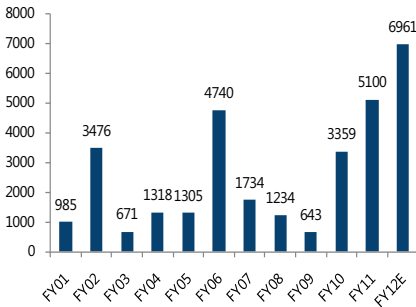


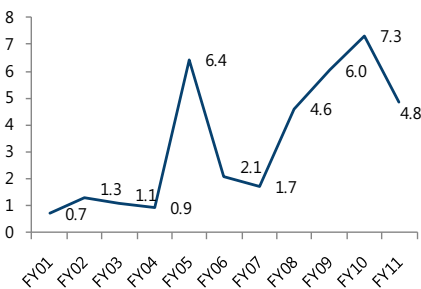
## Sector Report

NEUTRAL

### Yearly award in kms



### Execution per/day



### Relative Performance

	1M	3M	6M	1YR
Sensex	10	3	6	0
Nifty	11	4	6	2
Ashoka Build	7	(18)	(27)	(24)
IL&FS Tranp	28	4	10	(6)
IRB Infra	16	3	2	(2)
Sadbhav Engg	33	2	(4)	40

**Rahul Metkar**

rahul.metkar@msflibg.in  
(+ 91 22 3094 7115)

**Ashish Kumar**

ashish.kumar@msflibg.in  
(+ 91 22 3094 7116)

February 14, 2012

## Highway Development

Near term challenges; smoother times ahead

Roads & Highway development presents a structured, planned & definitive opportunity of ~₹ 1365bln (USD 26.25bln) to EPC & BOT developers. Dissecting this opportunity, we find that the scale, size & regional distribution of majority of balance projects may not be attractive for a BOT developer. Also, the competitive intensity of bids has challenged all industry players alike & warrant caution. In our opinion, these bids assume a consistent availability of cheaper source of finance which in itself is unsustainable over a longer time frame. We believe capital markets shall, in the long run, create a valuation differential between aggressive company managements and those with conservative & sustainable strategy. Hence, we like companies with business model & management style which does not encourage excessive risk taking, have projects with longer concession tail & are able to consistently generate positive FCFE with minimal support from the parent entity.

### Definitive opportunity, award activity has already peaked

Highway development under the planned NHDP presents an opportunity of ~₹ 1365bln (USD 26.25bln). While we don't deny the size & certainty of the opportunity we are concerned about limited projects fitting the size & scale of a PPP development. The regional spread too is not quite encouraging. Also, we expect FY12 to see peak of awards in near term.

### Competitive pressures – no respite in near term

The recent bids by developers belie their stated IRR objective. Also, the expectation of gradual decline in competitive intensity has been proven otherwise. Supply side constraints along with demand side factors of declining order backlog/sales, lower asset utilization & scope for financial leveraging has attracted the breadth of the construction players to road projects particularly the NHA project awards. Hence, we expect the competitive intensity to remain at elevated levels in near term restricting IRR's of projects to lower teens.

### Takeout essential (debt &/or equity), equity requirement to pull plug on competitive intensity

We estimate an equity requirement of ₹ 2687bln over the next 3 years for projects currently under implementation. Additionally, ₹ 339bln of equity shall be required for projects which are expected to be awarded in the next 2 years. In our opinion, this shall be the sole factor for pulling the plug on the competitive intensity of the sector.

### Challenging times to continue; Valuations offer comfort

The competitive intensity, amongst other reasons has led to underperformance of the sector with broader markets. The current average valuation of 1.5x P/B offer significant comfort from further downside. We initiate coverage on Ashoka Buildcon & ITNL with a Buy rating, downgrade IRB Infra to Hold, maintain Buy on Sadbhav Engineering. Sadbhav Engineering continues to occupy the top slot in our pecking order of stock selection.

### Valuation Snapshot

Company	Rating	CMP	Target Price	Mkt cap	P/BV (x)			ROE (%)		
					FY11	FY12E	FY13E	FY11	FY12E	FY13E
Ashoka Buildcon	Buy	196	251	10.4	1.2	1.0	0.9	15.1	10.4	13.4
ITNL	Buy	209	249	40.6	1.8	1.5	1.3	23.0	18.8	16.5
IRB Infra	Hold	168	171	55.7	2.3	2.2	2.1	20.2	18.1	15.0
Sadbhav	Buy	138	186	20.5	2.4	1.6	1.5	12.0	14.1	7.3

**Table of Contents**

**Executive Summary.....3**

**Investment Summary.....6**

    Definitive opportunity, declining scale & PPP economics.....6

    Vehicle addition comforting for toll road operators.....10

    Sporadic awards to continue; timely borrowing by NHAI key to project awards.....11

    Competitive pressures – no respite in near term.....18

    Road Infra lending – Systemic leverage high, is incomprehensible to us.....22

    Takeout essential (Debt &/or equity) – equity requirement to pull plug on competitive intensity.....24

    Comparative Analysis.....28

    Sector Valuation.....30

**Ashoka Buildcon – Speeding up.....39**

**IL&FS Transportation – Balanced portfolio offers comfort.....51**

**IRB Infra – Riding on past glory.....65**

**Sadbhav Engg – Benchmark for excellence.....77**

**Appendix – SPV Credit Ratings.....86**

## Executive Summary

- **Definitive opportunity, declining scale & PPP economics**

Highway development under the planned National Highways Development Program presents an opportunity of ~₹ 1365bln (USD 26.25bln). While we don't deny the size & certainty of the opportunity we are concerned about limited opportunity fitting the size & scale of a PPP project. The regional spread too is not quite encouraging. Our conclusion is based on detailed analysis of projects based on type of development (2/4/6 lane), length, cost, & geography through which the road passes. Unless the Greenfield expressway projects takeoff in a major way, the near term opportunity presents lesser number of commensurate project opportunity for large BOT developers.

- **Sporadic award activity to continue; timely borrowing by NHAI key to project awards**

So far, the NHDP awards have been characterized by irregularity due to poor feasibility reports, land acquisition problems, NHAI finances, & other policy related issues. Even though the B K Chaturvedi committee recommendation did attempt to address this issue and have recorded better pace of land acquisition, we have not witnessed a marked improvement of the same. Project restructuring resulting in bid cancellation has been the other reason for bunching up of awards. Lack of long-term sources of finances too has prevented faster implementation of NHDP. Premiums received on recent project bids are expected to support NHAI's finances post completion of awards. We estimate a gross borrowing requirement of ₹ 350bln for completion of NHDP awards (our estimate excludes cost of development of 1000kms of Phase VI under NHDP). While timely borrowing is essential for project awards, we expect project restructuring to result in average time cycle of project awards remaining high.

- **Vehicle addition comforting for toll road operators**

Viability of toll-based projects depends on the traffic growth. As per our Auto Analyst, Mr. Ronak Sarada, Light Commercial Vehicles (LCV) segment is expected to register 15% CAGR over FY11-13E, whereas Heavy & Medium Commercial Vehicle (H&MCV) segment is expected to grow by 10% during the same period. We believe these growth rates coupled with Indian economy growing by 7-8% Y-o-Y, would ensure sufficient growth for toll based stretches. On the passenger car movement, since India has one of the lowest penetration levels worldwide, traffic growth from cars would supplement CV traffic growth. Note that CVs contribute the most to total revenue collection of Indian toll roads (around 70% of total toll collection).

- **Competitive pressures – no respite in near term**

The recent bids by developers belie their stated IRR objective. Also, the expectation of gradual decline in competitive intensity has been proven otherwise. We view the competitive intensity as interplay of demand-supply dynamics and the fragmented nature of the construction/infrastructure industry. Supply side constraints of lower all round capital formation measures in the economy, absence of awards by other construction intensive infrastructure & industrial sectors along with demand side factors of declining order backlog/sales, lower asset utilization & scope for financial leveraging has attracted the breadth of the construction players to the road / highway sector particularly the NHAI project awards. Market share analysis indicates that established players have won majority of the awards over the last 3 years further frustrating the new entrants. Hence, we expect the competitive intensity to remain at elevated levels in near term restricting IRR's of projects to lower teens.

- **Road Infra lending – Systemic leverage high, is incomprehensible**

Advances to infrastructure sector have grown at a CAGR of 36.2% over the last 4 years due to Gol's thrust on infrastructure development through PPP. Credit to infrastructure sector stands at 32.1% of outstanding industry credit as on Dec'11. During the same period, the advances to road projects have grown at a CAGR of 37% taking its share in infrastructure lending to 18%. Recently, there has been a discussion on bank's lending to road developers based on an inflated project cost resulting in higher systemic leverage potentially risking the entire banking system along with NHAI's finances and future development plan. Having factored in a 35%/40% higher cost of project as compared to NHAI/State RDC estimates, a construction period of 3.5yrs & a 75/25 Debt/Equity funding structure we find that cumulatively the bank lending to road exceeds our debt draw down estimates by ₹ 341bln. Failure to

explain the cumulative difference of ₹ 341bn assumes significance in the light of such amount being 6% of the outstanding infrastructure credit (exclusive of advances by Infrastructure NBFC) to roads. We are unable to comprehend the exact reason for such high leverage of the sector.

- **Takeout essential (debt &/or equity), equity requirement to pull plug on competitive intensity**  
As an extension to our discussion on high systemic leverage we believe takeout of bank loans by long term finance and takeout of loans at developer level by equity is becoming increasingly essential to de-risk the system. Assuming the project cost to be 30% higher than the NHAI estimate & a funding mix of Debt:Equity-70:30 we expect an equity requirement of ₹ 2687bn over the next 3 years for projects currently under implementation. Additionally, ₹ 339bn of equity shall be required for projects which are expected to be awarded in the next 2 years. In the absence of a stable secondary market most of the developers have started to look at the PE route for raising capital. Hence, we believe takeout by equity is essential for avoiding any adverse systemic fallout of the leverage. Also, in our opinion, this shall be the sole factor for pulling the plug on the competitive intensity of the sector.
- **Four important parameters we look at to grade companies**  
We look at four important aspects to grade road developers

  - ✓ Company's presence in the industry & its track record
  - ✓ Strong financial position
  - ✓ Third party EPC capability / Interdependence between EPC & BOT business
  - ✓ Cash flow generation
  - ✓ Concession tail/Asset maturity
- **Roads & Highways Sector – Neutral on sector, Sadbhav Engineering, our top pick**  
The Indian Roads & Highways presents an opportunity of ~₹ 1365bn (USD 26.25bn) involving development of ~18,534kms. Although a significant opportunity, declining scale of projects & high competitive intensity lowers the profitability, hence neutral on the sector. Players like ITNL, IRB Infra, Sadbhav Engg, Ashoka Buildcon etc are expected to capitalize on the opportunity in the near term. We initiate coverage on ITNL & Ashoka Buildcon and retain Sadbhav Engineering as our top pick in the sector.
- **IRB Infrastructure (Hold, Target Price: ₹ 171, CMP: ₹ 168, upside 2%)**  
IRB Infrastructure posses some of the best stretches across industrial corridors of Mumbai-Pune & Mumbai-Gujarat in its portfolio. However, bids in the past and its recent bid for the Ahmedabad-Vadodara highway have been aggressive eroding the IRR's of the project. Also, we believe a strong inter-dependence of EPC & BOT business for IRB Infrastructure encourages risk taking. A declining scale of opportunity & aggression in bids risks higher multiple ascribed to its EPC arm.
- **IL&FS Transportation (Buy, Target Price: ₹ 249, CMP: ₹ 209, Upside 19%)**  
ITNL's portfolio, as compared to its peers, has a balance mix in terms of Toll/Annuity, State/Central, etc. IL&FS' parentage accrue other benefits like its experience in Indian infrastructure and funding support to company's growth. We believe in the company's strong project evaluation process and eventually the return generation capacity enabling it to support growth without any dilution. Also, longer duration of its portfolio is likely to support its valuations.
- **Sadbhav Engineering (Buy, Target Price ₹ 186, CMP ₹ 138, upside 35%)**  
Sadbhav Engineering has demonstrated excellent ability in negotiating a challenging phase for the industry by being ahead of its industry peers in project & business lifecycle management. We like company's strong execution record & financial position along with an EPC capability which is not entirely dependent on the BOT arm for orders and has consistently generated positive CFO. A medium maturity profile of assets, disciplined bidding & lower requirement of any support for operational projects strengthens our investment thesis. Also, timely capital infusion provides sufficient bandwidth for growth. Hence, Sadbhav Engineering is our top pick in the sector.

- **Ashoka Buildcon (Buy, Target Price ₹ 251, CMP ₹ 196, upside 28%)**

Ashoka Buildcon is on a transformation path from being a predominant state road player to a respectable position in development of National Highways. A key differentiator for Ashoka has been its in-house traffic estimation team which has experience of more than 5 years. This is complemented by high quality execution capability & is known for delivering projects ahead of schedule. Supported by its new project wins we expect the company to clock the highest revenue growth over FY12-14E amongst the companies discussed above. Although the variance of Ashoka's bid over its nearest rival has been lower for recent project wins the margin of comfort still remains lower. Also, we believe there is an eminent risk of dilution of its holding in its BOT assets

**Exhibit 1: Sector valuation**

Company	CMP	Target	Reco	Mcap (\$ bln)	Mcap (₹ bln)	P/BV		EV/EBITDA		ROE		ROCE	
						FY12E	FY13E	FY12E	FY13E	FY12E	FY13E	FY12E	FY13E
Ashoka Buildcon	196	251	Buy	0.2	10.4	1.0	0.9	7.8	7.9	10.4%	13.4%	5.7%	5.7%
ITNL	209	249	Buy	0.8	40.6	1.5	1.3	9.8	10.1	18.8%	16.5%	8.6%	7.4%
IRB Infra	168	171	Hold	1.1	55.8	2.3	2.2	8.4	8.7	18.1%	15.0%	9.1%	6.7%
Sadbhav Engg	138	186	Buy	0.4	20.6	1.6	1.5	12.7	12.8	14.1%	7.3%	5.3%	3.2%

Source: MSFL Research

**Exhibit 2: Sector growth matrix (FY11-14E)**

Company	Order Book (₹ bln)	OB/Sales(FY12E)	Revenue Growth	EBITDA Growth	Net profit Growth
Ashoka Buildcon	41.5	2.8	30%	32%	16%
ITNL	100.6	1.9	21%	18%	4%
IRB Infra	91.3	2.9	24%	22%	8%
Sadbhav Engg	59.4	2.1	19%	38%	27%

Source: MSFL Research

**Exhibit 3: Key Triggers**

Company	Triggers	Impact
Ashoka Buildcon	<ul style="list-style-type: none"> <li>Equity infusion from PE player</li> </ul>	<ul style="list-style-type: none"> <li>Positive for balance sheet and increased confidence on funding of under construction projects.</li> </ul>
IRB Infra	<ul style="list-style-type: none"> <li>Higher traffic growth for Surat Dahisar and Tumkur Chitradurga projects</li> </ul>	<ul style="list-style-type: none"> <li>Better cash flows and reduced dependence on parent for supporting operations</li> </ul>
ITNL	<ul style="list-style-type: none"> <li>Early completion of toll projects</li> </ul>	<ul style="list-style-type: none"> <li>Longer tolling period and higher near term cash flows</li> </ul>
Sadbhav Engg	<ul style="list-style-type: none"> <li>New order win in EPC arm</li> <li>Early completion of 3 BOT projects</li> </ul>	<ul style="list-style-type: none"> <li>Increased revenue visibility &amp; growth</li> <li>Bonus and higher near term cash flows</li> </ul>

Source: MSFL Research

**Investment Summary**

- **Definitive opportunity, declining scale & PPP economics**

We are confident of highway development and project awards under National Highways Development Program (NHDP) to have lion's share in India's infrastructure development in the near term, outlined by planned awards of 18,534kms at an estimated development cost of ₹ 1365bln, presenting a definitive opportunity for infrastructure developers. However, inspite of a large opportunity, our analysis, excluding the competitive intensity factor, points to reduced attractiveness under PPP mode of development, for majority of the planned awards. Our analysis of balance awards in each of the NHDP Phases is based on the following parameters

- ✓ Type of development (2/4/6 laning)
- ✓ Average scale of project (length in kms) & number of projects
- ✓ Region & corridor of the project

**The overall picture ...**

Phase IV to be the mainstay of award going forward

**Exhibit 4: Phase wise opportunity in kms & ₹ bln respectively**

Phase	Total Length	Est. TPC
II	300	56
III	3380	301
IV	11314	655
V	3540	353
<b>Total</b>	<b>18534</b>	<b>1365</b>

Source: NHAI, MSFL Research

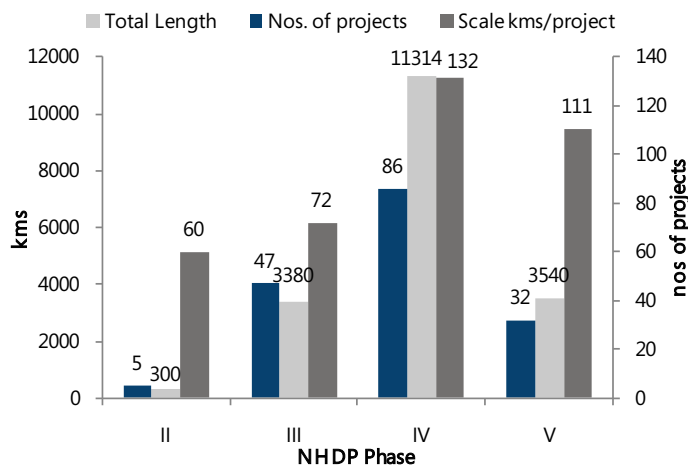
**Exhibit 5: Region-wise opp. in kms & ₹ bln**

Region	Total Length		Est TPC	
	kms	%	₹ bln	%
North	4534	24%	334	25%
South	4917	27%	420	31%
Central	1669	9%	93	7%
East	4615	25%	346	25%
West	2799	15%	172	13%

Source: NHAI, MSFL Research

Limited opportunity in industrialized western region; ~10% of opportunity lies in extreme geographies

**Exhibit 6: Average scale of project in kms**



Source: NHAI, MSFL Research

Scale opportunity for bigger players limited to Phase V restricting any commensurate growth in asset portfolio

Limited opportunity in Phase III for bigger players ...

Our analysis suggests that Phase III offers limited opportunity for bigger players due to

- ✓ Concentration of 30% of balance awards in North Eastern states, which in our view poses significant execution challenges
- ✓ Only 38% & 20% of the total project awards have an average scale of 127kms & 75kms

Phase III opportunity – 3380kms at an est. development cost of ₹ 301bln

Substantial part of opp. i.e. ~30% is concentrated in North Eastern states which in our view poses significant execution challenges & offers limited return on capital for PPP developers

Scale opportunities limited to 10 projects & 38% of 3380kms of total length remaining to be awarded

Phase IV development – largest opportunity in NHDP in near term. Avg. project scale ~132kms for 4 lane & 2 lane projects

Exhibit 7: Geographical breakup of Phase III opportunity

States	Eastern Region		Southern Region			Northern Region		
	% Length	% est. TPC	States	% Length	% est. TPC	States	% Length	% est. TPC
Bihar	7.1%	7.6%	TN	11.6%	9.4%	UP	1.4%	1.5%
Orissa	4.1%	4.3%	Karnataka	0.7%	0.8%	Punjab	0.9%	0.9%
WB	1.8%	1.9%	Kerala	8.4%	9.0%	Haryana	11.8%	10.7%
Arunachal Pradesh	0.7%	0.7%	Pondicherry	0.1%	0.1%	Delhi	0.8%	0.9%
Assam	18.1%	19.4%				HP	3.0%	3.2%
Manipur	3.3%	3.5%						
Meghalaya	3.8%	2.2%						
Mizoram	4.1%	4.4%						
Nagaland	0.8%	0.9%						
<b>Total</b>	<b>43.8%</b>	<b>44.8%</b>		<b>20.8%</b>	<b>19.3%</b>	<b>Total</b>	<b>17.8%</b>	<b>17.1%</b>

States	Western Region		Central Region		
	% Length	% est. TPC	States	% Length	% est. TPC
Maharashtra	6.5%	6.9%	Chhattisgarh	1.5%	1.6%
Rajasthan	0.6%	0.7%	MP	9.0%	9.6%
<b>Total</b>	<b>7.1%</b>	<b>7.6%</b>		<b>10.5%</b>	<b>11.2%</b>

Source: NHAI, MSFL Research

Exhibit 8: Phase III opportunity segmentation

	Other states		North Eastern states	
	Nos	Total Length (kms)	Nos	Total Length (kms)
<51 kms	15	387	5	136
51-100 kms	9	677		
>100 kms	10	1274	6	907
<b>Total</b>	<b>34</b>	<b>2338</b>	<b>11</b>	<b>1043</b>

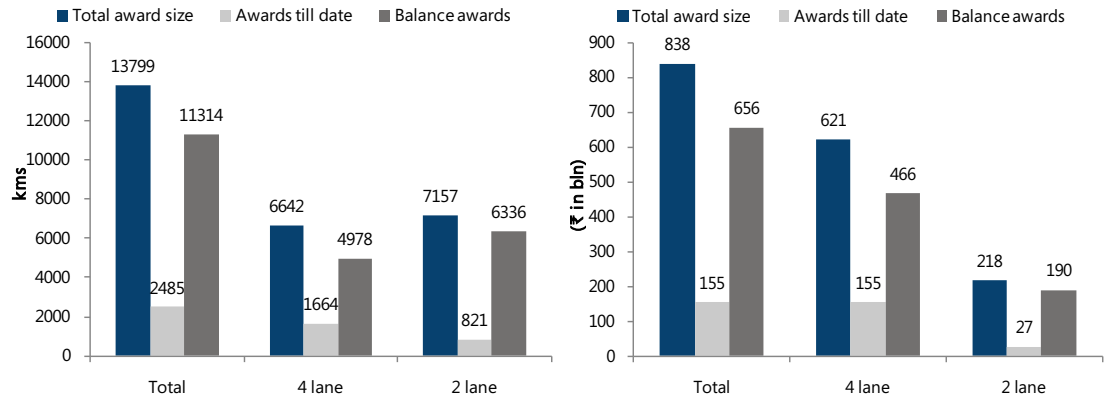
Source: NHAI, MSFL Research

Phase IV – Largest opportunity in size, PPP dependent on Govt. grants

Development of Phase IV presents the largest available opportunity under NHDP in near term. Contrary to popular perception substantial part of Phase IV opportunity also involves development of 4 lane roads. The average project size in terms of length for both 4 laning & 2 laning is ~132kms providing the requisite scale for attracting larger developers. However, they fair poorly on traffic attractiveness and will have to be dependent on NHAI grants for development under PPP mode. We expect 70% of 4 laning length to be awarded with grant from NHAI while 65% of 2 laning length is expected to be developed under EPC mode.

