue



Source: Company, Angel Research

Exhibit 26: MCE segment EBIT



Source: Company, Angel Research

Despite issues grappling the Mining sector during FY2013-15, focus on spare part sales and equipment servicing helped the MCE segment to report 8% revenue CAGR during FY2013-15 to ₹1,620cr. Shift in mix towards high margin exports and spare part sales helped BEML report turn-around in its segment level EBIT from loss of ₹12cr in FY2013 to profit of ₹120cr in FY2015.

Details of Manufacturing Plants

BEML has 9 manufacturing units located across Kolar Gold Field (KGF), Bangalore, Palakkad and Mysore, which are into manufacturing products for the Mining Equipment, Rail & Metro and Defense business segments.

Exhibit 27: Details of Manufacturing facilities

Production Facilities	Segments	Production details
Kolar Gold Field (KGF) Complex	MCE	Bulldozers, Hydraulic Excavators, Wheel Loaders, Dozers, Pipe Layers, Tyre Handlers, Hydraulic Cranes, Walking Dragline, Electric Rope Shovels, Engineering Mine Ploughs
	R&M	Rail Coach & Wagon components & aggregates
	Defense	Armored Recovery Vehicles, Transmissions, Axles
Bangalore Complex	R&M	Rail coaches, AC EMUs, DEMU's, SS EMU's, MEMUs, OHE Cars, Stainless Steel Metro Cars
	Defense	Milrail Coaches, Ejector & Air Cleaner assemblies, and Military Wagons
Palakkad Complex	R&M	Rail Coach parts & aggregates
	Defense	Tatra Heavy duty Trucks, Sarvatra Bridge Systems, Heavy Recovery Vehicles
Mysore Complex	MCE	Rear Dump Trucks, Motor Graders, Water Sprinklers, Engines for all their product offerings

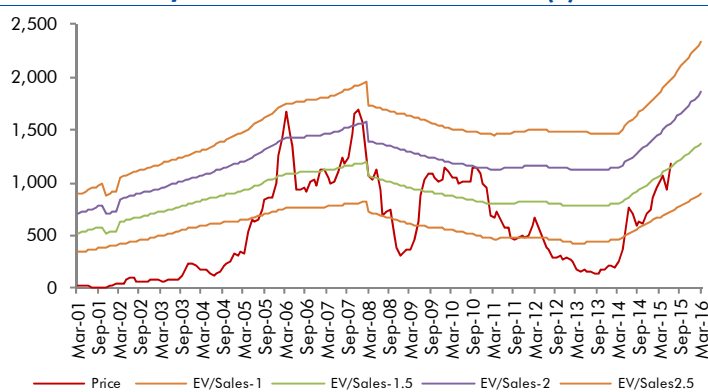
Source: Company, Angel Research

Valuation

At the current market price of ₹1,218/share, BEML is trading at FY2016E and FY2017E P/E multiple of 41.7x and 19.0x, respectively. Historically, since Feb-2001, BEML's stock has traded at a 1-year forward P/E multiple of 27x (excluding when BEML made losses). Earnings growth of the company has been very volatile since FY2013. We expect BEML to report 19% top-line and 529% bottom-line CAGR during FY2015-17E, with such strong growth expected to sustain beyond FY2017 as well. We expect BEML to continue to enjoy premium valuations on account of strong long-term growth outlook and low competitive threat across all the business segment in which it operates.

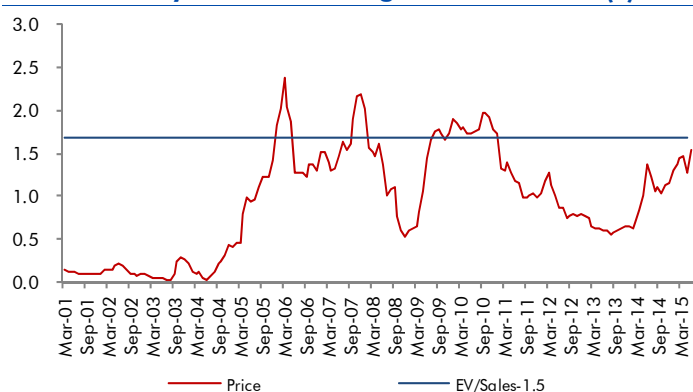
Considering the strong earnings growth, which is likely to stretch beyond FY2017, we have assigned a 1-year forward P/E multiple of 22.0x (~19% discount to its long-term historical average). Our target multiple of 22.0x captures, (1) strong business recovery in FY2016/17E, which is expected to last for another 3-5 years, (2) strong margin recovery from here-on, considering the market positioning within relatively lesser competitive business areas (guarded by structural advantage BEML enjoys given its PSU status). On assigning 22.0x P/E multiple to our FY2017E EPS estimate of ₹64/share, we arrive at a price target of ₹1,414.