Exhibit 9: Lane-wise Phase IV development opportunity

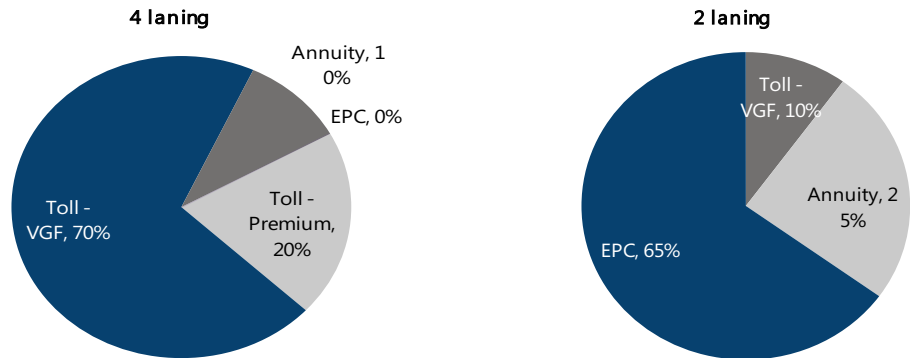
Contrary to perception, 4 lane projects offer a significant PPP opp. in Phase IV albeit with Govt. support in form of grant



Source: NHAI, MSFL Research

Exhibit 10: Expected mode of award for 4 & 2 lane projects in Phase IV

4 lane projects to be primarily dependent on NHAI grant while EPC shall be the dominant mode of award for 2 lane projects in Phase IV



Source: MSFL Research

Phase V – only respite for large developers, high competition expected

Our analysis suggests that only 6 laning projects under Phase V of NHDP offer commensurate growth opportunities for large road BOT developers. Hence, with completion of NHDP being the main focus & in absence of any such attractive projects being developed by NHAI in near term we expect these projects to attract high competition.

Six lane projects offer better scale opportunities for larger players.

Exhibit 11: Phase V opportunity segmentation

Project length based segments	Nos. of projects	Total Length (kms)	Avg. length of project (kms)
<51	3	132	44
51-100	13	993	76
100-150	11	1386	126
>150	5	1029	206

Source: NHAI, MSFL Research

Also, a detailed analysis of Phase V plan suggests that majority of the balance awards are on the Chennai-Kolkata & Mumbai-Chennai leg of the Golden Quadrilateral while the Mumbai-Delhi leg has been completely awarded. The Chennai-Kolkata leg of the GQ has majority of its length passing through coastal Andhra Pradesh covering sea ports of Vishakhapatnam, Kakinada & Paradip. While the Mumbai-Delhi leg of GQ catered to traffic supplying goods to consumption centers in the north manufactured in industrialized Gujarat & Maharashtra or traffic catering to export-import of goods to the ports of Mundra, Kandla & JNPT, the Chennai-Kolkata leg does not offer such opportunities since the consumption areas are in the hinterland away from the ports.



Majority of the projects yet to be awarded are along the east coast of the country

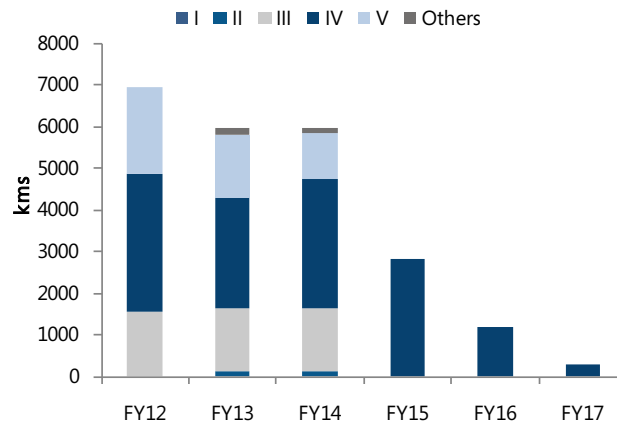
Exhibit 12: 3 sides of GQ yet to be six laned

Golden Quadrilateral	Corridor	NH nos	GQ Length (kms)	Ph V Length (kms)	Awarded length (kms)	Balance for Award Length (kms)
	Delhi -Kolkata	2	1454	1315	656	659
Mum-Delhi	8,8A,76,79	1383	1328	1328	-	
Mum-Chennai	4,7,46	1291	1370	542	828	
Chennai-Kolkata	5,6,60	1685	1733	487	1245	
<b>Total</b>		<b>5813</b>	<b>5746</b>	<b>3013</b>	<b>2732</b>	
NSEW	Corridor		NSEW Length (kms)	Ph V Length (kms)	Awarded length (kms)	Balance for Award Length (kms)
	Phase I & II		7200	861	461	400
Additional projects						407
<b>Total</b>						<b>3539</b>

Source: NHAI, MSFL Research

Our analysis is based on current NHDP development plan as envisaged by NHAI & the Planning Commission. Also, we have excluded Phase VI which entails 1000kms of expressway development from our analysis since we believe these projects may not be bid out in near term. Restructuring of projects by NHAI to make it attractive for PPP is a possibility which may affect our conclusion.

Exhibit 13: Expected project award schedule



Source: NHAI, MSFL Research

While we believe, that conversion of state highways into national highways, increasing the number of lanes of existing national highway network, greenfield expressway development remains an attractive long term opportunity, in near term & major period of the XII<sup>th</sup> Five Year Plan, the NHAI & Planning Commission is likely to concentrate on completion of NHDP award.

Hence, we believe, that although the pie for highway development under the NHDP has substantial size the share of projects which offer commensurate opportunities in terms of profitability (project IRR) & portfolio growth for large & established road BOT developers' viz. IRB, GMR Infrastructure, L&T, GVK, ITNL etc is small. The two likely scenarios that could play out are

- ✓ slow down in the growth momentum through new project wins for such leading companies
- ✓ new project wins which inherently have lower project IRR's (competition may further lower the expected project IRR)

Project award already peaked

Expressways & increase in NH length remains a continuous process & a long term opportunity while NHDP a near term focus

Expect slowdown in growth momentum through new project wins for leading companies

- Vehicle addition comforting for toll road operators

It is estimated that around 70% of total toll collection on India's National highways is contributed by commercial vehicles (CVs). MSFL's Auto Analyst, Mr. Ronak Sarma, estimates 15% CAGR over FY11-15E for Light Commercial Vehicle (LCV) and 10% for Medium & Heavy Commercial Vehicle (M&HCV) for goods category. We believe this provides sufficient comfort on traffic volume growth for toll-based stretches.

Exhibit 14: Vehicle growth in India

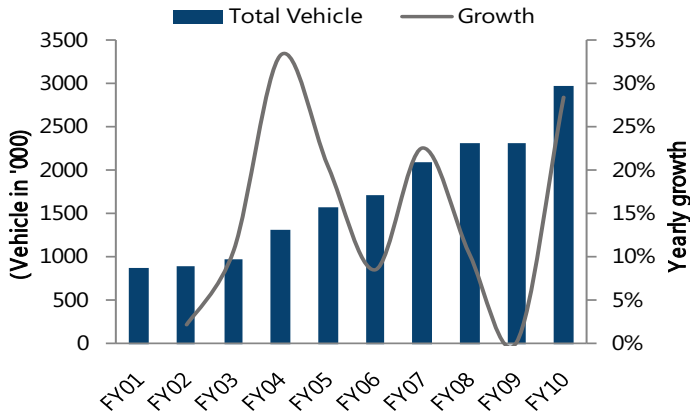


Exhibit 15: Higher LCV growth expected over FY11-15E

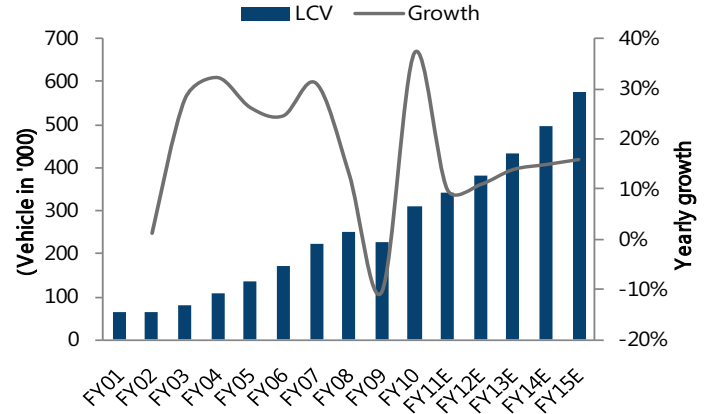


Exhibit 16: Moderate M&HCV growth expected over FY11-15E

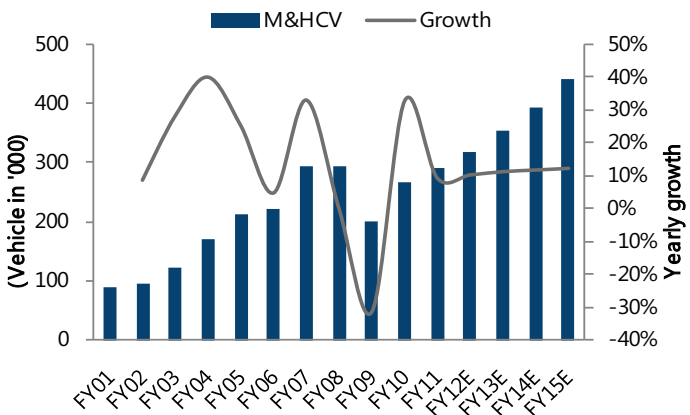
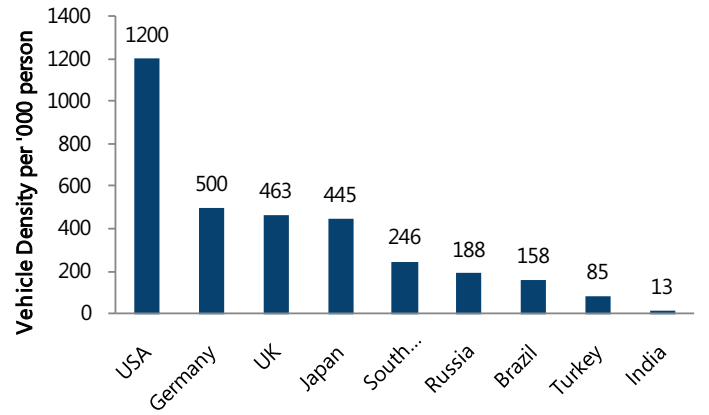


Exhibit 17: Passenger vehicle density (per 1000 persons)



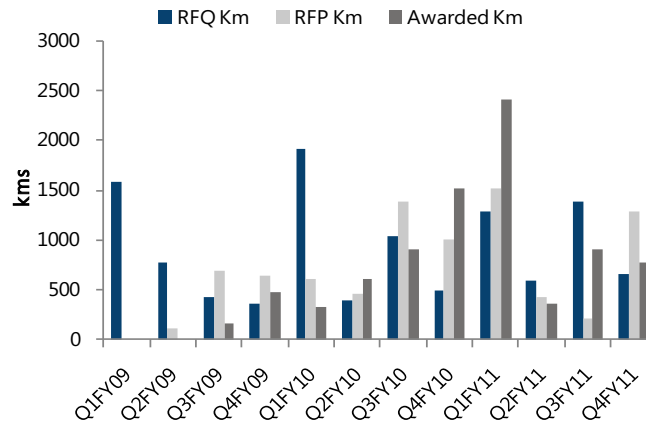
Source: ICRA, MSFL Research

Despite strong growth (~7.5% GDP growth) witnessed for nearly a decade, penetration of cars in India remains one of the lowest in the world. India has the lowest car penetration of 13 per 1000 population as compared to 1200 in USA. Hence we expect growth in passenger car segment to lead GDP growth.

- Sporadic awards to continue; timely borrowing by NHAI key to project awards

The NHAI project awards over the last 3 years has been quite sporadic with no awards over extended periods & bunching up of awards in a short period of time.

Exhibit 18: Quarterly trend of Open RFQs, RFPs & awards in km

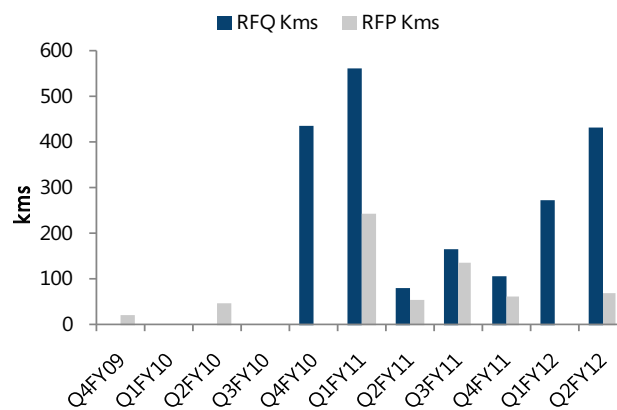


Awards picked up post Q2FY10 which saw a drastic decline in Q2FY11

Source: NHAI, MSFL Research

We have observed cancellation of bids time & again with majority of the cancelled project bids being restructured & bid out again. Hurdles in land acquisition too have adversely affected the award schedule.

Exhibit 19: Quarterly RFQ & RFP cancellation trend



Project restructuring has been the major reason for cancellation of bids

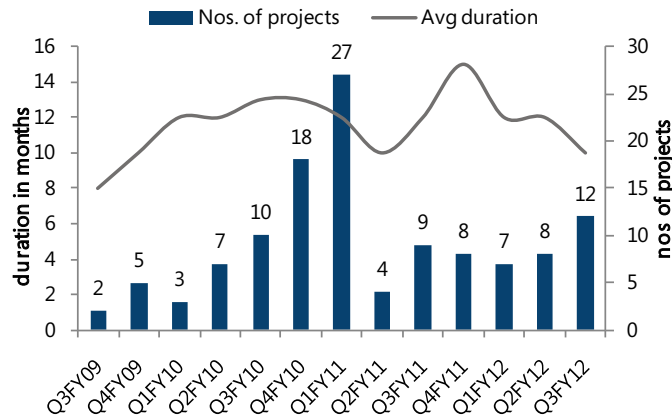
Source: NHAI, MSFL Research

The B.K.Chaturvedi Committee did attempt to address this issue & reduce the project award cycle through its following recommendations

- ✓ Project wise pre-qualification be substituted with annual/periodic pre-qualification
- ✓ Instead of a waterfall model for project bidding it suggested the project be tested for BOT-Toll, BOT-Annuity & EPC concurrently. A project not found prima facie suitable for BOT-Toll can be implemented directly on BOT-Annuity subject to the overall cap as envisaged in the Work Plan
- ✓ Before implementing a project on EPC basis, it will be compulsorily tested for BOT-Annuity and only if unacceptable bids are received the project will be awarded on EPC basis
- ✓ In case of projects under NHDP Phase IV, if traffic is less than 5000 PCUs, the project will be directly taken up on EPC

Exhibit 20: Trend in project award duration

Avg duration for a project award is 10 months, 67% higher than targeted 6 months. Do not expect improvement in the near term



Source: NHAI, MSFL Research

However, in spite of these recommendations being accepted we have not seen any marked improvement in the award schedule. In our opinion, following are the key reasons for the irregularity in the awards

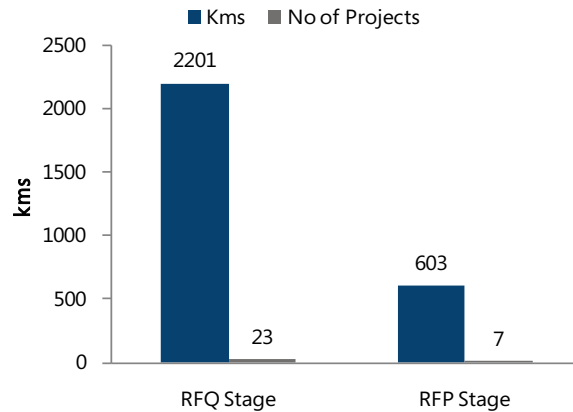
- ✓ Poor and/or obsolete feasibility study report
- ✓ NHAI finances
- ✓ Policy consultations and approvals from other departments of Government of India

We believe that NHAI project awards shall continue to be characterized by irregularity since

- ✓ Phase IV is expected to be the mainstay of awards. Hence, it is likely that majority of the projects shall be tested for all three BOT-Toll, BOT-Annuity & EPC modes or at least two of these modes before being awarded
- ✓ Expect similar process for 30% of Phase III projects
- ✓ Policy consultations on Annuity cap and deadlock on EPC defect liability period terms is likely to further add to the delays in the process
- ✓ Going forward, market borrowings is expected to be major source of funding for NHAI

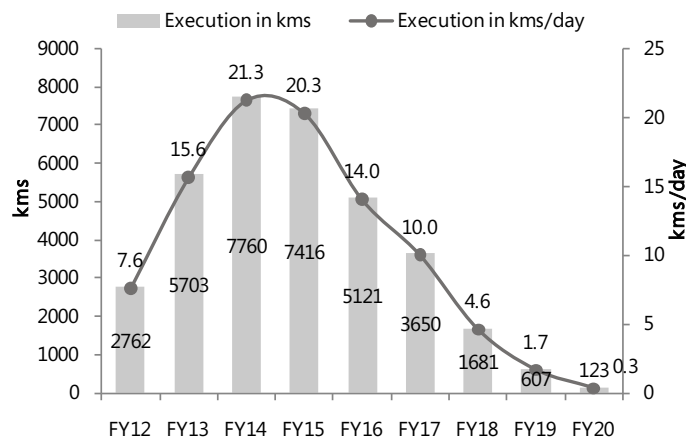
Strong RFQ pipeline of projects with ~2200 kms length

Exhibit 21: Current pipeline of projects



Source: NHAI, MSFL Research

Exhibit 22: Yearly execution expectation



Source: NHA, MSFL Research

Expect execution to touch 20kms/day by end of FY14E.

**NHAI still needs ₹ 350bln of market borrowing**

Traditionally, NHAI has relied on funds from Central Road Fund (CRF) and government grants with no recourse to stable, long term sources of finance.

Exhibit 23: NHAI fund sources for the period FY06-11

Period ending (₹ mln)	Mar-06	Mar-07	Mar-08	Mar-09	Mar-10	Mar-11
<b>Sources of funds</b>	91113	125650	124208	138537	109056	147222
Cess	32697	64075	65411	69725	74047	84409
ABS	7900	5707	5590	1590	2000	8430
EAP Grant	23466	15942	17751	15132	2697	3197
EAP Loans	6000	3955	4440	3790	680	800
From issue of capital gains bonds	12894	14991	3052	16300	11536	21601
Grant for maintenance of highways	1220	1178	1479	700		
Toll revenue	7983	11183	13987	17083	22000	24630
Interest income on unutilized capital	1723	1846	5052	5179	2336	1498
Decrease in Loans & advances	-10841	-6001	4516	4279	214	-577
Inc. in liabilities	1683	6671	419	961	6482	3629
Net premium/(grant) received/(paid)	1029	11462	2512	848	-13276	643
<b>% composition</b>						
Cess	36%	51%	53%	50%	68%	57%
ABS	9%	5%	5%	1%	2%	6%
EAP Grant	26%	13%	14%	11%	2%	2%
EAP Loans	7%	3%	4%	3%	1%	1%
From issue of capital gains bonds	14%	12%	2%	12%	11%	15%
Grant for maintenance of highways	1%	1%	1%	1%	0%	0%
Toll revenue	9%	9%	11%	12%	20%	17%
Interest income on unutilized capital	2%	1%	4%	4%	2%	1%
Decrease in Loans & advances	-12%	-5%	4%	3%	0%	0%
Inc. in liabilities	2%	5%	0%	1%	6%	2%
Net premium/(grant) received/(paid)	1%	9%	2%	1%	-12%	0%

Source: NHA, MSFL Research

Depended on Govt support for finances with almost no recourse to stable long term finance

Lack of adequate internal cash generation may have been the reason for NHAI not resorting to long term borrowing

The 54EC capital gain tax bonds too have to be refinanced every three years. Also, though the collections through these bond issues have increased in every subsequent issue, it has been significantly below the target collections. The growth in toll collection too has been dismal. In an effort to reduce leakages and increase toll collection efficiency NHAH has now decided to competitively bid out OMT contracts to professional agencies experienced in OMT of roads as against its previous practice of allotting it to retired defense personnel.

One of the sources of cash flow has been premium received by NHAH for BOT projects. While earlier the premium was a onetime payment by BOT winner, it has now changed to a yearly premium amount with fixed 5% increment every year. This reduces volatility in cash flows and is a predictable and long term source of cash inflow for NHAH. A welcome fallout of the competitiveness in the recent project bids has been NHAH receiving higher than expected premium thereby reducing its dependence on market borrowing and government support to some extent

#### Exhibit 24: Recent projects awarded on premium

Project	Length in kms	NHAH Cost in ₹ bln	Premium in ₹ mln	Company
Chengapalli to Coimbatore Bypass	55	8.5	360	IVRCL Infra
Indore Jhabua	155	11.8	230	IVRCL Infra
Hyderabad Yadgiri	36	3.9	120	Sadbhav Engg
Panipat Rohtak	81	8.1	450	Sadbhav Engg
Kandla Mundra Port	71	9.5	80	Reliance Infra
Deoli Kota	83	5.9	490	GVK Power
Sambalpur Baragarh	88	9.1	10	Ashoka Buildcon
Belagaum Khanpur	82	3.6	20	GVR Infra
Jetpur Somnath	123	8.3	230	IDFC Pluss expressway
Pune Satara	140	17.3	910	Reliance Infra
Samainkhaili Gandhidham	56	8.1	580	Larsen & Toubro
Indore Dewas	45	3.3	240	Gayatri
Belgaum Dharwad	80	4.8	310	Ashoka Buildcon
Tumkur Chitradurga	114	8.4	1400	IRB Infra
Hosur Krishnagiri	60	5.4	670	Reliance Infra
Panvel Indapur	84	9.4	340	Supreme Infra
Ludhiyana Talwandi	78	4.8	10	Essel Infra
Dhankuni Kharagpur	111	14.0	1260	Ashoka Buildcon
Kota Jhalwar	88	5.3	40	Keti Construction
Ahmedabad Varodara	102	21.3	3100	IRB Infra
Barwa Adda panagarh	123	16.7	1060	DSC
Nagpur Wainganga	45	4.8	270	JMC projects
Beawar pali Pindwara	244	23.9	2510	Larsen & Toubro
Kishangarh Ahmedabad	556	53.9	6360	GMR Infrastructure

Source: NHAH, MSFL Research

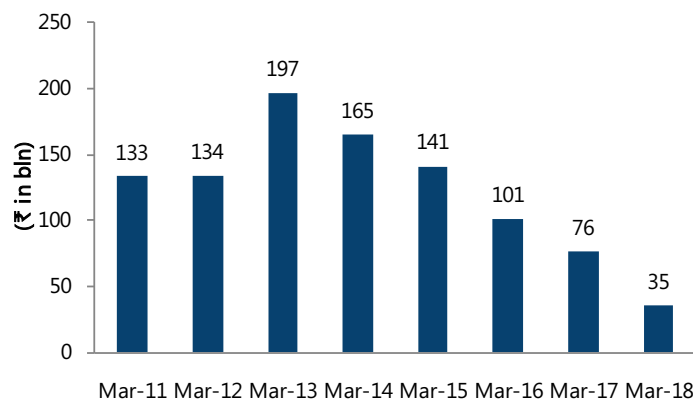
However, we expect only 23% of balance awards to be bid out at premium restricting any substantial growth in premium collections for NHAH. In addition, expected increase in expenditure towards land acquisition (particularly since the effect of LARR Bill on compensation towards land acquisition cannot be estimated), grant for projects under implementation and annuity payments is expected to result in requirement of gross market borrowings of up to ₹ 350bln during FY12-16E. We expect NHAH to hit markets with ₹ 100bln infrastructure tax bonds every alternate year during FY12-FY16 to raise ₹ 300bln. In addition, NHAH is expected to raise ₹ 50bln through capital gain tax bonds. Any meaningful development

Competition has led to majority of recent projects being bid out at premium, aiding cash generation for NHAH

Expect NHAH to hit bond market with ₹ 100bln issue every alternate year during FY12-16

of expressways under Phase VI may result in additional borrowing by NHAI, over and above our expectation.

Exhibit 25: Year wise capital work in progress



Source: MSFL Research

We expect capital expenditure on NHDP (haven't factored 1000kms expressway development under Phase VI in our projections) to post a substantial decline post FY16. Hence, post FY16, in absence of incremental obligations under NHDP and/or other developmental programs, we expect NHAI to achieve surplus cash generation.

Pending phase VI development &/or other developmental programs NHDP capex to see substantial decline post FY16

Key Assumptions

- ✓ Balance awards
  - Award schedule:

Period ending	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17
<b>Total Awards</b>	<b>6961</b>	<b>5958</b>	<b>5981</b>	<b>2839</b>	<b>1209</b>	<b>308</b>
I						
II		150	150			
III	1572	1491	1491	0	0	0
IV	3284	2667	3091	2839	1209	308
V	2105	1500	1099	0	0	0
<b>Others</b>		150	150			

- Breakup of awards – BOT-Toll (Premium), BOT-Toll (VGF), BOT-Annuity & EPC

	Phase III	Phase IV	Phase V
BOT (Toll) Premium	22%	9%	100%
BOT-Toll (VGF)	66%	36%	NA
BOT-Annuity	5%	18%	NA
EPC	7%	36%	NA

Source: MSFL Research

- Land acquisition -
  - 40% of land acquired in the year preceding the award, 40% in the year of award & 20% post award
  - Cost of land acquisition –
    - 4 & 6 laning - ₹ 15mIn/km
    - 2 laning – ₹ 0.6mIn/km

Land acquisition cost constitutes ~35% of outflow till FY14. Possibility of increase in LA cost due to LARR bill.

- VGF - 30% & 15% of NHAI estimate of project cost for Phase III & IV respectively
- Annuity – 9% of NHAI estimate of project cost
- Premium – 5% of NHAI estimate of project cost
- ✓ Projects under implementation
  - Land acquisition -
    - Cost of land acquisition –
      - 4 & 6 laning - ₹ 15mln/km
      - 2 laning – ₹ 0.6mln/km
- ✓ Cess growth – 3.5%, Toll growth – 5%
- ✓ Interest cost on Loans from Government - 13.5%, Market borrowing – 8.4%

Exhibit 26: NHAI cash flow projections

Period ending (fig in ₹ mln)	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18
<b>Inflows</b>	147222	220082	178594	249204	194043	256730	202854	216802
Cess	84409	87363	90421	93586	96861	100251	103760	103760
ABS	8430	8430	8430	8430	8430			
EAP Grant	3197	3197	3197	3197	3197			
EAP Loans	800	800	800	800	800			
Net Bank loans	-1038		13000		15000	-28012		
From issue of capital gains bonds	21601	0	30000	0	20000			
From issue of tax free bonds		100000	0	100000		100000		
Grant for maintenance of highways		6000	6180	6365	6556	6556	6556	6556
Toll revenue	24630	16230	16230	14932	13737	14424	15145	15902
(Increase)/Decrease in Loans & advances	-577	-9000	-3000	-3000				
Inc. in liabilities	3629							
Negative grant	643							
Premium		7062	13337	24895	29461	63510	77392	90583
<b>Outflows</b>	141906	178666	250218	231024	215923	230555	183108	167821
Capital work in progress	133185	134157	196748	164712	141094	101448	76066	35103
Interest expense	1481	2349	2826	3393	2700	1277	1062	846
Interest & other expen on bond issue	2382	2684	2754	2652	2600	2275	1300	650
Interest expense on tax free bonds			8400	8400	16800	16800	25200	25200
Repayment of loan from GOI	1302	1302	1302	1302	1302	1302	1302	1302
Repayment of loan from ADB	239	500	500	500	500	500	500	500
Redemption of Capital Gains bonds	3047	16300	11536	21601	0	30000	0	20000
Expenditure on maintenance of highways		6000	6480	6998	7558	8162	8816	9521
Investments	270	500	500	500	500	500	500	500
Expenditure on toll collection		1623	1623	1493	1374	1442	1515	1590
Annuity		13252	17549	19472	41495	66847	66847	72609
<b>Surplus/(Deficit)</b>	5315.7	41416	-71624	18180	-21880	26175	19746	48980

Source: MSFL Research



Exhibit 27: Cash flow composition

Period ending	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18
<b>% inflow composition</b>							
Cess	40%	51%	38%	50%	39%	51%	48%
From issue of capital gains bonds	0%	17%	0%	10%	0%	0%	0%
From issue of tax free bonds	45%	0%	40%	0%	39%	0%	0%
Grant for maintenance of highways	3%	3%	3%	3%	3%	3%	3%
Toll revenue	7%	9%	6%	7%	6%	7%	7%
Premium	3%	7%	10%	15%	25%	38%	42%
Others	2%	13%	3%	15%	-12%	1%	0%
<b>% outflow composition</b>							
Interest expense	1%	1%	2%	1%	1%	1%	1%
Interest & other expenditure on bond issue	2%	1%	1%	1%	1%	1%	0%
Interest expense on tax free bonds	0%	3%	4%	8%	7%	14%	15%
Redemption of Capital Gains bonds	9%	5%	9%	0%	13%	0%	12%
Expenditure on maintenance of highways	3%	3%	3%	4%	4%	5%	6%
Land acquisition	47%	37%	23%	12%	2%	1%	0%
EPC	24%	31%	12%	15%	23%	28%	17%
VGf	5%	10%	37%	39%	19%	13%	4%
Capital Work in progress	76%	78%	72%	66%	44%	42%	21%
Annuity	7%	7%	8%	19%	29%	37%	43%
Others	2%	1%	2%	2%	2%	2%	2%

Source: MSFL Research

Cash flow from premium based PPP projects to see significant contribution post FY16. However, cess shall remain the backbone of NHAI finance

While we expect substantial contribution from premium based PPP projects post FY16 government support in the form of Cess shall continue to remain a major source of finance for NHAI. Also, we expect Land acquisition, EPC, VGf & Annuity payments to constitute 80% of cash obligations for the next 4 years.

Future annuity obligations of NHAI are not recorded on its balance sheet creating a false impression of actual liabilities. Creation of such liabilities without any cap can have an adverse impact on the expenditure plan for future developmental projects. Hence, we believe the decision to have an overall cap on annuity payment is a step in the right direction. We believe the annuity cap should be based on the following factors

- ✓ Expected yearly inflow to keep sufficient buffer for any expenditure towards maintenance/new developmental work
- ✓ Total Five Year Plan expenditure on National Highways
- ✓ Annuity towards projects awarded in a year & previous years of the Plan should not exceed say 20% in a year to avoid bunching of projects

Annuities are off balance sheet items. Commitments without any cap can have detrimental effect on future development plans

Exhibit 28: Annuity payments

₹ in mln	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23
Total annuity outflow	13252	17549	19472	41495	66847	66847	72609	77063	81518	84705	84705	82356
% of total outflow	7.4%	7.0%	8.4%	19.2%	29.0%	36.5%	43.3%	61.2%	66.9%	67.4%	67.6%	71.2%
% of inflow	11.6%	13.6%	13.6%	27.2%	37.5%	34.1%	34.5%	35.6%	36.6%	37.0%	37.0%	35.0%

Source: MSFL Research

We expect a total borrowing of ₹ 350bln (out of which ₹ 100bln issue was floated by NHAI in Dec'11) to be sufficient for funding the remaining part of NHDP. Any shortfall in raising the market borrowing is likely to adversely affect the award schedule thereby accentuating the irregularity of the same.

• **Competitive pressures – no respite in near term**

The competitive intensity of the sector, as reflected in the premium committed by some of the BOT developers to bag projects, has resulted in the investors becoming apprehensive of the return expectations from these projects. However, the developer community is divided over the return expectation of such competitively bid projects since one cannot accurately predict the traffic pattern for the concession period of 20-25 years which depends on myriad of factors. Also, these projects present an EPC opportunity for the developers. In a more recent development, based on the differences in top 3 bids for some of the awards industry commentators and analysts have suggested moderation in the competitive intensity and expect a further fall in the same.

In our opinion, one should analyze the demand-supply factors responsible for the high competitive intensity in the sector.

Competition intensity an interplay of demand-supply dynamics and fragmented structure of the construction industry with little entry barriers

✓ **Supply side factors**

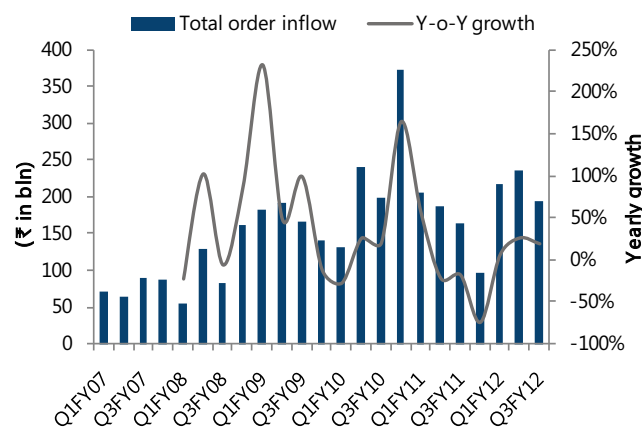
- Lower capital expenditure in other segments of the infrastructure sector and subdued all round capital formation measures in the economy, witnessed over the last 2-3 years
- National Highways being the only sector where the opportunity is structured and has evolved policies towards implementation of the structured opportunity
- The bidding process is standardized & transparent. Also, the Concession Agreement is standardized
- Irregularity & bunching up of project bids
- Availability of finances

✓ **Demand side factors**

- Existing capacity & current order backlog
- Scope for balance sheet leveraging
- Entry of new domestic & international players

**Supply side factors ...**

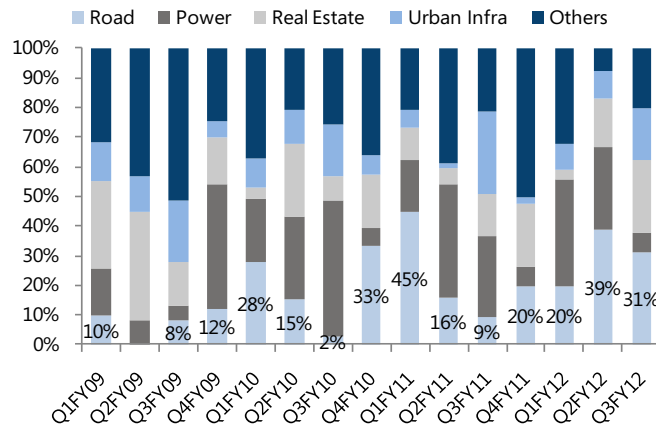
**Exhibit 29: Quarterly order inflow trend**



Source: Company Announcements, MSFL Research

Order inflow growth declined sharply in FY11 but has bounced back in FY12 ...

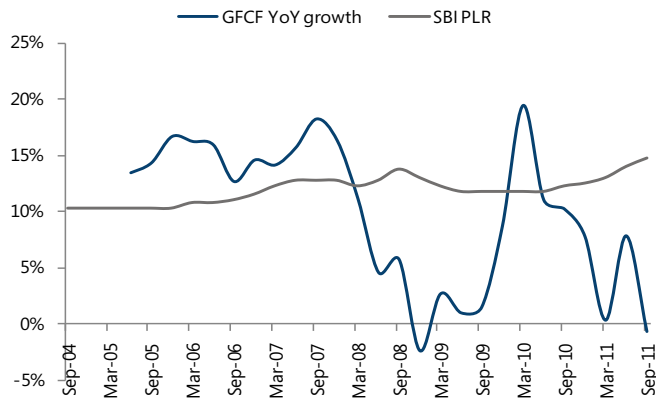
Exhibit 30: Sector-wise quarterly order inflow



Source: MSFL Research

Bounce back in order inflow growth primarily due to NHAI road project awards ...

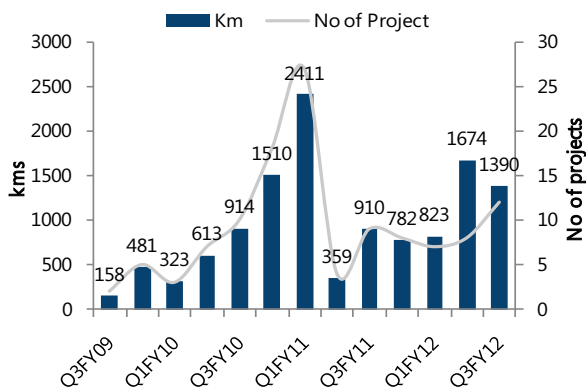
Exhibit 31: GFCF growth trend



Source: RBI, Bloomberg, MSFL Research

SBI PLR at 7 year high. GFCF growth nears lows of Dec'08. Only decline in interest rates can boost capital formation.

Exhibit 32: Project award trend



Source: NHAI, MSFL Research

NHAI project awards have been sporadic resulting in low confidence in award visibility

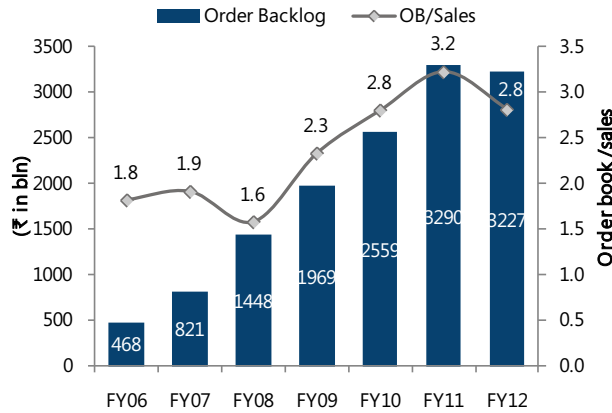
Expect pressure on supply side to persist due to marginal supply of projects from other industries/segments

The data on the supply side parameter suggests that in spite of being irregular, the road sector particularly NHAI has been the major source of awards. Also, reduction in benchmark rates by RBI & stabilization of the same shall have to precede any upturn in capital formation cycle. Hence, expect marginal supply of projects from other segments of the construction & infrastructure industry

Demand side factors ...

Exhibit 33: Order backlog trend for major road players

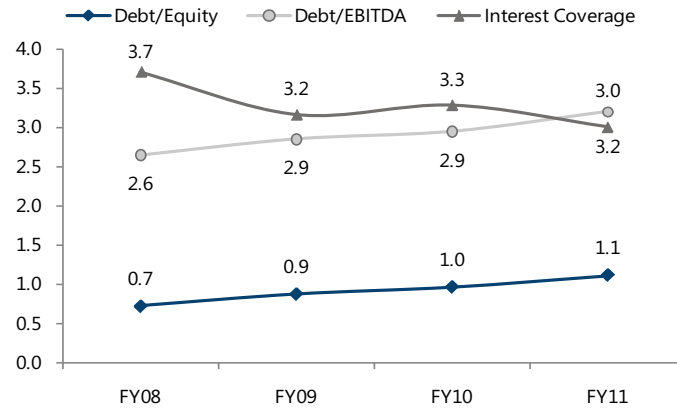
Order backlog though comfortable is on a declining trend



Source: Company Announcements, MSFL Research

Exhibit 34: Leverage Trend

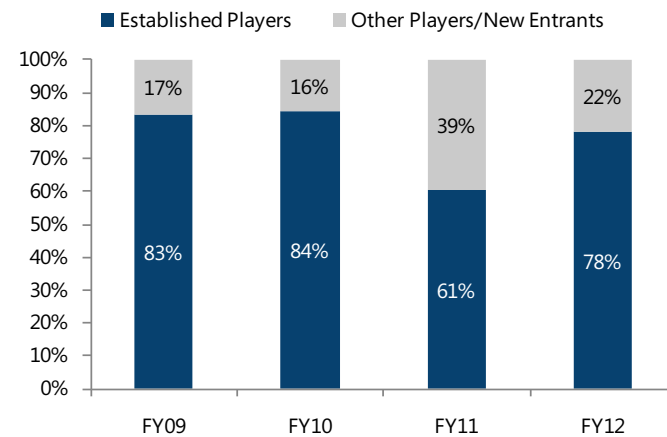
Leverage worsening but still some room left till it reaches the threshold



Source: Company, MSFL Research

Exhibit 35: NHAI project award market share trend

Established players maintain market share in NHAI awards. New entrants shall keep the bidding environment competitive till they attain market share.



Source: NHAI, MSFL Research

Exhibit 36: Year wise market share trend of listed players

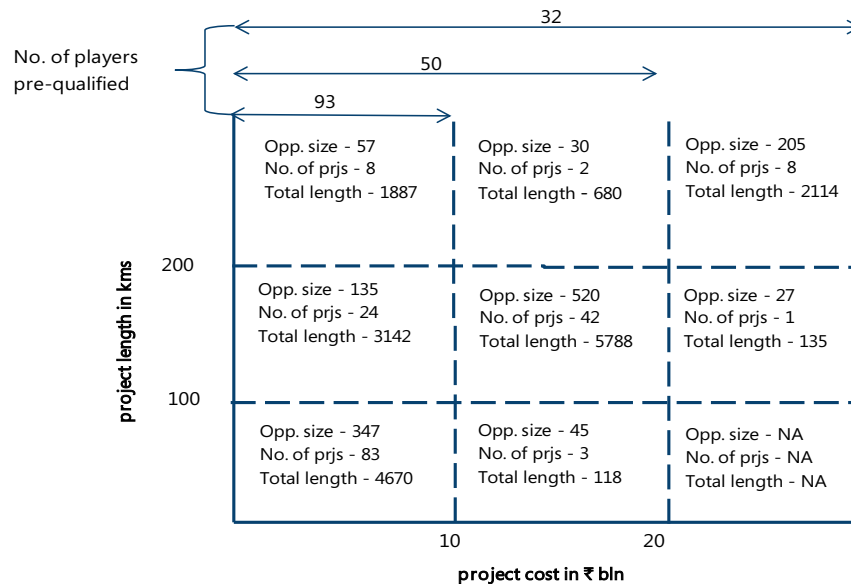
Listed players corner lion's share of NHA awards

	FY09	FY10	FY11	*FY12
IRB	0%	12%	2%	3%
ITNL	0%	9%	0%	0%
Sadbhav	0%	3%	0%	0%
LT	9%	6%	2%	10%
HCC	16%	8%	0%	0%
Ashoka Buildcon	0%	0%	6%	3%
Era Infra	0%	4%	3%	2%
GVKPIL	0%	0%	2%	8%
GMR Infra	0%	8%	0%	14%
Reliance Infra	0%	6%	5%	0%
Ramky	0%	0%	0%	6%
C&C Construction	0%	0%	0%	2%
IVRCL	0%	6%	3%	3%
Gammon Infra	0%	2%	0%	3%
Punj Lloyd	0%	0%	3%	0%
Madhucon	0%	0%	7%	2%
Gayatri	0%	0%	0%	4%
Supreme Infrastructure	0%	0%	2%	0%
Lanco Infrastructure	0%	0%	6%	0%
JMC Projects	0%	2%	2%	1%
Simplex Infra	0%	0%	0%	4%
<b>Total</b>	<b>25%</b>	<b>67%</b>	<b>43%</b>	<b>65%</b>

\*As of Dec'11, Source: NHA, MSFL Research

Exhibit 37: Opportunity segmentation & player pre-qualification

Largest opportunity in <₹ 10bln projects where no. of pre-qualified players is highest



Opp. Size in ₹ bln, Source: NHA, MSFL Research

The demand side factors of order backlog/sales, leverage point towards lower resource utilization for infrastructure players intensifying the competition in already fragmented market. Also, the market share data suggests new players losing out in the competition which is likely to increase the competitive intensity in the bidding process.

Both, the supply side and demand side data suggests no near term respite in the competitive intensity of the projects.

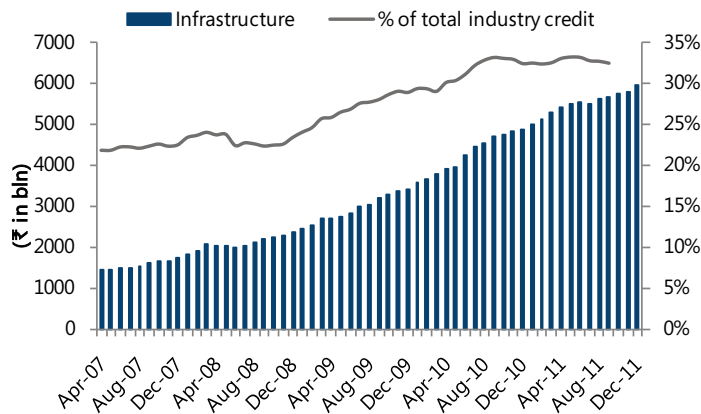
Lower resource utilization, fragmented industry structure & low entry barrier add to competitive intensity

• Road Infra lending – Systemic leverage high, is incomprehensible to us

As per RBI data, advances to infrastructure sector have grown at a CAGR of 36.2% over the last 4 years due to Gol’s thrust on infrastructure development through PPP. During the same period, the advances to road has grown at a CAGR of 37% taking it’s share in infrastructure lending to 18%.