Exhibit 28: 1-year forward EV/ Sales band (x)



Source: Angel Research

Exhibit 29: 1-year forward Avg. EV/Sales band (x)



Source: Angel Research

We did an alternate check to assess whether the assigned target P/E multiple justifies our price target. BEML's stock at ₹1,218/share would be trading at FY2016E and FY2017E, EV/sales multiple of 1.6x and 1.3x, respectively. At the implied price target of ₹1,414/share, BEML's share would be still trading at FY2017 EV/sales of 1.5x, which is at ~12% discount to its long-term average. Given the 16% upside from current levels, **we initiate coverage on BEML stock with Buy rating.**

Risks to our Estimates

- Delays in MCE and Metro capex cycle recovery from here-on could be a big risk to our estimates.
- Significant loss of market share vs. our assumption of slight loss of market share, across MCE segment could be a risk to our assumptions.
- Any sharp appreciation in the Rupee (INR) could make MCE segment imports competitive, which again could be a risk to our market share assumptions and be a threat to our earnings growth estimates.

Profit and Loss Statement

Y/E March (₹ cr)	FY13	FY14	FY15	FY16E	FY17E
Net Sales	2,809	2,912	2,809	3,277	4,006
% Chg	3.0	3.7	(3.5)	16.7	22.2
Total Expenditure	2,854	2,798	2,739	3,082	3,649
Cost of Raw Materials Con.	1,645	1,711	1,583	1,846	2,311
Purchase of Stock-in-trade	9	3	0	1	0
Employee benefits Expense	739	717	769	787	805
Other Expenses	460	367	387	448	532
EBITDA	(45)	113	70	196	357
% Chg	NMF	NMF	(38.2)	179.8	82.7
EBIDTA %	(1.6)	3.9	2.5	6.0	8.9
Depreciation	50	54	52	55	59
EBIT	(95)	60	18	141	298
% Chg	NMF	NMF	(70.2)	693.0	111.8
Interest & Financial Charges	141	110	71	51	34
Other Income	104	63	60	66	79
PBT	(132)	13	7	156	343
Exceptional Items	10	16	0	0	0
Prior Period Adjustments	0	(19)	0	0	0
Tax	(42)	4	0	34	75
% of PBT	32.1	35.2	2.2	22.0	22.0
PAT	(80)	5	7	122	268
% Chg	NMF	NMF	44.8	1,699.6	120.0
PAT %	(2.8)	0.2	0.2	3.7	6.7
Basic EPS	(19.2)	1.1	1.6	29.2	64.3
Diluted EPS	(19.2)	1.1	1.6	29.2	64.3
% Chg	NMF	NMF	44.8	1699.6	120.0

Note: NMF- Not Meaningful

Balance Sheet

Y/E March (₹ cr)	FY13	FY14	FY15	FY16E	FY17E
Sources of Funds					
Equity Capital	42	42	42	42	42
Reserves Total	2,038	2,038	2,035	2,135	2,356
Networth	2,080	2,080	2,077	2,177	2,398
Total Debt	1,214	905	592	528	317
Other Long-term Liabilities	406	379	317	337	355
Long-term Provisions	149	136	164	184	199
Total Liabilities	3,850	3,500	3,150	3,226	3,269
Application of Funds					
Gross Block	1,184	1,201	1,253	1,316	1,385
Accumulated Depreciation	653	702	754	809	868
Net Block	531	499	499	507	518
Capital WIP & Intan. under Dev.	142	173	162	145	144
Investments	4	4	3	3	3
Deferred Tax Assets (net)	105	100	101	101	101
Inventories	2,456	2,152	1,921	1,920	1,959
Sundry Debtors	862	977	992	987	1,088
Cash and Bank Balance	77	16	144	256	246
Loans & Advances	603	532	400	406	448
Current Liabilities	1,366	1,261	1,441	1,511	1,678
Net Current Assets	2,632	2,417	2,017	2,057	2,063
Other Assets	436	308	368	413	440
Total Assets	3,850	3,500	3,150	3,226	3,269