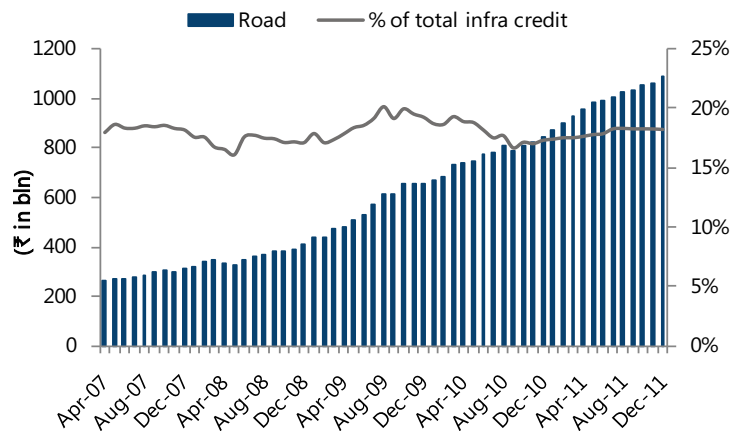
36% CAGR in outstanding credit to infrastructure over the last 4 years

Exhibit 38: Outstanding bank credit to infrastructure sector



Source: RBI, MSFL Research

Exhibit 39: Outstanding bank credit to road



Source: RBI, MSFL Research

Credit to road at 18% of total outstanding infrastructure credit, has stabilized post FY10

MORTH studying bank lending to road on inflated project costs hinting at higher systemic leverage

Recently, there has been a discussion on bank’s lending to road developers based on an inflated project cost resulting in higher systemic leverage potentially risking the entire banking system along with NHAI’s finances and future development plan.

To test the above hypothesis we have considered NHAI & state highway project awards for the period beginning Jan’08 to Sep’11, since, meaningful progress in awards was witnessed during this period.

Data points & assumptions ...

National Highways

- ✓ Total awards during Jan’08-Sep’11 – 12023 kms
- ✓ Assumed an escalation of 35% over NHAI estimates of project cost
- ✓ Total cost of projects awarded – ₹ 1122.9bln
- ✓ Construction period of 3.5 years. Construction schedule: Year 1 – 17%, Year 2 – 30%, Year 3 – 38%, Year 4 – 15%
- ✓ Funding structure: Debt:Equity-75:25

State Highways

- ✓ Total awards during Jan'08-Sep'11 – 3582 kms
- ✓ Assumed an escalation of 40% over state estimates of project cost
- ✓ Total cost of projects awarded – ₹ 246.77bln
- ✓ Construction period of 3.5 years. Construction schedule: Year 1 – 20%, Year 2 – 35%, Year 3 – 35%, Year 4 – 10%
- ✓ Funding structure: Debt:Equity-75:25
- ✓ Assumed projects with a total length of 1215 km & a cost of ₹ 27.51bln awarded during prior period to achieve COD in the period under consideration

Bank lending

- ✓ Year-wise incremental lending to roads

State highways form a considerable part of bank exposure to road sector

Exhibit 40: Debt requirement & bank lending trend

(fig in ₹ bln)	FY09	FY10	FY11	Total
<b>Capital Expenditure</b>	40.3	73.4	206.4	320.1
National Highways	7.0	29.2	131.0	167.1
State Highways	33.3	44.3	75.4	153.0
<b>Debt Drawn</b>	30.2	55.1	154.8	240.1
National Highways	5.2	21.9	98.2	125.3
State Highways	25.0	33.2	56.6	114.8
<b>Incremental Bank Lending to roads</b>	125.8	265.1	190.0	580.9
<b>Difference</b>	95.6	210.0	35.2	340.9

Source: Planning Commission, RBI, MSFL Research

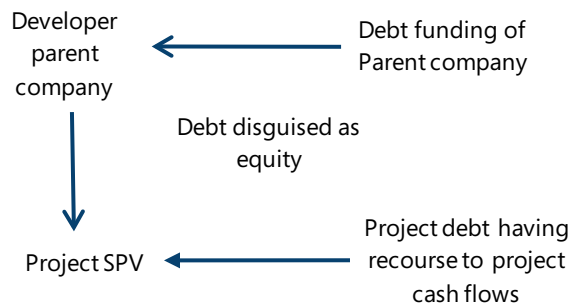
Failure to explain the cumulative difference of ₹ 341bln assumes significance in the light of such amount being 6% of the outstanding infrastructure credit (exclusive of advances by Infrastructure NBFC) to roads.

Fail to comprehend ₹ 341bln additional borrowing

We believe, high systemic leverage, is a result of the Promoter- project SPV bankruptcy remote structure of BOT development. While lending at the project SPV level is based on recourse to project cash flows there may not be such recourse to any funding at the Promoter level. The Promoter is expected to infuse equity into the SPV during the construction phase of the project, however, in absence of commensurate cash flows at the Promoter company level the Promoter depends on borrowing to infuse equity into the SPV resulting in increase in the project leverage.

Balance sheet funding one of the reasons of high leverage

Exhibit 41: Corporate & funding structure for infrastructure companies



Source: MSFL Research

• **Takeout essential (Debt and/or equity) – equity requirement to pull plug on competitive intensity**

As an extension to our discussion on high systemic leverage we believe takeout of bank loans by long term finance and takeout of loans at developer parent level entity by equity is becoming increasingly essential to de-risk the system.

**Exhibit 42: Key features of Takeout Finance scheme by IIFCL**

Features	Details
Eligibility	<ul style="list-style-type: none"> <li>✓ The project should be from sector(s) as defined in clause 5.2 (c) of SIFTI</li> <li>✓ Projects which have achieved financial closure &amp; have a residual debt tenor of at least 6 years</li> <li>✓ Projects which are yet to achieve financial closure as on the Effective Date</li> </ul>
Extent of takeout	<ul style="list-style-type: none"> <li>✓ Individual Lender(s) to the extent of 100% of the residual loan</li> <li>✓ For Lead Bank, IIFCL shall provide takeout finance to the extent of 75% of residual loan</li> <li>✓ However, the total Takeout Amount cannot exceed 50% of the total residual loan</li> <li>✓ In case of Take-out Financing, IIFCL direct lending to the project shall not exceed 10% of the project cost and total lending including Takeout Financing by IIFCL shall not exceed 30% of total project cost. The above exposure shall further be subject to applicable regulatory norms.</li> <li>✓ On the Scheduled Date of Occurrence of Takeout, the takeout will be executed in respect of only those loans, which are classified as standard assets in the books of the Lenders who have signed the Takeout Agreement</li> </ul>
Takeout Agreement	<ul style="list-style-type: none"> <li>✓ IIFCL, the identified Lender(s) and the Borrower shall enter into a tripartite agreement</li> <li>✓ The takeout will be executed if the project has achieved an average Debt Service Coverage Ratio (1 year of operation) of at least 1.10.</li> </ul>
Tenor of Takeout financing	<ul style="list-style-type: none"> <li>✓ The Scheduled Date of Occurrence of Takeout shall be 1 year after the scheduled Commercial Operation Date (COD) of the project. In case, the COD gets changed with the concurrence of the Lenders, the Scheduled Date of Occurrence of Takeout shall be changed accordingly.</li> <li>✓ The tenor of the Takeout Amount with IIFCL shall be up to 15 years. The amortization schedule of taken out loan by IIFCL will be structured to ensure that the last loan repayment is not scheduled beyond 80% of the Project Term.</li> </ul>
Rate of interest	<ul style="list-style-type: none"> <li>✓ The rate of interest for the loan taken-out by IIFCL on the Schedule Date of Occurrence of Takeout may be subject to reduction based on the revised risk profile of the project.</li> </ul>
Takeout fees	<ul style="list-style-type: none"> <li>✓ The Lender(s) availing the takeout finance from IIFCL under the Takeout Finance Scheme will pay a Takeout Fee not exceeding 0.3% p.a. (of the Takeout Amount) to IIFCL. Takeout Fee will be payable from the date of signing of the Takeout Agreement till the Scheduled Date of Occurrence of Takeout. Takeout Fee shall be payable at half-yearly intervals. Lender(s) may recover the Takeout Fees from the Borrower</li> <li>✓ 50% of the takeout fee paid by the eligible lender be refunded in the event of non-occurrence of takeout on the Schedule Date of Occurrence</li> </ul>

Extent of takeout insufficient to attract bankers

Bankers have demanded refund of 100% of takeout fee in the event of non occurrence of takeout

Source: IIFCL



We believe the extent of takeout & the refund of takeout fees in the event of non occurrence of takeout have been the major bone of contention between the banking community and IIFCL. Failure to address these issues has resulted in the takeout scheme not gaining traction in the project finance market. However, recent move by IIFCL to sign a MOU with IDFC and LIC gives some encouragement to the scheme.

Also, in order to accelerate and enhance the flow of long term funds to infrastructure projects for undertaking the Government’s ambitious program of infrastructure development, Union Finance Minister in his budget speech for 2011-12 had announced setting up of Infrastructure Debt Funds (IDFs). Accordingly, the Government has since come out with the broad structure of the proposed IDFs.

**Exhibit 43: Key features of Infrastructure Debt Fund**

	IDF as a Trust	IDF as a company (NBFC)
Regulator	SEBI	RBI
Sponsor	Any domestic entity regulated by SEBI	One or more sponsors, including NBFC-IFCs or banks
Minimum capital requirement	₹ 0.1bln	₹ 3bln
Equity contribution of sponsor	NA	Min. 30% & Max 49% of paid up capital of IDF
Financing instruments	INR denominated bonds of minimum 5 year maturity	INR or USD denominated bonds of minimum 5 year maturity
Minimum investment by investors	₹ 10mln with ₹ 0.1mln as minimum size of unit	NA
Extent of lending/subscription to debt securities of infrastructure projects	Minimum 90% of its assets in the debt securities of infrastructure companies or SPVs across all infrastructure sectors, project stages and project types	Debt securities of only PPP projects which have a buyout guarantee and have completed at least one year of commercial operation. Refinance by IDF would be 85% of the total debt covered.
Equity/convertible instruments of infrastructure projects	Maximum of 10% of its assets	Not permitted
Investors	FII & DIIs	FIIs, off-shore HNIs, NRIs and DIIs
Credit Risk	Investors	IDF
Forex Risk	Investors	IDF

Source: DEA, RBI, SEBI, MSFL Research

**Our take - A good beginning ...**

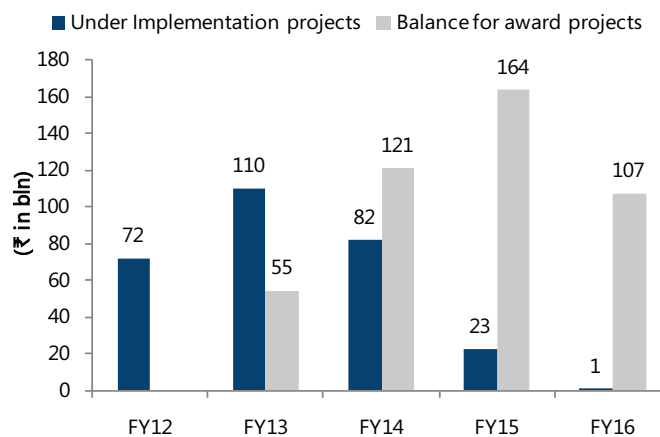
Infrastructure Debt Fund, a unique proposition by Gol, is an attempt to attract & deploy long term contractual & other savings (domestic & international) for our long term needs of infrastructure finance & mitigate the asset liability mismatch of the banking industry. In our opinion, the following issues need to be addressed for success of either of the proposed structures & ultimately the scheme.

- ✓ **Risk profile linked to structure rather than the project** – The different structures proposed attempts to attract different class of investors (risk averse to IDF-NBFC, risk takers to IDF-Trust) based on the structure rather than on the risk profile of project invested. This is being imposed by restricting IDF-NBFC’s to invest in debt securities of only PPP projects which have a buyout guarantee and have completed at least one year of commercial operation while IDF-Trust can invest in debt/equity/convertible securities of infrastructure companies or SPVs across all infrastructure sectors, project stages and project types. This assumes that the IDF-Trust cannot invest in low-risk instruments. We believe evolution of financial products for each class of investors should be left to market rather than imposing it through a fixed structure.

- ✓ **Project Authority guaranteeing project debt in case of refinance by IDF-NBFC** - IDF-NBFCs will enter into Tripartite Agreements to which, the Concessionaire, the Project Authority and IDF-NBFC shall be parties. Under the tripartite agreement the fund is allowed to invest only to the extent of 85% of the original debt & is secured by first charge on the assets. In case of termination, IDFs are required to be repaid first post which the lenders shall be paid out of the surplus, if any. The termination payment is linked to the outstanding debt used for funding the total project cost. This is akin to public guarantee of private risk. We believe the Project Authority will not be in a position to undertake this since the PPP projects are bid out competitively wherein the private bidder assumes the risk. Also, banks will be unwilling to lend if such a takeout is proposed since bank lending to the tune of 15% of the debt becomes subordinate to the IDF-NBFC loan and the response may be similar to that of IIFCL's takeout finance scheme.
- ✓ **Regulatory arbitrage** – The regulatory oversight is lopsided in favor of IDF-Trusts with more flexibility in terms of minimum capital requirement, pass through mechanism of funds. Also, the return on equity may be capped in the company route making the IDF-Trust route more attractive to prospective sponsors.
- ✓ **Need of risk based pricing of debt** - Development of corporate bond markets in the country shall aid risk based pricing of debt.

While the IIFCL takeout scheme & the IDF majorly address the issue of debt funding of infrastructure projects, equity funding too remains an equally important matter. Assuming the project cost to be 30% higher than the NHAI estimate & a funding mix of Debt/Equity-70/30 we estimate an equity requirement of ₹ 287bln over the next 3 years for projects currently under implementation. Additionally, ₹ 339bln of equity shall be required for projects which are expected to be awarded in the next 2 years.

**Exhibit 44: Equity requirement trend**



Source: MSFL Research

Note that the above estimate does not include equity required to support the initial operations of the project till it achieves some stability in cash flows.

Majority of the developers currently rely on cash flow from

- ✓ EPC business
- ✓ Unrelated businesses
- ✓ Portfolio BOT assets which are operational
- ✓ Private Equity players and/or Primary/Secondary capital markets

EPC business was and still remains a significant source of cash flow for the BOT development business. However, the slowdown in capex cycle has hit cash flow from 3<sup>rd</sup> party EPC business. Also, cash support from unrelated business has been hard to come by due to requirement of these businesses itself. While

Quantum of equity requirement implies major players may need to raise funds from PE players /capital markets

EPC business remains a major source of cash flow for the BOT development business.

some of the established developers may be able to fund their equity requirement through cash flow from portfolio BOT SPV's, for majority of the developers the portfolio projects are yet to begin commercial operations or are in the early stages of operation which themselves require support in the initial years till their cash flows stabilize.

In the absence of a stable secondary market most of the developers have started to look at the PE route for raising capital. While some of the players like Sadbhav Engineering, HCC, Isolux Corsan, Soma etc have been successful we do not see the PE industry alone being able to support such a high requirement.

Equity funding – Huge opportunity for PE players

**Exhibit 45: Recent PE deals in road infrastructure development space**

Year	Fund	Target company	Deal Value
2012	3i Infrastructure Fund	Supreme Infrastructure	USD 61mln
2011	Morgan Stanley Infrastructure Fund	Isolux Corsan JV	USD 200mln
2011	3i Infrastructure Fund	KMC	USD 111mln
2011	JP Morgan Chase	Soma Enterprises	USD 110mln
2011	IDFC Private Equity	GVR Infra	USD 32mln
2011	Xander Private Equity	HCC Concessions	USD 53mln
2011	MOSL PE, IDFC Investment Advisors	GR Infraprojects	USD 18mln
2011	NYLIM Jacob Ballas India Fund	PNC Infratech	USD 33mln

Source: News reports, MSFL Research

Since, the time frame involved in closure of a PE deal is usually longer, in the interim, the developers have turned to traditional/structured debt for funding their equity requirement. This partly explains the high systemic leverage. Hence, we believe takeout by equity is essential for avoiding any adverse systemic fallout of the leverage. Also, in our opinion, this shall be the sole factor for pulling the plug on the competitive intensity of the sector.

**Likely scenarios**

Project cash flows and firm capitalization have emerged as the two key parameters, which shall decide the survival of the developer. We see consolidation as the only self-correcting measure for the sustainability of the sector. We believe, capital requirement, arising out of competitively bid project wins and shortfall in operation cash flow, shall be the driving factor for consolidation. The key question remains, when can we see meaningful consolidation happening in the sector?

The two likely scenarios either of which needs to play out before we see a meaningful consolidation

- ✓ Scenario 1: Failure in financial closure of aggressively bid projects resulting in re-bids by NHAI
- ✓ Scenario 2: Requirement of prolonged cash support to competitively bid operational projects resulting in exit from project

Expect consolidation only beginning by FY14

While Scenario 1 can play out only in the pre-construction stage Scenario 2 can play out only during the operational stage of the project. Hence, Scenario 1 is likely to have an immediate impact on the competitive landscape while Scenario 2 shall have an impact only in the medium to longer term.

In our opinion there is a lower probability of Scenario 1 being played out and hence expect consolidation-beginning FY14.

- **Comparative Analysis**

We believe sustainable cash flow generation is the key to achieve growth & simultaneously deliver shareholder return. The project cash flow is a function of traffic growth/annuity amount, premium paid, concession period & funding structure. While the traffic density, its growth & concession period is inherent to the project stretch the amount of premium paid & the funding structure are developer dependent and reflect the aggressiveness of the developer. Notwithstanding these quantitative parameters the track record of the company, current market position & the business model are important factors which need to be factored in the investment decision. We prefer companies whose business model do not encourage excessive risk, are able to sustain positive cash flow generation over a longer duration to ensure non-dilutive growth and the current capitalization enables them to raise financial resources without undermining the existing shareholder.

We have based our comparative evaluation on the following factors

- ✓ **Track record of companies operating in the segment** – We believe this should be one of the most important criteria for evaluating companies in the sector. This gives comfort of the company's experience in managing bureaucracy related to the highway sector. Also, internal processes, resource management, etc are much more mature
- ✓ **Financial position and likelihood of equity dilution** – Financial position in terms of firm capitalization indicates the ability to raise capital resources and manage growth without undermining the existing shareholder
- ✓ **Third party EPC capability / Interdependence between EPC & BOT business** – We believe delinking or reducing the interdependence of the EPC business from the BOT development business is essential for sustainable growth of both the businesses. Although an in house EPC provides cash flow for the group we believe it should not be at the expense of BOT asset's cash flow. In our opinion the in-house EPC should add value to the BOT asset & not vice-versa. This is possible if the EPC division is able to execute the project at a cost lower or equal to that of other pure construction companies which helps the BOT asset in reducing its capital costs translating into better net cash flows for the asset developer. However, we have noticed infrastructure companies having in-house EPC bidding aggressively to secure orders for its EPC business & ensure higher margins for EPC business which brings in significant cash flows during the construction period of 3 years itself and helps the group in recycling the cash by investment in new wins. In addition, the practice of ensuring higher margins for EPC division renders it incompetent for any competitively bid EPC contracts.

This inter-dependence can be attributed to

- Low ordering activity in other sector
- Lack of expertise/pre-qualification in other sectors
- Incompetent cost structures
- Plough back of cash flow from EPC for equity investment of new wins

The separation of EPC & BOT development business along with development of 3<sup>rd</sup> party EPC capabilities across sector & region shall avoid excessive risk taking & ensure cost synergies.

ITNL is best placed on this parameter due to flexible business model of not having an in-house EPC execution while IRB Infrastructure is at the other end of the spectrum due to strong inter-dependence of the EPC & asset development business.

- ✓ **Cash flow generation** – Strong cash flow generation supports non-dilutive growth. All the companies except for Sadbhav Engineering are in the investment phase and hence are likely to remain FCFE negative. An aggressive bid is likely to result in negative FCFE over major part of the concession period. As per our estimates IRB Infrastructure fairs poorly on this parameter with negative FCFE for Bharuch-Surat & Surat-Dahisar necessitating further equity support from the parent company.
- ✓ **Asset maturity** – The concession tail analysis provides the duration profile of the BOT portfolio of infrastructure companies. Higher the concession tail better is the sustainability of cash flows without any new project wins

**Exhibit 46: Comparative analysis on five important parameters**

	Ashoka Buildcon	IL&FS Transportation	IRB Infra	Sadbhav Engg
Track record	2	4	3	3
Financial Position	2	2	3	3
Dilution risk	1	3	2	4
3 <sup>rd</sup> party EPC capability/ interdependence between EPC & BOT	2	4	0	3
BOT cash flow generation	2	2	3	4
Asset maturity	3	4	2	3

*Rating: 4-Highest ranking, 1- Lowest ranking*

• Sector Valuation

Exhibit 47: Sector valuation matrix

Company	CMP	Target	Reco	Mcap (\$ bln)	Mcap (₹ bln)	P/BV		EV/EBITDA		ROE		ROCE	
						FY12E	FY13E	FY12E	FY13E	FY12E	FY13E	FY12E	FY13E
Ashoka Buildcon	196	251	Buy	0.2	10.4	1.0	0.9	7.8	7.9	10.4%	13.4%	5.7%	5.7%
ITNL	209	249	Buy	0.8	40.6	1.5	1.3	9.8	10.1	18.8%	16.5%	8.6%	7.4%
IRB Infra	168	171	Hold	1.1	55.8	2.3	2.2	8.4	8.7	18.1%	15.0%	9.1%	6.7%
Saadbhav Engg	138	186	Buy	0.4	20.6	1.6	1.5	12.7	12.8	14.1%	7.3%	5.3%	3.2%

Source: MSFL Research

Exhibit 48: 1 yr forward P/E for Ashoka Buildcon

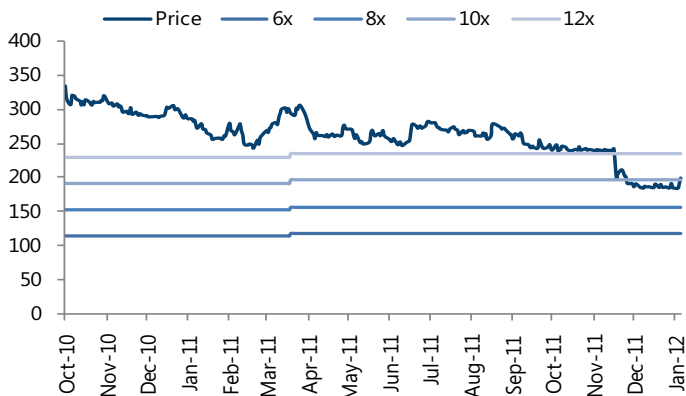
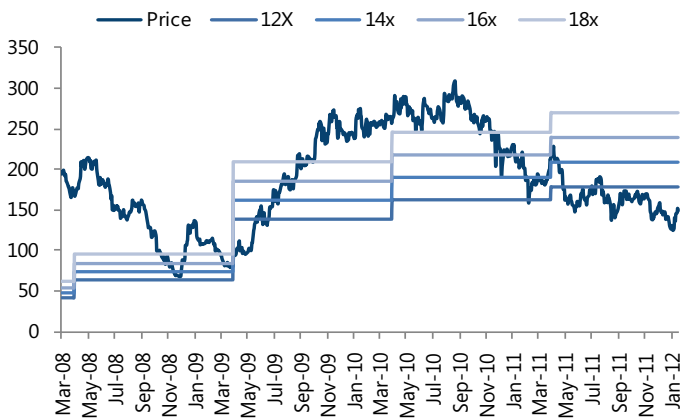


Exhibit 49: 1 yr forward P/E for IL&FS Transportation



Exhibit 50: 1 yr forward P/E for IRB Infra



Source: MSFL Research

Exhibit 51: 1 yr forward P/E for Saadhav Engg

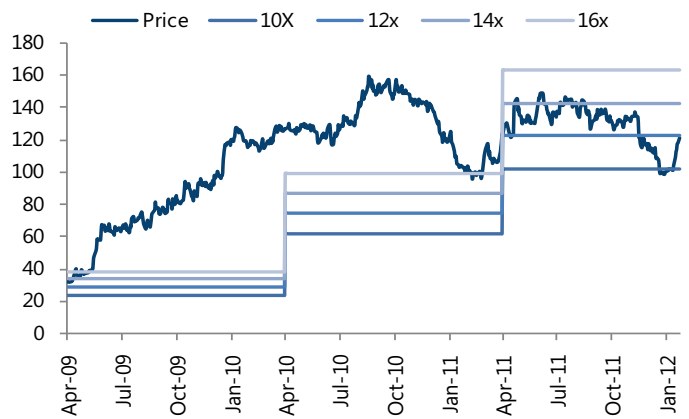


Exhibit 52: 1 yr forward P/BV for Ashoka Buildcon

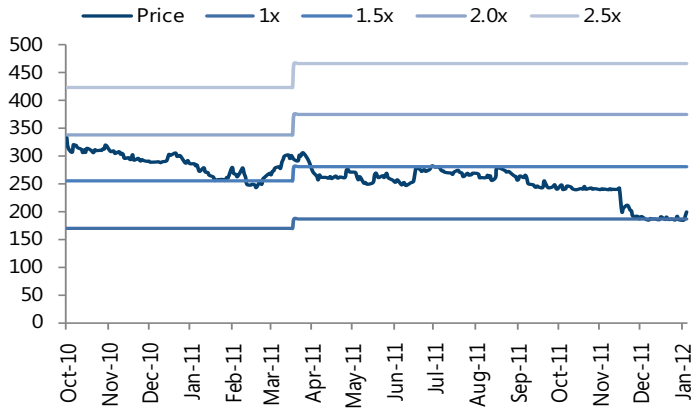


Exhibit 53: 1 yr forward P/BV for IL&FS Transportation

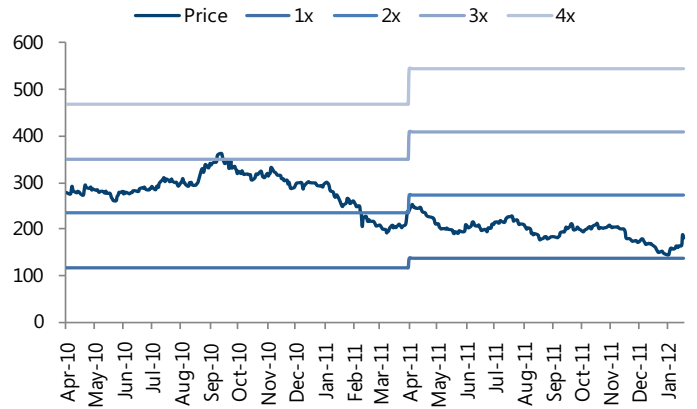


Exhibit 54: 1 yr forward P/BV for IRB Infra

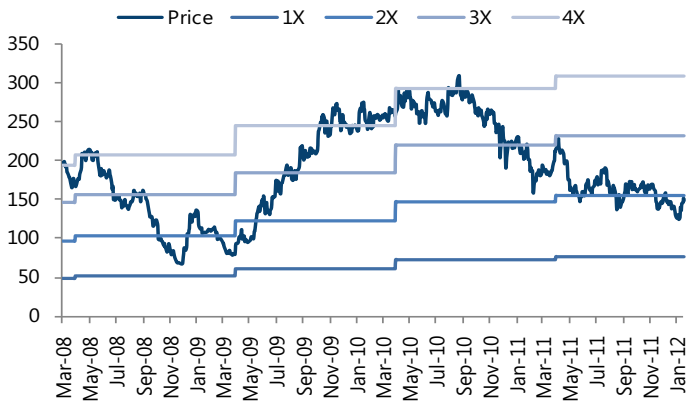
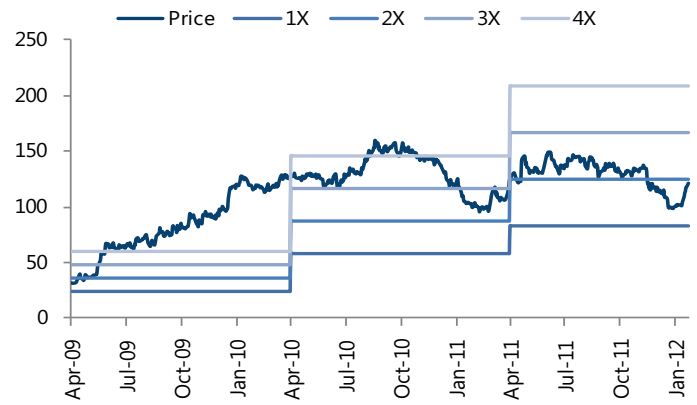


Exhibit 55: 1 yr forward P/BV for Sadbhav Engg



Source: MSFL Research

Exhibit 56: 1 yr forward EV/EBITDA for Ashoka Buildcon

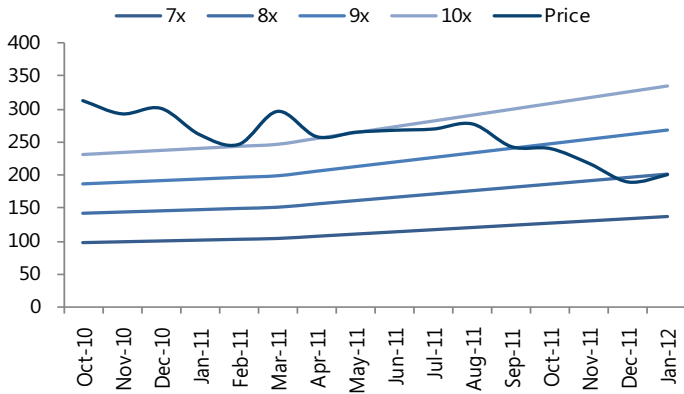


Exhibit 57: 1 yr forward EV/EBITDA for IL&FS Transportation

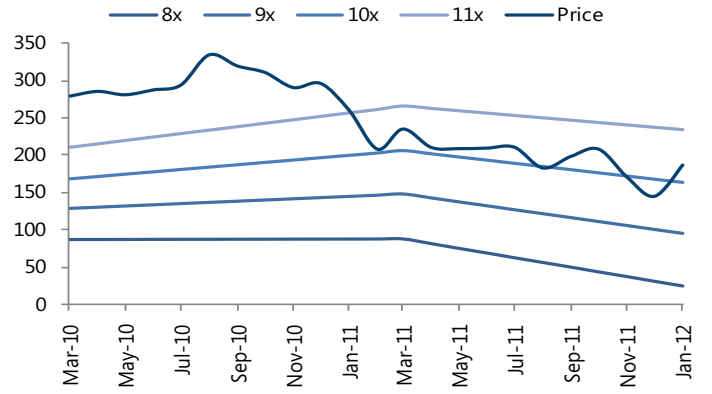
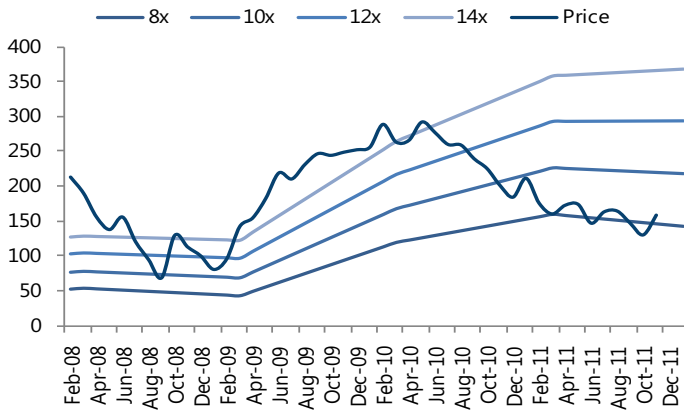
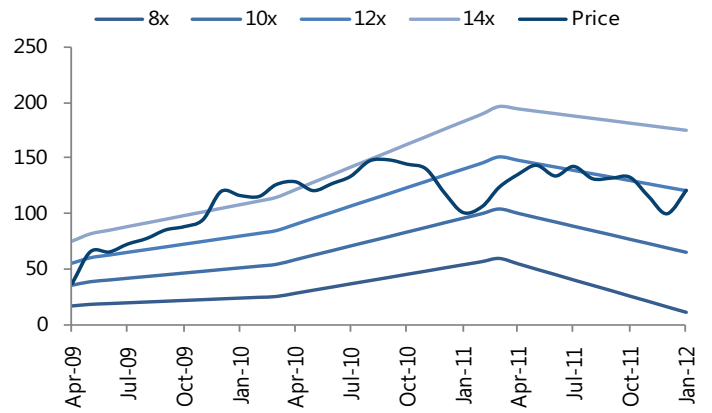


Exhibit 58: 1 yr forward EV/EBITDA for IRB Infra



Source: MSFL Research

Exhibit 59: 1 yr forward EV/EBITDA for Sadbhav Engg





## Initiate Coverage on Indian Highways

### Buy on Ashoka Buildcon, ITNL & Sadbhav Engg, Hold on IRB Infra

We initiate coverage on the Road & Highway Development Sector with Buy rating on Ashoka Buildcon and ITNL, maintain our Buy on Sadbhav Engineering and downgrade IRB Infrastructure to Hold. While creation of road infrastructure capacity is a continuous & evolving process and remains an attractive opportunity over a longer time frame, in the near term we expect FY12 to witness peak award of ~6900kms by NHAI post which the yearly awards are expected to decline (we haven't factored Phase VI in our estimates). Also, a detailed look at the balance awards does not excite us particularly since the project size and scale is expected to be smaller in addition to the attractive regional distribution of the opportunity. Although this industry has always remained competitive due to its very nature of contracts being bid out, the over exuberance by some of the developers has brought to fore the risk of competitive intensity. Analysis of the finances of the sector convinces us of presence of systemic high leverage. We believe takeout of bank loans by long term financial institutions & takeout of debt by equity is of prime importance for the sustainability of the sector. We expect most of the private road BOT developers to hit the primary capital markets in coming 2 years while some are expected to tap the PE route for de-leveraging. As per our estimates, a total of ₹ 2687bln is required towards equity for projects currently under implementation, over the next 3 years. Additionally, ₹ 339bln of equity shall be required for projects which are expected to be awarded in the next 2 years. Hence we believe funding requirement of equity contribution towards the assets shall be the primary factor for reducing the competitive intensity of the sector.

Factoring in the sector dynamics in our company analysis we conclude that Sadbhav Engineering is expected to deliver superior shareholder value in the near to medium term time frame and is our top pick in the sector. Sadbhav Engineering fares better than other companies on capital management, risk of further dilution, execution capability, disciplined bidding & choice of projects. On ITNL, we believe the company's vast experience in the Indian transportation segment would enable it to get projects on reasonable terms. Also, its road project mix in terms of toll/annuity, state/central, etc is superior v/s peers. Though, ITNL doesn't have an in house EPC capability and gets it done through local smaller players, we believe this has the advantage of maneuvering in various region for project bidding and doesn't have to manage an EPC division, which includes resource management such as equipment, labour, etc. We rate ITNL a Buy and believe it provides better risk-reward and better corporate governance as compared to peers. We believe that, IRB Infra has got into an aggressive mode of getting road project leaving little margin of safety for further benefits from the project and we are not comfortable with the business model wherein the BOT asset development model is tightly integrated with the EPC business which has created an inter-dependence thereby pushing the company to take aggressive bets. Ashoka Buildcon on the other hand represents a transformation story from being predominantly a state road developer to a national player. Ashoka has created a differentiation by having an in-house traffic estimation team and has a strong & reliable execution team. Since the company has expanded its portfolio only recently doubts have been expressed about the viability of the bids but a long concession period as compared to that of IRB gives us comfort. We believe there is eminent dilution risk for Ashoka Buildcon due to shortfall in equity funding for its projects under construction. Cash cow state projects, execution capability, relatively longer concession periods providing stability to its cash flow comforts us to rate Ashoka Buildcon a Buy.

#### Exhibit 60: Sector valuation

Company	CMP	Target	Reco	Mcap (\$ bln)	Mcap (₹ bln)	P/BV		EV/EBITDA		ROE		ROCE	
						FY12E	FY13E	FY12E	FY13E	FY12E	FY13E	FY12E	FY13E
Ashoka Buildcon	196	251	Buy	0.2	10.4	1.0	0.9	7.8	7.9	10.4%	13.4%	5.7%	5.7%
ITNL	209	249	Buy	0.8	40.6	1.5	1.3	9.8	10.1	18.8%	16.5%	8.6%	7.4%
IRB Infra	168	171	Hold	1.1	55.8	2.3	2.2	8.4	8.7	18.1%	15.0%	9.1%	6.7%
Sadbhav Engg	138	186	Buy	0.4	20.6	1.6	1.5	12.7	12.8	14.1%	7.3%	5.3%	3.2%

Source: MSFL Research

**Ashoka Buildcon (Rating – Buy, Target ₹ 251, CMP 196 ₹, upside 28%)**

Ashoka Buildcon is fast transforming from a pre-dominantly state road BOT player concentrated in central & western India to a pan-India player with National Highways contributing in a major way to its road BOT portfolio. We expect its operational lane kms to rise from 1455kms in FY11 to 4240kms in FY15. Also, its existing portfolio is a cash cow with most of its operational roads being able to re-leverage which is unheard of amongst its peers enabling investment in growth opportunities. Its experience in execution has helped it deliver projects on or before time lending credibility to its EPC execution skills. We expect Ashoka Buildcon to register a revenue & net profit CAGR of 30% & 16% over FY11-14E. The company looks attractive based on both NPV & earnings multiples. We initiate coverage on Ashoka Buildcon with a Buy recommendation and a target price of ₹ 251.

**Rapid transformation to a national player**

Ashoka Buildcon has within a span of last 4 years scaled up its BOT road portfolio from 2105 lane kms to 4708 lane kms today. Currently, 2105 lane kms are operational with state projects contributing 65%. We expect major NH projects to be operational over FY14E-15E taking the operational lane kms to 4240 lane kms with NH's contributing 68%. We expect revenue & EBIDTA to grow at a CAGR of 30% & 16% respectively over FY11-14E.

**Right mix withing portfolio; new wins concetrated on NH-6**

We believe Ashoka Buildcon's road portfolio has a right mix with its low capital state projects delivering high growth and are cash cow to the group while new NH project wins are concentrated on NH6 which connects resource rich east to industrialized western India & a long concession period captures the potential for long term growth opportunity of this route.

**Strong orderbook; captive projects to drive growth**

Ashoka Buildcon has more than a decade experience in road construction. We expect execution of its current order book of ₹ 43.1bln, 86% of which is captive to drive revenue growth of 30% over FY11-14E. Although, the equity funding for the projects is not tied up we expect the company to raise resources through private equity funding.

**Valuation**

At CMP of ₹ 196, the company is trading at 1.0x FY12E & 0.9x FY13E P/BV & 7.8x FY12E & 7.9x FY13E EV/EBIDTA respectively. A sizeable order book, and expansion of BOT portfolio firmly places the company on a higher growth trajectory. We initiate coverage with a Buy recommendation and a price target of ₹ 251. Key risks to our recommendation include shortfall in funding of its BOT projects and/or higher than expected dilution of its BOT road portfolio to PE investors.

**IL&FS Transportation (Rating – Buy, Target ₹ 249, CMP ₹ 209, upside 19%)**

IL&FS Transportation (ITNL) is the only pure asset developer & a management driven company in the road BOT space. IL&FS, parent company of ITNL, having two decades of experience in developing & funding infrastructure projects in India has helped ITNL build organization capabilities in the infra asset development space. ITNL has followed a disciplined bidding strategy to maintain its hurdle IRR, based on which it has judiciously built a balanced road portfolio comprising a mix of annuity (32%, lane kms) & toll (68%, lane kms) spread across the breadth of the country. While its international acquisition's may not accrue value in the near term we expect ITNL's domestic portfolio to help it grow its revenue & net profit at a CAGR of 21% & 4% each over FY11-14E. Also, its relative inexpensive valuation & flexibility to withstand business cycles makes it an attractive pick. We initiate coverage on ITNL with a Buy rating.

**Flexible business model & superior project management**

IL&FS's more than two decade experience in developing & financing infrastructure projects across sectors within the country has helped ITNL develop superior organizational capabilities in terms of developing, designig, financing & maintaining infrastructure assets. Although, ITNL doesn't have construction capabilities & misses out on cash flow & IRR from this business we believe this lends flexibility to the business model to withstand business cycles.

**Portfolio mix better than peers**

ITNL's Toll/Annuity projects ratio is 59:41 and State/Central projects at 58:42. Within state highways, some projects are annuity-based, allaying investor fears of low-density/low-returns stretches. Also, the concession tail period of its projects is more than 15 years lending support to cashflows & valuation. With a strong order inflow of ₹ 81bln in last two year, we expect ITNL to post a 21% consolidated revenue CAGR over FY11-FY14E.

**Cash flow sufficient for near term requirement; lesser risk of dilution**

According to our estimates ITNL has an equity requirement of ₹ 3.73bln over FY12-14E which is expected to be partially met through cumulative free cash flow generation of ₹ 2.7bln over the same period.

**Valuation**

At CMP of ₹ 209, the company is trading at 1.5x FY12E & 1.3x FY13E P/BV & 9.8x FY12E & 10.2x FY13E EV/EBIDTA respectively. In addition, we believe a BOT portfolio with 32% of annuity projects is less sensitive to traffic growth and provides support to the current valuations. We initiate coverage with a Buy recommendation and a PT of ₹ 249. Key risks include deterioration in international business.

**IRB Infrastructure (Rating – Hold, Target ₹ 171, CMP ₹ 168, upside 2%)**

IRB Infrastructure, an early entrant in the road development business is the most focussed toll road developer in the country today with presence across two major growth corridors of Mumbai – Gujarat & Mumbai – Pune. However, apart from the Mum-Pune Exp. project we expect the shareholder returns on other projects to remain sub-optimal due to lower than expected traffic growth. We believe there are limited commensurate growth opportunities for IRB in the balance NHDP awards and a highly competitive environment exacerbates the situation. Also, we lower our base traffic assumption for Kolhapur project which has impacted our BOT valuation by ₹ 12. We downgrade our recommendation to Hold with a price target of ₹ 171

**Challenging to repeat success amidst declining scale of PPP projects & intense competition**

NHAI has a planned balance awards program of 18,534kms with an estimated development cost of ₹ 1365bln. However, in spite of a significantly large opportunity, our analysis, points to reduced attractiveness under PPP mode, for majority of the planned awards. Our analysis suggests that only 6-lane projects under Phase V offer commensurate growth opportunities for large road BOT developers albeit in a highly competitive scenario.

**Aggressiveness has always been the characteristic of business strategy**

IRB Infrastructure's Ahmedabad-Vadodara bid, the first of mega highway project bid out in 2011, was perceived to be aggressive stereotyping the company as being aggressive in its bidding strategy. However, we believe that Ahmedabad-Vadodara was not the only 'aggressive' bid by IRB, closer look at the Bharuch-Surat & Suart-Dahisar projects corroborates our view of aggressiveness being the underlying of IRB's business strategy

**EPC cashflows support non-dilutive growth**

IRB Infra's order backlog stands at ₹ 91.2bln. We estimate construction revenue to grow at a CAGR of 23% over FY11-14E mainly driven by projects won in FY10. The total equity requirement for IRB over FY12-15E stands at ₹ 26.5bln. Higher margins in the EPC division aids FCFE generation and supports equity investment in its under construction group projects. We estimate a cumulative equity funding gap of ₹ 4.8bln for FY12-FY14E.

**Valuation**

We believe there are limited upside triggers for the company and the current macro scenario also limits any new project win with higher IRR. Factoring delay & a discount to the base traffic in Kolhapur project coupled with lower multiple for EPC division (5x from 7x earlier) we downgrade our recommendation to Hold with a price target of ₹ 171. Key risks include higher than expected traffic growth across projects & decline in competitive intensity in sector.

**Sadbhav Engineering (Rating – Buy, Target ₹ 138, CMP ₹ 186, upside 35%)**

Sadbhav Engineering, now an integrated road sector player with a portfolio of nine BOT road projects (2,403 lane km worth ₹ 79bn on gross cost) has consistently been ahead of its industry peers on addition of projects in times of low competitive intensity, capital management, completion of projects ahead of schedule & disciplined bidding thereby providing bandwidth in terms of capital & execution for any attractive opportunities that come by. We believe the company offers a better risk-reward compared to its peers on aspects like project funding, order-book mix (internal/external), execution capability and working capital management. Its robust EPC potential from internal (road projects) and external (roads, mining & irrigation) orders strengthens our investment thesis. Sadbhav Engineering remains our top pick in the sector. We recommend buy with a price target of ₹ 186

**Focus on execution; to achieve COD well ahead**

Sadbhav Engineering for the past year and a half has focussed on execution of its 4 BOT road projects won in FY10 & FY11. The management's strategy of concentrating on construction has yielded results with Sadbhav expected to achieve COD 3-6 months ahead of schedule. This not only makes Sadbhav eligible for bonus but also enables it to toll for higher duration to the extent of early completion

**Ahead of curve in a dynamic & challenging environment**

We like the management's ability to see through the sector dynamics and being a step ahead of its peers in the industry. It is amply demonstrated by the milestones achieved. Better capital management, focus on execution & conservative bidding strategy in recent past has comfortably positioned the company with respect to funding & execution bandwidth.