Cash Flow Statement

Y/E March (₹ cr)	FY13	FY14	FY15P	FY16E	FY17E
Profit before tax	(122)	9	7	156	343
Depreciation	53	55	52	55	59
Other Adjustments	96	(35)	(28)	(18)	(18)
Change in Working Capital	(275)	282	434	66	(10)
Interest & Financial Charges	141	110	71	51	34
Direct taxes paid	(31)	(26)	(0)	(34)	(75)
Cash Flow from Operations	(138)	394	535	275	333
(Inc)/ Dec in Fixed Assets	(170)	(53)	(42)	(45)	(69)
(Inc)/ Dec in Invest. & Int. received	38	25	22	18	18
Cash Flow from Investing	(132)	(28)	(20)	(27)	(51)
Inc./ (Dec.) in Borrowings	303	(306)	(312)	(64)	(211)
Issue/ (Buy Back) of Equity	0	0	0	0	0
Dividend Paid (Incl. Tax)	(24)	(12)	(5)	(21)	(47)
Finance Cost	(124)	(109)	(71)	(51)	(34)
Cash Flow from Financing	155	(427)	(388)	(137)	(292)
Inc./ (Dec.) in Cash	(116)	(61)	128	112	(10)
Opening Cash balances	192	77	16	144	256
Closing Cash balances	77	16	144	256	246

Key Ratios

Y/E March	FY13	FY14	FY15P	FY16E	FY17E
Valuation Ratio (x)					
P/E (on FDEPS)	NMF	NMF	NMF	41.7	19.0
P/CEPS	NMF	87.1	86.1	28.8	15.5
Dividend yield (%)	0.2	0.1	0.1	0.4	0.8
EV/Sales	2.2	2.1	2.0	1.6	1.3
EV/EBITDA	NMF	52.7	79.0	27.3	14.4
EV / Total Assets	1.6	1.7	1.8	1.7	1.6
Per Share Data (₹)					
EPS (Basic)	(19.2)	1.1	1.6	29.2	64.3
EPS (fully diluted)	(19.2)	1.1	1.6	29.2	64.3
Cash EPS	(7.1)	14.0	14.1	42.3	78.4
DPS	2.5	1.0	1.0	4.4	9.6
Book Value	499.5	499.4	498.7	522.8	575.8
Returns (%)					
RoCE (Pre-tax)	(2.8)	1.8	0.6	4.9	10.2
Angel RoIC (Pre-tax)	(2.9)	2.0	0.7	5.2	11.0
RoE	(4.3)	0.4	0.3	5.7	11.7
Turnover ratios (x)					
Asset Turnover (Gross Block) (x)	2.4	2.4	2.3	2.6	3.0
Inventory / Sales (days)	321	292	268	216	180
Receivables (days)	123	117	129	111	100
Payables (days)	175	166	178	170	154
WC days	269	243	219	157	126
Leverage Ratios (x)					
D/E ratio (x)	0.5	0.4	0.2	0.1	0.0
Interest Coverage Ratio (x)	NMF	0.5	0.3	2.8	8.8

Note: NMF- Not Meaningful

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Disclosure of Interest Statement	BEML
1. Analyst ownership of the stock	No
2. Angel and its Group companies ownership of the stock	No
3. Angel and its Group companies' Directors ownership of the stock	No
4. Broking relationship with company covered	No

Note: We have not considered any Exposure below ₹1 lakh for Angel, its Group companies and Directors

Ratings (Based on expected returns over 12 months investment period):	Buy (> 15%)	Accumulate (5% to 15%)	Neutral (-5 to 5%)
		Reduce (-5% to -15%)	Sell (< -15)