**Orderbook concerns weigh down on stock; confident of its 3<sup>rd</sup> party EPC capabilities**

As on Dec'11, the order book stands at ₹ 59.4bn. Captive road BOT's order contribute 28%. With execution of captive orders expected to be completed in FY13 & a dismal order inflow in 9M1F12, the EPC growth concerns has weighed down on the stock. We are confident of Sadbhav's 3<sup>rd</sup> party EPC capabilities since the company has EPC capabilities across three segments of Road, Irrigation & Mining & is actively pursuing JV's for prequalification in DFCC orders.

**Valuation; Top pick in the sector**

With strong EPC capability across multiple sectors & scale, higher capital efficiency and timely completion of its BOT assets Sadbhav Engineering remains our top pick. We maintain Buy with a PT of ₹ 186. We have valued the EPC entity at ₹ 86.1/share on the basis of 9x FY13P earnings while the BOT projects contribute ₹ 96.2/share (52%) based on a FCFE approach and one time early completion bonus of ₹ 3.6/share.

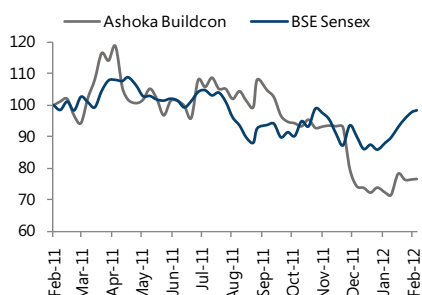
## Initiating Coverage

### Buy

CMP	₹ 196
Target Price	₹ 251
Upside Potential	28%

#### Price Performance

52 wk Hi/Lo	307/176
All time Hi/Lo	363/176
6 mnth Average Vol	6685
Stock Beta	0.39



#### Valuation

	FY11	FY12P	FY13P
P/E (x)	10.2	10.0	6.8
P/BV (x)	1.2	1.0	0.9
RONW (%)	15.1	10.4	13.4
ROCE (%)	7.7	5.7	5.7

#### Peer Valuation (FY13)

	ITNL	IRB
PE	8.9	11.0
P/BV	1.3	2.1

#### Equity Data

Market Cap. (₹ bln)	10
Face value (₹)	10
No of shares o/s (mln)	53

	Dec'10	Dec'11	%Δ
Promoters	73.25	67.23	-8.22
DFI's	17.76	17.22	-3.04
FII's	2.54	1.30	-48.82
Public	6.45	14.25	120.93

## Ashoka Buildcon

### Speeding up...

Ashoka Buildcon is fast transforming from a pre-dominantly state road BOT player concentrated in central & western India to a pan-India player with National Highways contributing in a major way to its road BOT portfolio. We expect its operational lane kms to rise from 1455kms in FY11 to 4240kms in FY15. Also, its existing portfolio is a cash cow with most of its operational roads being able to re-leverage which is unheard of amongst its peers enabling investment in growth opportunities without dilution. Its experience in execution has helped it deliver projects on or before time lending credibility to its EPC execution skills. We expect Ashoka Buildcon to register a revenue & net profit CAGR of 30% & 16% over FY11-14E. The company looks attractive based on both NPV & earnings multiples. We initiate coverage on Ashoka Buildcon with a Buy recommendation and a target price of ₹ 251.

#### Rapid transformation to a national player

Ashoka Buildcon has within a span of last 4 years scaled up its BOT road portfolio from 2105 lane kms to 4708 lane kms today. Currently, 2105 lane kms are operational with state projects contributing 65%. We expect major NH projects to be operational over FY14E-15E taking the operational lane kms to 4240 lane kms with NH's contributing 68%. We expect revenue & EBIDTA to grow at a CAGR of 30% & 16% respectively over FY11-14E.

#### Right mix within portfolio; new wins concentrated on NH-6

We believe Ashoka Buildcon's road portfolio has a right mix with its low capital state projects delivering high growth and are cash cow to the group while new NH project wins are concentrated on NH6 which connects resource rich east to industrialized western India & a long concession period captures the potential for long term growth opportunity of this route.

#### Strong orderbook; captive projects to drive growth

Ashoka Buildcon has more than a decade experience in road construction. We expect execution of its current order book stands of ₹ 43.1bln, 86% of which is captive to drive revenue growth of 30% over FY11-14E. Although, the equity funding for the projects is not tied up we expect the company to raise resources through private equity funding

#### Valuation

At CMP of ₹ 196, the company is trading at 1.0x FY12E & 0.9x FY13E P/BV & 7.8x FY12E & 7.9x FY13E EV/EBIDTA respectively. A sizeable order book, and expansion of BOT portfolio firmly places the company on a higher growth trajectory. We initiate coverage with a Buy recommendation and a price target of ₹ 251. Key risks to our recommendation include shortfall in funding of its BOT projects and/or higher than expected dilution of its BOT road portfolio to PE investors.

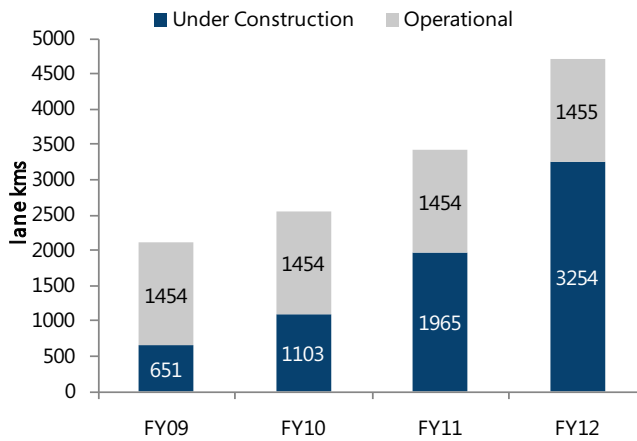
#### Summary Financials

₹ in Mln	FY11	FY12P	FY13P	FY14P
Net Sales	13020	14993	24335	28676
OPBDIT	2522	3384	4887	5745
Adj Profit	1008	1030	1525	1620
Adj EPS	19.2	19.6	29.0	30.8
Networth	8825	9855	11380	12967
Debt	12830	18595	32795	45976
Fixed Assets	16937	22119	35730	49807
Net Current Assets	4448	5727	7511	8265

**Transformation from a state to national road developer**

Ashoka Buildcon entered into road development on a BOT basis as early as 1997 with projects across Maharashtra & Madhya Pradesh. The company has since then gained experience in identifying & delivering BOT projects which has been complemented by its EPC capabilities. In the past two years it has bagged four big ticket NHAI road projects worth ₹ 41.3bn taking its total road BOT portfolio from 2105 lane kms in FY09 to 4708 lane kms in FY12, a 31% CAGR over the period. Also, the proportion of National Highways in the total portfolio has increased from 35% to 71%.

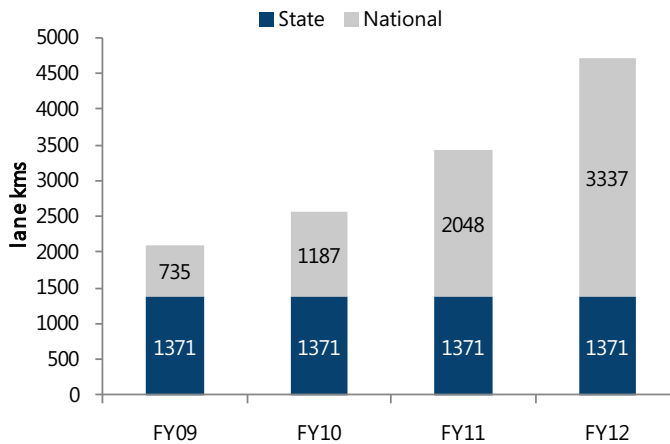
**Exhibit 1: BOT portfolio trend in lane kms**



45% of portfolio won in FY11&12 and hence majority under construction

Source: Company, MSFL Research

**Exhibit 2: Increasing proportion of NH's in BOT portfolio**



NH contribution has increased from 46% to 71% in last 2 years

Source: Company, MSFL Research

Exhibit 3: BOT Portfolio Overview

	Stake	Client	Location	Lane kms	Project Cost	Appointed Date	Concession Period	Status	Gross Per Day Toll Collection
Bhandara	51%	NHAI	Maharashtra	377	5350	Sep-07	20.0	Operational	1.12
Pune Shirur	100%	PWD	Maharashtra	216	1610	May-03	12.2	Operational	0.54
Nagar Aurangabad	100%	PWD	Maharashtra	168	1030	Dec-06	10.7	Operational	0.47
Nagar Karmala	100%	PWD	Maharashtra	160	500	Feb-99	16.7	Operational	0.71
Wainganga	50%	MORTH	Maharashtra	26	410	Nov-98	18.7	Operational	0.53
Dhule Bypass	99.9%	PWD	Maharashtra	12	60	Aug-97	8.7	Operational	0.11
Nashirabad	100%	MORTH	Maharashtra	8	150	Nov-98	10.9	Operational	0.20
Sherinala	100%	PWD	Maharashtra	7	140	Mar-99	16.2	Operational	0.11
Indore Edalabad	86.7%	MPRDC	Madhya Pradesh	407	1650	Sep-01	15.0	Operational	1.77
Dewas Bypass	100%	PWD	Madhya Pradesh	40	610	Aug-01	10.7	Operational	0.53
Katni Bypass	99.8%	PWD	Madhya Pradesh	35	710	Aug-02	12.0	Operational	0.52
Belgaum Dharwad	100%	NHAI	Karnataka	454	6940	Jun-10	30.0	UC	1.50
Pimpalgaon Nashik	26%	NHAI	Maharashtra	452	16910	Jul-09	20.0	UC	5.36
Sambalpur Baragarh	100%	NHAI	Orissa	408	11420	Jun-10	30.0	UC	2.39
Durg	51%	NHAI	Chhatisgarh	332	5870	Jan-08	20.0	UC	1.70
Jaora nayagaon	15%	MPRDC	Madhya Pradesh	320	8350	Aug-07	25.0	UC	2.80
Dhankuni Kharagpur	100%	NHAI	West Bengal	841	22000	Jun-11	25.0	UC	7.00
Cuttak Angul	100%	NHAI	Orissa	448	11420	Nov 2011	23.0	UC	NA

UC: Under Construction

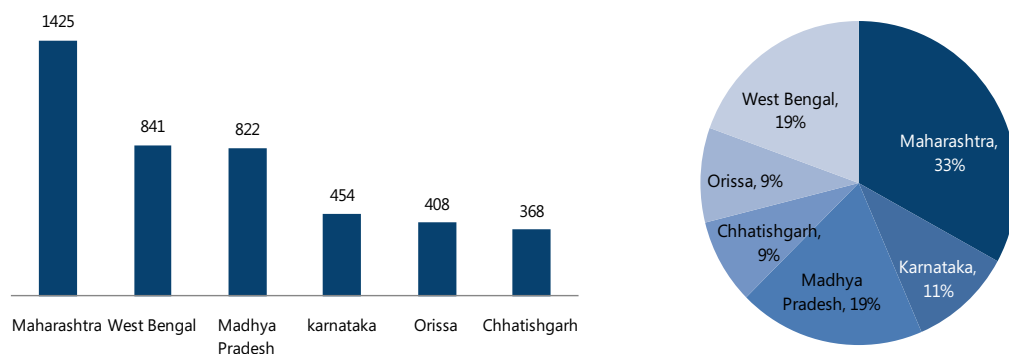
Source: Company, MSFL Research

**Portfolio concentration in Western & Eastern India**

Ashoka’s portfolio is more concentrated towards the western and eastern India. 52% of the total portfolio is contributed by Maharashtra and West Bengal. Besides that Madhya Pradesh contributes 19% of the total road portfolio. Combining together ~72% of the total portfolio is contributed by these three states which have a high growth potential.

Exhibit 4: Geographical breakup of BOT portfolio

Portfolio concentration in high growth areas



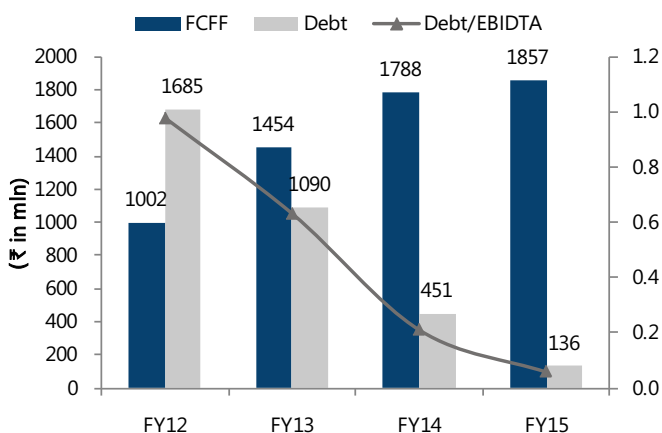
Source: Company, MSFL Research

**State projects are cash cow; re-leveraging to help fund capex**

The existing operational projects spanning 1455 lane kms (State - 1052, NH - 403) are generating FCFF of ~₹ 1bn. As per our estimates these cash flows are expected to grow at a CAGR of 23% over the next 3 years. Also, for 6 out of 10 operational state projects 100% of the debt has been repaid. Hence, the cash flows from these projects can be re-levered to help meet the equity requirement for projects under construction.



Exhibit 5: Current cash flows &amp; debt obligations leave room for re-leveraging



Source: Company, MSFL Research

Cash flow from state projects leaves scope for re leverage

#### Equity funding still to be tied up; expect dilution at infra holdco level

The company has, in the past two years added four National Highway projects to its portfolio. This sudden ramp up in the BOT portfolio has resulted in jump in equity requirement for these projects. Assuming no further additions to the portfolio we expect an equity requirement of ₹ 11bln over the next 3 years.

Exhibit 6: Equity requirement over FY12-15

(Fig in ₹ mln)	FY12	FY13	FY14	FY15
Pimpalgaon-Nashik-Gonde Road	240	261	46	-
Belgaum Dharwad Road	494	677	315	-
NH6 Sambalpur Baragarh Road	697	1,195	1,285	-
Dhankuni-Kharagpur Road	100	874	1,099	425
Cuttack Angul	-	540	1,440	1,020
<b>Total</b>	<b>1,532</b>	<b>3,547</b>	<b>4,185</b>	<b>1,445</b>
Cumulative requirement	1,532	5,079	9,264	10,709

Source: Company, MSFL Research

~₹ 11bln requirement over next 3 years

The two major sources of internal fund generation are cash flow from their EPC business & BOT cash flows.

Exhibit 7: Internal accruals fall short by ₹ 6.1bln

(Fig in ₹ mln)	FY12	FY13	FY14	FY15
Operational State BOT projects	21	670	784	924
FCF from EPC	534	316	605	696
<b>Total</b>	<b>555</b>	<b>987</b>	<b>1,389</b>	<b>1,620</b>
Surplus/(Deficit)	(977)	(2,561)	(2,796)	175
Cumulative Surplus/(Deficit)	(977)	(3,537)	(6,333)	(6,159)

Source: MSFL Research

Shortfall of ₹ 6.1bln in equity funding

Also, the management has an option to re-leverage cash flows of operational BOTs for funding the equity requirement. Ashoka Buildcon in the past has re-levered 15 out of the 20 projects to the extent of 150% of project cost raising ~₹ 2.3bln. According to our estimates, three of its projects viz. Indore-Edalabad, Pune Shirur & Katni Bypass have scope for re-leverage.

Three BOT projects are debt free

**Exhibit 8: Strong incremental debt servicing capability**

	Debt/EBIDTA			Interest coverage			DSCR		
	FY13	FY14	FY15	FY13	FY14	FY15	FY13	FY14	FY15
Indore-Edalabad Road	0.7	0.2	0.0	10.0	21.3	82.2	1.8	2.0	3.7
Pune-Shirur Road	0.0	0.0	0.0	NA	NA	NA	NA	NA	NA
Katni Bypass	0.0	0.0	0.0	NA	NA	NA	NA	NA	NA

Source: MSFL Research

According to our estimates, these three projects can provide ₹ 2.3bln of re-leveraging opportunity to the management

Debt service ability well within comfort range of bankers even after re leverage

**Exhibit 9: Post re-leveraging, debt servicing ability still comfortable**

Operational projects	Debt/EBIDTA			Interest coverage			DSCR		
	FY13	FY14	FY15	FY13	FY14	FY15	FY13	FY14	FY15
Indore-Edalabad Road	2.9	2.1	1.5	4.3	3.7	4.7	1.5	1.2	1.2
Pune-Shirur Road	2.4	1.4	0.6	0.1	0.8	1.8	7.6	1.3	1.2
Katni Bypass	2.0	1.5	0.9	3	6	5	7.0	2.1	1.3

Source: MSFL Research

Re leverage reduces the short fall to ₹ 5.1bln

**Exhibit 10: Post re-leveraging, short fall reduces to ₹ 5.1bln**

	FY12	FY13	FY14	FY15
Operational BOT projects	10	2,853	324	242
FCF from EPC	534	316	605	696
Total	544	3,169	929	937
Surplus/(Deficit)	(987)	(378)	(3,256)	(507)
Cumulative Surplus/(Deficit)	(987)	(1,365)	(4,621)	(5,129)

Source: MSFL Research

As the earlier exhibit indicate we expect ₹ 5.1bln shortfall in equity funding post re leveraging. A leverage of ~0.6x on the parent balance sheet offers room for funding the shortfall by increasing the leverage of the parent to 1x levels. However, we believe this atbest shall be a short term instrument which eventually shall be replaced by long term capital. The management is contemplating raising USD 150mln by diluting stake at SPV holdco level. As per our estimates such a move is expected to result in 25% dilution of its holding in project SPVs.

**In-control of all the process of road development**

Project traffic estimation is done in-house. ASBL has generated a database over a period of 15years for projects which they believe would be bided out in the future. The traffic estimation process of the company is more detailed than others with the top management getting involved in the process. Over the period, the company has also developed capability for "Operating & maintenance" post commercial operation of the project. This gives the company an additional advantage and saves some margin in-house. The construction of the project is also done in-house. With very basic work (non value-add) being sub-contracted like earth-removal, etc, Ashoka has the ability to execute the project. The company has been able to generate operating margins of 11%-13% and has been able to deliver the project on-time.

In house traffic team a differentiator for Ashoka

**Exhibit 11: Ashoka Buildcon's presence in the life cycle of project**

Life cycle	ITNL	IRB Infra	Sadbhav Engg	Ashoka Buildcon
Project Planning	Yes	No	No	No
Traffic estimate	No	No	No	Yes
Designing	Yes	Yes	Yes	Yes
Construction	No	Yes	Yes	Yes
O&M	Yes	Yes	Yes	Yes

Source: MSFL Research

**Construction business to drive growth; supported by strong order book**

Ashoka Buildcon has a current order book of ₹ 43.2bln translating into order book/sales of 3.3x FY11 sales which provides strong revenue visibility of next 2-3 years. The captive order book contributes ~90% of the total order book while power & transmission segment and third party contributes the rest. Ashoka Buildcon is active in power & transmission segment only in Maharashtra, however company will continue to focus on road projects.

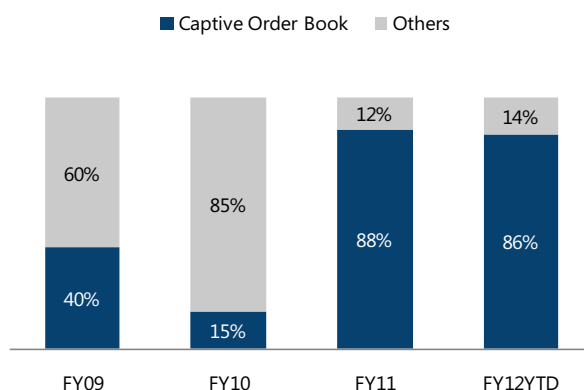
**Exhibit 12: Order Book Trend**

	FY09	FY10	FY11	FY12YTD*
Captive Order Book	6,873	2,502	40,910	36900
EPC Works	3,724	7,450	1,883	0.0
Power T&D	6,419	6,697	3,927	6220
Building	20	9	-	-
<b>Total</b>	<b>17,036</b>	<b>16,658</b>	<b>46,720</b>	<b>43120</b>

\* Does not include Cuttak Angul BOT project, Source: Company

Over last 3 years the contribution of captive orders has increased to 86% in FY12 as against 15% in FY10. Higher contribution from captive order books can be attributed to the recent order inflow in the BOT road segment. Company has bagged orders worth ₹ 57bln over last 3 years. Therefore pick up in execution in the BOT project will ensure strong revenue growth for the company over FY11-14E. We expect the EPC division to grow at a 33% CAGR over FY11-14E.

**Exhibit 13: Higher captive Order ensures revenue growth**



Source: Company, MSFL Research

**Revenue from construction arm to dominate till FY14E**

Since the company has received major chunk of orders in last 12-18 months and execution of these projects is likely to pick in FY13 & FY14, construction revenue will continue to dominate over next 3 years. EPC division contributed 79% of total revenue in FY11 which is likely to remain high at 83% of total revenue till FY14E.

Exhibit 14: Construction revenue trend

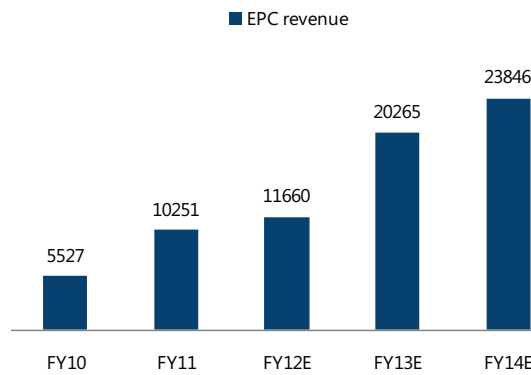
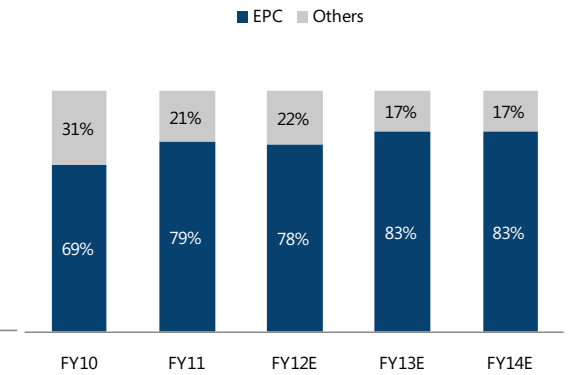


Exhibit 15: EPC contribution to remain high



Source: Company, MSFL Research

Currently six of the BOT road projects are under different stages of development. These projects are expected to get completed by FY14. We believe that these captive BOT projects are likely to contribute on an average ~80% of total EPC revenue over next 3 years.

Exhibit 16: Revenue contribution from captive BOT projects

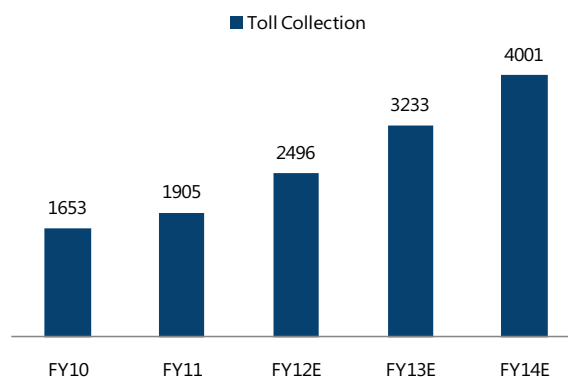
BOT projects	FY12E	FY13E	FY14E
Dhankuni Kharagpur	2016	7056	8870
Sambalpur Baragarh	2117	3629	3901
Belgaum Dharwad	1978	2709	1260
Pimpalgaon Nashik	2176	2208	0
Durg Bypass	151	0	0
Jarora Nayagaon	18	0	0
<b>Total</b>	<b>8456</b>	<b>15602</b>	<b>14031</b>

Source: MSFL Research

**Toll Revenue to increase 3.5x over FY11-14E**

The toll collection for Ashoka is likely to grow at 28% CAGR over FY11-14E. The toll collection for Ashoka stands at ₹ 1.9bn in FY11 and we expect it to increase upto ₹ 4.0bn by FY14E.

Exhibit 17: Expected yearly toll collection



Source: Company, MSFL Research

Financials

We expect Ashoka Buildcon to post 30% & 16% revenue and earnings CAGR over FY11-FY14E. Consolidated EBIDTA margins are expected to decline due to decline in construction margins and higher revenue contribution from EPC division over FY11-14E.

Exhibit 18: Consolidated Revenue growth trend

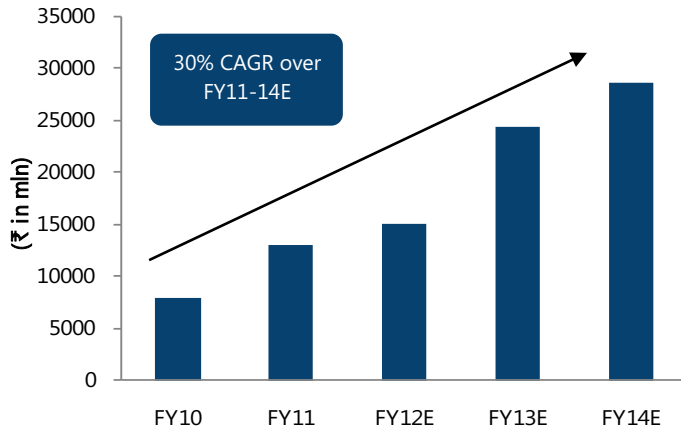


Exhibit 19: EBITDA growth trend

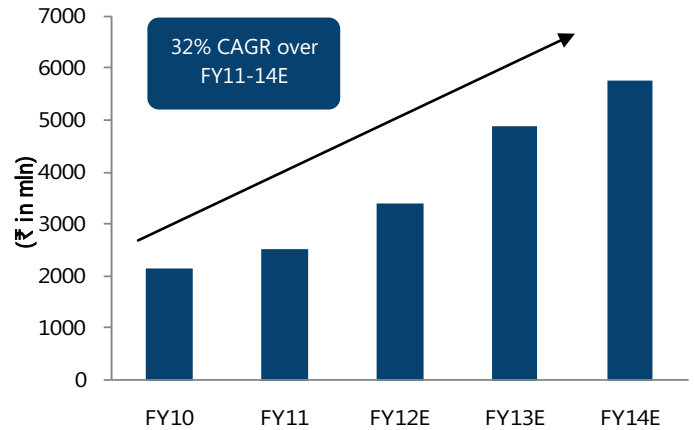


Exhibit 20: Net profit growth trend

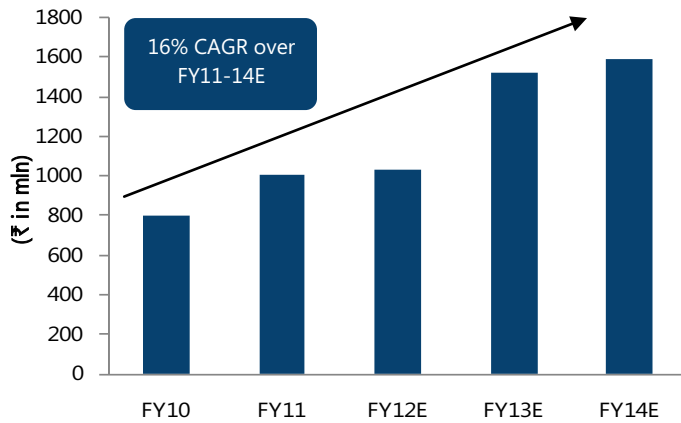


Exhibit 21: Margins under pressure

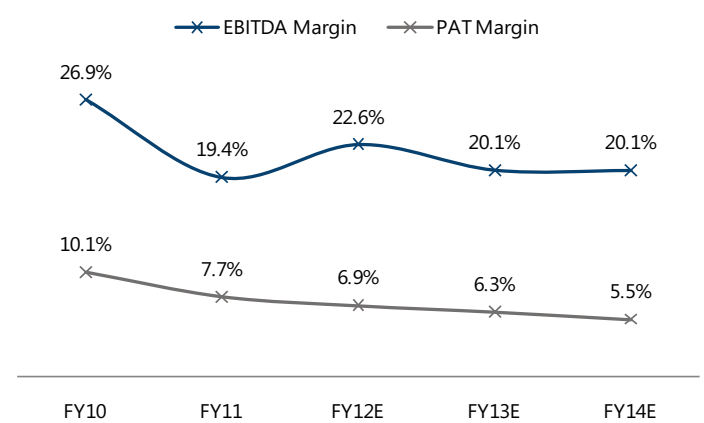


Exhibit 22: Increasing D/E

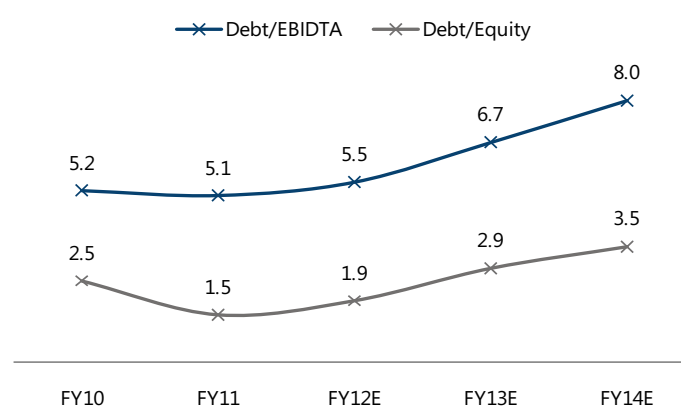
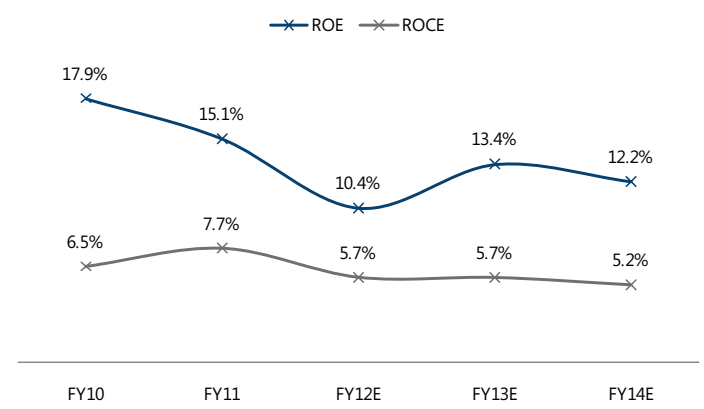


Exhibit 23: Declining return ratios



Source: Company, MSFL Research

## Valuation

We have valued the company based on SOTP methodology with BOT projects valued using DCF methodology and the core construction business using EV/EBITDA based approach. At CMP of ₹ 196, the company is trading at 1.0x FY12E & 0.9x FY13E P/BV & 7.8x FY12E & 7.9x FY13E EV/EBITDA respectively and is available at a discount to its peers. With a sizeable capital order book, entry into newer geographies and segments we believe that company is firmly placed on higher growth trajectory. We have assigned a 25% dilution discount to the BOT value. We believe the company will have to dilute its holding in BOT assets in order to fund the equity requirement for the existing BOT projects.

### Exhibit 24: SOTP Valuation

Project	Method	Stake	Project NPV	ABL's Share	NPV	NPV/ share
Indore-Edalabad Road	FCFE	87%	1829	1585	1585	30.1
Pune-Shirur Road	FCFE	100%	610	610	610	11.6
Ahmednagar-Aurangabad	FCFE	100%	426	426	426	8.1
Katni Bypass	FCFE	100%	235	235	235	4.5
Dewas Bypass	FCFE	100%	489	489	489	9.3
Ahmednagar-Karmala	FCFE	100%	572	572	572	10.9
Waingaga Bridge	FCFE	50%	758	379	379	7.2
Sheri Nallah Bridge	FCFE	100%	87	87	87	1.7
Bhandara NH6 Road	FCFE	51%	564	288	288	5.5
Durg NH6 Road	FCFE	51%	1516	773	773	14.7
Jaora-Nayagaon Road	FCFE	15%	5300	769	769	14.6
Pimpalgaon-Nashik-Gonde	FCFE	26%	1946	506	506	9.6
Belgaum Dharwad Road	FCFE	100%	886	886	886	16.8
NH6 Sambalpur Baragarh Road	FCFE	100%	643	643	643	12.2
Dhankuni-Kharagpur Road	FCFE	100%	755	755	755	14.4
						171
Dilution discount (25%)				9002	2250	42.8
Total BOT value						128.6
Standalone Business	EV/EBITDA					256
Less:Net Debt at parent level						133
Net value						251

Source: MSFL Research

## Key Risks

### **Higher concentration of road portfolio on NH 6**

Company has a portfolio of 1745 lane kms on NH6 (37% of road portfolio). Lower than expected traffic growth on this stretch will affect the viability of the project, thus impacting the earnings of the company

### **Higher equity requirement; dilution risk remains high**

Currently, Ashoka Buildcon has 5 BOT projects under development which requires ₹ 11bln towards its equity commitment in next three years. A high leverage of 1.9 in FY12E together with the equity commitment presents a dilution risk for the investors.

### **Delay in PE deal will stretch the parent balance sheet**

Company is aggressively looking for a private equity deal, which will take care of the equity requirement of the current under construction projects. Any delay in the private equity deal will lead to a short term pressure on the parent company. This will also result in slower bidding.

### **High competition**

Competition in this industry will remain intense. Although, the opportunity is large, with the fragmented nature of industry, the existing and new players will continue to be a source of competition impacting the market share & profitability.

### **Slowdown in infra spending**

95% of Ashoka's order book is mainly contributed by road projects. Any slow down in government's infrastructure spending may hurt order inflow for the company, thus impacting the revenue of the company.

## Company Overview

Ashoka Buildcon is one of the oldest construction companies in India and was established in 1976. It was primarily engaged in construction of residential buildings and other EPC works. Company entered into the BOT space in 1997 and bagged its first BOT for the construction & maintenance of Dhule bypass in Maharashtra. Currently company has a portfolio of 4708 lane kms comprising of 19 BOT projects across Maharashtra, Madhya Pradesh, Chhattisgarh, Karnataka, West Bengal & Orissa. Company has successfully completed 14 BOT projects while remaining 5 BOT projects consisting of 3254 lane kms is under construction. Company has major portfolio on NH 6 connecting Western and eastern India. This contributes ~57% of total road portfolio.

Company has a separate in house RMC division to cater the demand of its EPC division apart from third party sales. Currently Ashoka Buildcon has 15 RMC plants out of which 5 are used for commercial operations.

### Exhibit 25: Key milestones

Year	Key Milestone
1976	Established
1997	Bags first BOT road project
2000	<ul style="list-style-type: none"> <li>Bags first NHAI road project</li> <li>Starts its RMC Business</li> </ul>
2002	Start Selling RMC to third parties
2004	Enters into shareholders agreement with IDFC Infrastructure fund
2009	Enters into Power Sector
2010	IPO of the company

Source: Company

## Key Management

### Ashok Kataria: Chairman

He is a Civil Engineer with 35 years experience in civil construction. He has previously worked with Public Health Department in Maharashtra and as a contractor to PWD Maharashtra. He has received "Udyog Ratna" award from Indian Economic Council and Life Time achievement award from Association of Consulting Civil Engineers.

### Satish Parakh : Managing Director

He is a civil engineer with more than 30 years of experience in construction industry. He has been associated with Ashoka Buildcon since 1982. He has previously worked with Shapoorji Pallonji & Company and M/s Kanitkar-Kulkarni.

### Paresh Mehta: Chief Financial Officer

He is a Chartered Accountant with 20 years of experience. Has been working with the company for the last 10 years.



## Financial Summary

## Profit &amp; Loss

Particulars (₹ in mln)	2010	2011	2012P	2013P	2014P
<b>Sales</b>	<b>7956</b>	<b>13020</b>	<b>14993</b>	<b>24335</b>	<b>28684</b>
Total Expenditure	5813	10499	11609	19447	22932
<b>EBIDTA</b>	<b>2143</b>	<b>2522</b>	<b>3384</b>	<b>4887</b>	<b>5752</b>
EBIDTA Margin (%)	26.9%	19.4%	22.6%	20.1%	20.1%
Depreciation	661	690	1092	1398	1575
EBIT	1481	1832	2292	3490	4177
Interest cost	490	715	1185	1690	2010
Operating Profit	991	1117	1107	1800	2168
Other Income	186	339	136	156	76
Extraordinary Item	-	1072	-	-	-
<b>PBT</b>	<b>1177</b>	<b>2528</b>	<b>1245</b>	<b>1962</b>	<b>2253</b>
Tax	319	424	324	505	559
<b>PAT</b>	<b>859</b>	<b>2104</b>	<b>921</b>	<b>1457</b>	<b>1694</b>
PAT Margin (%)	10.8%	16.2%	6.1%	6.0%	5.9%
Minority Interest	55	24	-48	-33	73
Share of profit from associates	-	-	61	35	-35
<b>Net Profit</b>	<b>804</b>	<b>2080</b>	<b>1030</b>	<b>1525</b>	<b>1587</b>
Adj PAT		1008	1030	1525	1587
Adj EPS	17.6	19.2	19.6	29.0	30.1
Sales Growth (%)		64%	15%	62%	18%
EBITDA Growth (%)		18%	34%	44%	18%
PAT Growth (%)		25%	2%	48%	4%

## Balance Sheet

Particulars (₹ in mln)	2010	2011	2012P	2013P	2014P
<b>Sources of Funds</b>					
Share Capital	457	526	526	526	526
NCRPS	124	105	0	0	0
Reserves & Surplus	4042	8299	9328	10853	12440
<b>Networth</b>	<b>4499</b>	<b>8825</b>	<b>9855</b>	<b>11380</b>	<b>12967</b>
Secured Loans	9678	10872	16137	29836	43018
Unsecured Loans	1543	1958	2458	2958	2958
<b>Total Loans</b>	<b>11221</b>	<b>12830</b>	<b>18595</b>	<b>32795</b>	<b>45976</b>
DTL	30	16	16	16	16
Minority interest	813	1112	1064	1031	1104
<b>TOTAL</b>	<b>16688</b>	<b>22888</b>	<b>29530</b>	<b>45221</b>	<b>60062</b>

## Application of Funds

Net Fixed Assets	12750	16937	22119	35730	49807
Investment	1487	1503	1684	1980	1991
Current Assets	6383	8155	10040	14512	16516
Current Liabilities	3932	3706	4313	7000	8251
<b>Net Current Assets</b>	<b>2451</b>	<b>4448</b>	<b>5727</b>	<b>7511</b>	<b>8265</b>
Deferred Tax Asset (Net)	0	0	0	0	0
Misc. expenditure not w/o					
<b>TOTAL</b>	<b>16688</b>	<b>22888</b>	<b>29530</b>	<b>45221</b>	<b>60062</b>

**Cash Flow**

Particulars (₹ in mln)	2010	2011	2012P	2013P	2014P
Internal accruals	1520	2793	2013	2854	3269
Other Adjustments	411	559	105	0	0
(Inc)/Dec in Net Current Assets	-379	-2012	-1192	-2943	-1316
<b>Cash flow from Operations</b>	<b>1553</b>	<b>1340</b>	<b>926</b>	<b>-89</b>	<b>1953</b>
Inc/(Dec) in Debt	3505	786	5765	14199	13182
Inc/(Dec) in Equity	-16	2067	-102	0	0
Dividend & Tax	0	0	0	0	0
<b>Cash flow from Financing</b>	<b>3488</b>	<b>2852</b>	<b>5663</b>	<b>14199</b>	<b>13182</b>
Fixed Asset formation	-4777	-4880	-6274	-15008	-15651
Inc/(Dec) in Investment	-110	445	-229	-261	-46
<b>Cash flow from Investment</b>	<b>-4887</b>	<b>-4436</b>	<b>-6503</b>	<b>-15269</b>	<b>-15697</b>
<b>Net Change in Cash</b>	<b>154</b>	<b>-243</b>	<b>86</b>	<b>-1159</b>	<b>-563</b>

**Ratio**

Valuation Ratio	2010	2011	2012P	2013P	2014P
P/E	11.1	10.2	10.0	6.8	6.5
P/BV	1.9	1.2	1.0	0.9	0.8
EV/EBIDTA	8.6	8.0	7.8	7.9	8.9
EV/Sales	2.3	1.6	1.8	1.6	1.8
Dividend Yield (%)	-	-	-	-	-
EPS	17.6	39.5	19.6	29.0	30.1
DPS	0.0	0.0	0.0	0.0	0.0
Book Value	101.2	169.7	187.2	216.2	246.3
Adj. ROE	17.9%	15.1%	10.4%	13.4%	12.2%
Adj. ROCE	6.5%	7.7%	5.7%	5.7%	5.2%

**Solvency Ratio (x)**

Debt/Equity	2.5	1.5	1.9	2.9	3.5
Debt/EBIDTA	5.2	5.1	5.5	6.7	8.0

**Turnover Ratio (x)**

Asset Turnover	0.5	0.6	0.5	0.5	0.5
Fixed Asset Turnover	1.0	0.9	0.7	1.1	1.0
Current Ratio	1.6	2.2	2.3	2.1	2.0
Inventory (days)	90.1	67.6	94.3	83.9	83.7
Debtors (days)	83.5	80.0	70.0	70.0	70.0
Creditors (days)	180.4	98.1	105.0	105.0	105.0

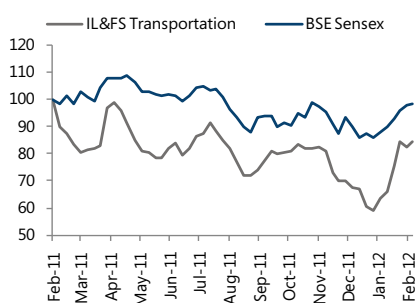
## Initiating Coverage

### BUY

CMP	₹ 209
Target Price	₹ 249
Upside Potential	19%

#### Price Performance

52 wk Hi/Lo	257/143
All time Hi/Lo	368/143
6 mnth Average Vol	93741
Stock Beta	0.71



#### Valuation

	FY11	FY12P	FY13P
P/E (x)	9.4	9.0	8.9
P/BV (x)	1.8	1.5	1.3
RONW (%)	23.0	18.8	16.5
ROCE (%)	11.0	8.6	7.4

#### Peer Valuation (FY13)

	IRB	Ashoka
PE	11.0	6.8
P/BV	2.1	0.9

#### Equity Data

Market Cap. (₹ bln)	40.5
Face value (₹)	10
No of shares o/s (mln)	194

	Dec'10	Dec'11	Δ%
Promoters	75.09	71.20	-5.18
DFI's	5.01	4.27	-14.77
FII's	4.78	2.55	-46.65
Public	15.12	21.98	45.37

## IL&FS Transportation Networks Ltd.

### Balanced portfolio offers comfort

IL&FS Transportation (ITNL) is the only pure asset developer & a management driven company in the road BOT space. IL&FS, parent company of ITNL, having two decades of experience in developing & funding infrastructure projects in India has helped ITNL build organizational capabilities in the infra asset development space. ITNL has followed a disciplined bidding strategy to maintain its hurdle IRR, based on which it has judiciously built a balanced road portfolio comprising a mix of annuity (32%, lane kms) & toll (68%, lane kms) spread across the breadth of the country. While its international acquisition's may not accrue value in the near term we expect ITNL's domestic portfolio to help it grow its revenue & net profit at a CAGR of 21% & 4% respectively over FY11-14P. Also, its relative inexpensive valuation & flexibility to withstand business cycles makes it an attractive pick. We initiate coverage on ITNL with a Buy rating.

#### Flexible business model & superior project management

IL&FS's more than two decade experience in developing & financing infrastructure projects across sectors within the country has helped ITNL develop superior organizational capabilities in terms of developing, designing, financing & maintaining infrastructure assets. Although, ITNL doesn't have construction capabilities & misses out on cash flow & IRR from this business we believe this lends flexibility to the business model to withstand business cycles.

#### Portfolio mix better than peers

ITNL's Toll/Annuity projects ratio is 59:41 and State/Central projects at 58:42. Within state highways, some projects are annuity-based, allaying investor fears of low-density/low-returns stretches. Also, the concession tail period of its projects is more than 15 years lending support to cashflows & valuation. With a strong order inflow of ₹ 81bln in last two year, we expect ITNL to post a 21% consolidated revenue CAGR over FY11-FY14E.

#### Cash flow sufficient for near term equity requirement; lesser risk of dilution

According to our estimates ITNL has an equity requirement of ₹ 3.73bln over FY12-14E which is expected to be partially met through cumulative free cash flow generation of ₹ 2.7bln over the same period.

#### Valuation:

At CMP of ₹ 209, the company is trading at 1.5x FY12E & 1.3x FY13E P/BV & 9.8x FY12E & 10.2x FY13E EV/EBIDTA respectively. In addition, we believe a BOT portfolio with 32% of annuity projects is less sensitive to traffic growth and provides support to the current valuations. We initiate coverage with a Buy recommendation and a PT of ₹ 249. Key risks include deterioration in international business.

#### Summary Financials

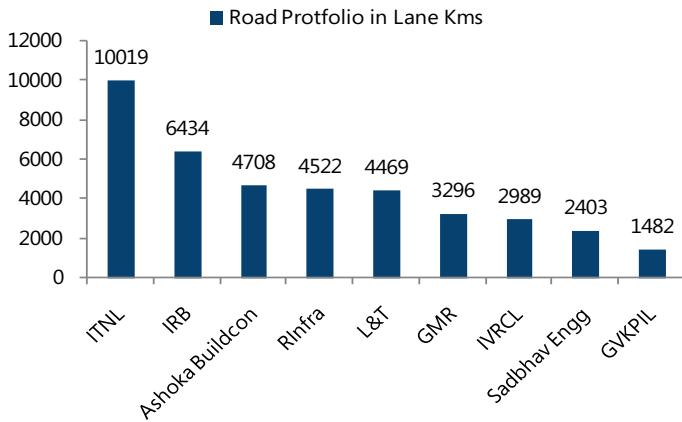
₹ in Mln	FY11	FY12P	FY13P	FY14P
Net Sales	40482	51140	62370	71769
OPBDIT	11549	13798	16571	18881
Net Profit	4329	4495	4563	4877
EPS	22.3	23.1	23.5	25.1
Networth	22392	26173	30011	34114
Debt	54670	101795	132030	141090
Fixed Assets	55073	85375	123651	139093
Net Current Assets	18807	39461	35341	33138

**Largest BOT player in India**

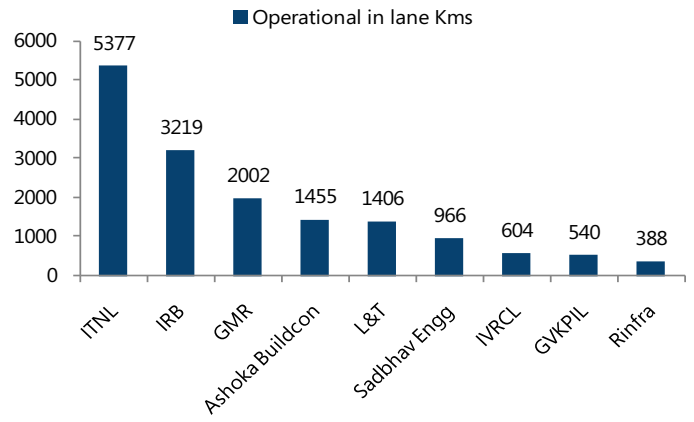
**Largest road developer in India; 24 projects under its portfolio**

ITNL is the largest BOT road player in India with ~10019 lane km of projects under its portfolio. Company's portfolio has witnessed a solid growth in last 10 years where in its portfolio has grown from 190 lane kms in 2001 to ~10019 lane kms in 2011. This strong growth of portfolio can be attributed to a robust order inflow of ~4000 lane kms in last 24 months. Out of 10019 lane km, 5377 lane km of projects are operational. Besides that company has built its portfolio with a balance mix of toll and annuity projects which provides cushion to any traffic risk.

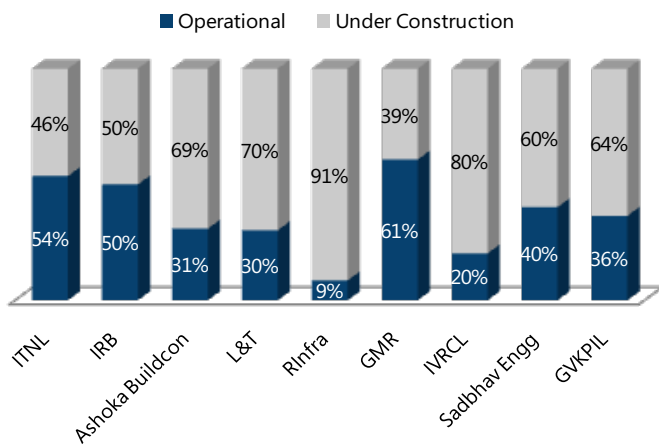
**Exhibit 1: Largest Road Portfolio**



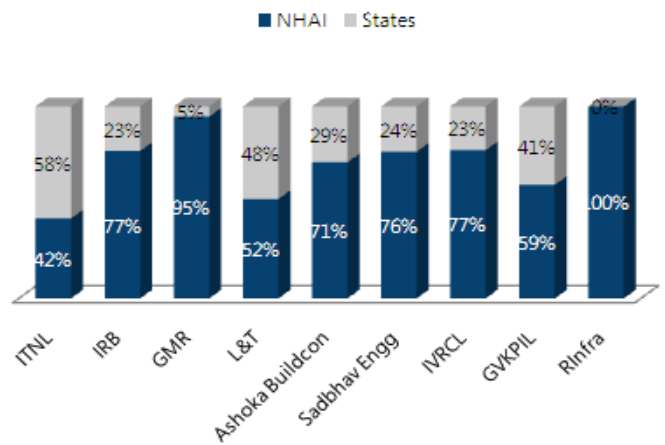
**Exhibit 2: Largest Operational Road Portfolio**



**Exhibit 3: Large under construction lane kms**



**Exhibit 4: Well distributed portfolio between Central & State**



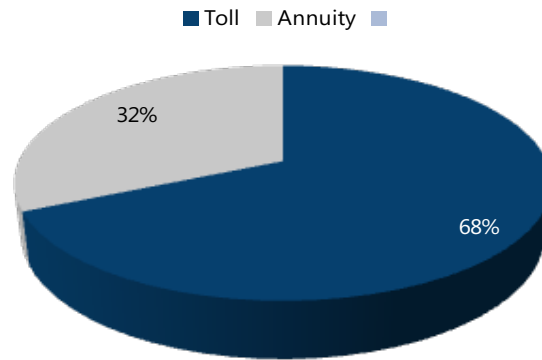
Source: Company, MSFL Research

Annuity projects support cash flows and NPV based valuation

**Balance mix of toll & annuity projects across growth as well as backward areas**

ITNL has a balance mix of road portfolio with ~68% of the portfolio in terms of lane-kms contracted under toll based model, ~32% of portfolio contracted under annuity model and the rest being international projects. We observe that the revenue would skew towards the annuity projects once the projects get operational by FY14-FY15E (assuming no order inflow).

**Exhibit 5: Annuity projects dominates the portfolio**



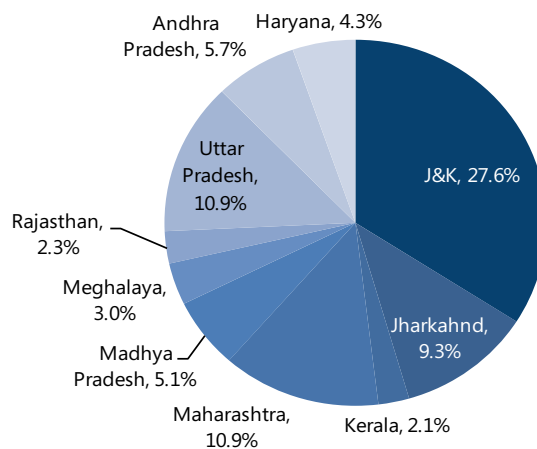
Source: Company

Innovative corridor development & swiss challenge model in partnership with IL&FS has enabled ITNL to make inroads in backward areas like Jharkhand & Chattisgarh

**Diversified transport player with pan India presence**

ITNL has built its road portfolio across the country and is present in 10 states. Company has bagged the projects in difficult areas like J&K, Meghalaya and Jharkhand which indicates company's ability to execute the projects. Besides that company is also diversified across other segments like railways (metro), airports, and bus terminals. Currently, the company has 22 road projects (fair mix of annuity/toll and state/central), 1 Bus project (Nagpur), 1 State Border Check post project (Madhya Pradesh), 2 Airports (Gulbarga & Shimoga airports under evaluation) and 1 Metro Rail (Gurgaon stretch of DMRC on 99-year lease).

**Exhibit 6: Pan India Presence in roads**



Source: Company

Asset light model delinks EPC with asset development business & offers flexibility to withstand business cycles

### Asset light business model; key advantage

ITNL is the only road developer which generates cash flows at a pre-construction phase through rendering various services from project planning to pre commencement of the projects. This business model also helps the company to recognize fee income ( design, engineering & consultancy) once the company receives the award. The fee income for the company varies between 3-10% of the total project cost. Besides that ITNL has an asset light business model and does not own any equipment. The construction work is outsourced to various contractors. Some of the sub-contractors for the company includes Monte Carlo Construction, Apco Constructions, GKC Constructions, etc. For high-capability projects like J&K & in North-East, the company has hired the services of Leighton (Australia) and Ramky Infra (who is also a partner in the project). We believe that this business model offers flexibility to withstand business cycles without significantly affecting the profitability.

### Exhibit 7: ITNL Presence in the life cycle of project

Life cycle	ITNL	IRB Infra	Sadbhav Engg	Ashoka Builcon
Project Planning	Yes	No	No	No
Traffic estimate	No	No	No	Yes
Designing	Yes	Yes	Yes	Yes
Construction	No	Yes	Yes	Yes
O&M	Yes	Yes	Yes	Yes

Source: Company, MSFL Research

### Expanding International presence through inorganic route

ITNL is continuously expanding its international presence through acquisition. In order to complement its BOT road operation it acquired Elsamax in 2008 which has expertise in operation and maintenance of roads, highways and petrol stations.

The company recently acquired 49% stake in YuHe Expressway in China for a consideration value of USD 160mln. Company is also looking to expand its portfolio in other countries like South Africa, Philippines and Indonesia. Global acquisition will help the company to increase its technical qualification for NHAI projects and other projects globally.

### Exhibit 8: Key Financial highlights of YuHe Expressway

Fig in USD mln	CY11E
Sales	53.5
EBITDA	46.0
EBITDA (%)	85.9
PBT	12.7
PBT (%)	23.7
Debt	300
Networth	300
D/E	1:1

Source: Company, MSFL Research

### Well funded for existing road projects

The company has 11 road projects under development. The total equity requirement towards funding these projects is ~₹ 17.9bln out of which till date the company has already invested ₹ 14.2bln. The balance ₹ 3.7bln is expected to be invested over next 2-3 years.

**Exhibit 9: Equity requirement over next 2-3 years**

Road Projects	Total equity requirement	ITNL Stake	ITNL Equity Requirement	Investment done as on Sep 2011	Equity to be invested
Moradabad Bareilly	2217	100%	2217	2217	0
Pune Sholapur	1600	100%	1600	1600	0
Chandrapur Warora	1763	35%	617	617	0
NAM Expressway	2335	50%	1168	1168	0
Thiruvananthapuram Roads	1493	50%	747	747	0
Rajasthan Roads	2464	50%	1232	968	264
Hazaribagh Ranchi	1310	74%	969	0.5	969
Jorabat Shillong	840	50%	420	420	0
MP Border Checkpost	4050	51%	2066	1042	1024
Chenani Nasiri	5194	100%	5194	3720	1474
Jharkhand Road	1702	100%	1702	1702	0
<b>Total</b>	<b>24968</b>		<b>17932</b>	<b>14201.5</b>	<b>3730.5</b>

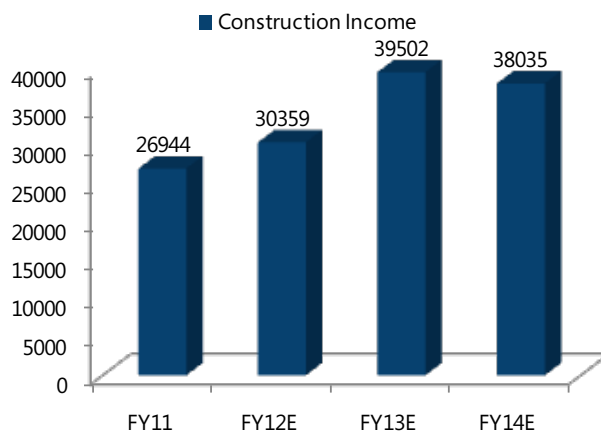
Source: Company, MSFL Research

**Projects' execution on track, to post 12% construction income CAGR over FY11-14E**

ITNL has currently 11 projects under various stages of construction and development which are likely to be executed over next 24-30 months. ITNL's current capital work order stands at ₹ 101bn. We do not foresee any delay in execution and expect construction income to grow at a CAGR of 12% FY11-14E.

Project execution on track, expect construction income to grow at 12% CAGR

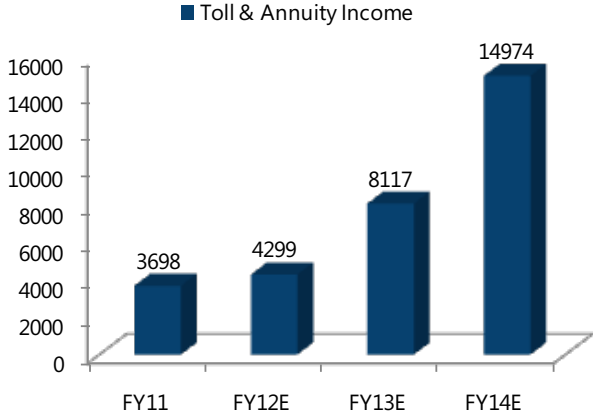
**Exhibit 10: Execution of project on track**



Source: Company, MSFL Research

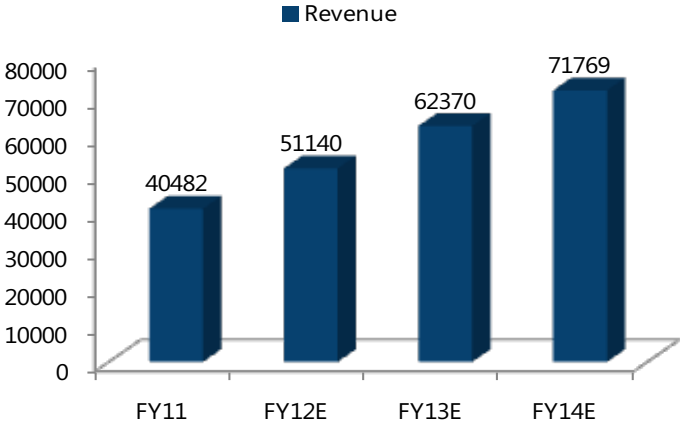
Over FY11-13E toll/annuity income is likely to grow at a 59% CAGR from ₹ 3.6bn in FY11 to ₹ 8.1bn in FY14E.

Exhibit 11: Toll income to increase 59% CAGR



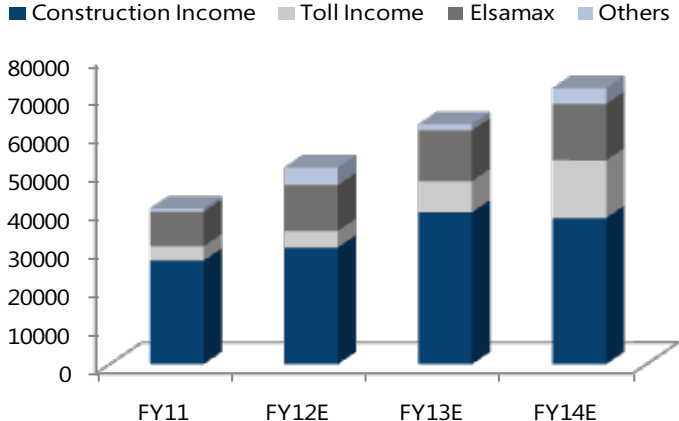
Source: MSFL Research

Exhibit 12: Consolidated Revenue growth



Source: MSFL Research

Exhibit 13: Revenue mix skewed towards construction income





## Valuation

Available at a discount  
to its peer set

We have valued the company based on SOTP methodology with BOT projects valued using DCF methodology and the core construction business using EV/EBITDA multiple based approach. At CMP of ₹ 209, the company is trading at 9.0x FY12E & 8.9x FY13E earnings

We have valued EPC business at FY13E EV/EBITDA of 5x which is 15% discount to the core construction companies outsources the execution to other EPC contractors. The value of EPC business comes to ₹ 79 per share (32% of total valuation). Besides that we have valued Elsamax, Gurgaon Metro and Vansh Nirmay Infrastructure Ltd at 1x of the equity invested. Summing up, we arrive at a price target of ₹ 249.

## Exhibit 14: SOTP based Valuation

Components	Method	Value per share (₹)
Construction	5x FY13E EV/EBITDA	79
BOT Road Projects	DCF	154
NKEL	DCF	12.7
Hazaribag Ranchi	DCF	1.6
Thiruvananthpuram City road projects	DCF	0.7
Thiruvananthpuram City road projects I	DCF	0.6
Jorabat Shillong Expressway	DCF	2.5
Chenani Nashiri	DCF	5.1
Kotakatta Kurnool	DCF	1.9
Ramky Elsamax Hyderabad Ring Road	DCF	1.2
East Hyderabad Expressway	DCF	2.0
Jharkhan Highway I	DCF	4.2
Chandrapur warora	DCF	3.2
NAM Expressway	DCF	12.8
Moradabad bareily	DCF	31.9
Pune Sholapur	DCF	14.9
Bewar Gomti	DCF	-6.5
West Gujarat Expressway	DCF	6.0
Gujarat Road & Infrastructure	DCF	24.9
Ridcor I	DCF	12.7
RIDCOR II	DCF	7.7
Jharkhan Highway II	DCF	10.0
Noida Toll Bridge		3.4
Elsamax	1x BV	14.0
Gurgaon Metro	1x BV	2.3
Vansh Nimay Infrastructure Limited	1x BV	0.5
<b>Total</b>		<b>249</b>

Source: Company, MSFL Research

### **Urban Infra projects**

Apart from being a leading player in the BOT road development ITNL has gradually build its portfolio in other transport verticals. Currently ITNL operates Metro Rail Project in Gurgaon and a bus transport system in Nagpur. Besides that company has shown interest in Airports and border check post projects.

### **Metro Rail**

Bagged from Haryana Urban Development Authority in JV with DLF, it is developing a 4.8 km metro rail link in Gurgaon at a total project cost of ₹ 10.8bln. The concession period of the project is 99 years and is expected to achieve COD in January 2013. The company has a 54% stake in the JV.

### **Airport**

ITNL has also forayed into development of airport projects in JV with Comet Group. It was awarded the development of two regional airports at Gulbarga and Shimoga by Government of Karnataka. The total cost of the project is ₹ 4.0bln with concession period of 30 years. ITNL has 40% stake in the project. The revenue source for the project would be airport fees, vendor space revenue and land side development rights.

### **Border Entry Point**

ITNL has bagged ₹ 10.9bln project from Government of Madhya Pradesh in consortium with Spanco (51%:49%) for development of 24 border check post. The project has concession period of 12.5 years with 2 years of construction period. The revenue source for the project would be entry fee from commercial vehicles, parking fee, loading and unloading, etc.

### **Nagpur Bus Transport Project**

The project was awarded by Nagpur Municipal Corporation to operate and maintain the city bus service of Nagpur for 10 years with the concession period ending in 2020. The company is required to deploy 470buses. The total project cost is ₹ 0.7bln.

## **Key Risks**

### **Diversifying in areas other than road sector like airports & metro**

ITNL has diversified in to areas like Airports and Metros in which the company has relatively less experience. We see this as a risk due to high capital expenditure and long gestation period of these projects.

### **Sub-contracts civil construction part of the project to local contractors**

ITNL subcontracts its civil construction to local sub-contractors and handles the initial designing and supervision of the construction work to check the quality of the project. The reliance on sub-contractors posses some risk on the timely completion of projects.

### **Lower than expected traffic estimates impacts earnings**

Toll revenues are subject to traffic risks. Any shortfall in traffic against expectation may hurt ITNL's performance going ahead.

## Company Overview

IL&FS Transportation Networks (ITNL) is a group company of IL&FS. ITNL was incorporated in 2000 by IL&FS in order to consolidate its existing road infrastructure projects and to pursue various new project initiatives in the area of surface transportation infrastructure. ITNL is one of the largest private sector road BOT players in India. ITNL is a developer, operator and facilitator of surface transportation infrastructure projects, taking projects from conceptualization through commissioning to operations and maintenance. Currently company has a road portfolio of 22 road projects which has a balance mix of toll and annuity projects. Besides roads, company has also ventured in metro rail projects, airports and urban transport project. In March 2008, ITNL commenced international operations through the acquisition of Elsamex S.A., a provider of maintenance services primarily for highways and roads in Spain and other countries.

**Exhibit 15: BOT Project Overview**

BOT Projects	Stake	Cost	Equity	Grant	Debt	Concession	End Date of Concession	Status
NKEL	74.5%	5423	1006	0	4417	17.5	Dec-19	Operational
Thiruvanthpuram City Roads	50.0%	1098	301	0	797	17.5	Sep-24	Operational
APEL	49.0%	8629	337	0	8292	20	Sep-26	Operational
Ramky Elsamax Hyredabad Road	26.0%	3994	450	665	2879	15	Oct-22	Operational
West Gujarat Expressway	49.0%	2758	400	180	2178	20	Sep-25	Operational
Gujarat Road	83.6%	4657	2315	0	2342	30	May-28	Operational
RIDCOR	50.0%	16180	1000	2150	13030	32	Jan-38	Operational
ITNL Road Infra Development Company	100.0%	3550	400	755	2395	11	Mar-20	Operational
East Hyderabad Expressway	74.0%	4278	293	776	3209	15	Aug-22	UC
Thiruvanthpuram City Roads II	50.0%	2626	1250	0	1376	17.5	Nov-26	UC
Hazaribagh Ranchi Expressway	73.9%	8692	1310	0	7382	18	Apr-28	UC
Pune Sholapur Road Development	100.0%	14027	1600	2850	9577	20	Mar-30	UC
Jharkhand Road Projects	100.0%	14078	1702	0	12736	18	Feb-28	UC
Chenani Nashri	100.0%	37200	7440	0	29760	20	Oct-30	UC
Jorabat Shillong	49.9%	8240	840	0	7400	20	May-30	UC
RIDCOR II	50.0%	7500	2250	460	5250	32	Feb-40	UC
Moradabad Bareily	100.0%	19836	2217	4433	13187	25	Feb-42	UC
NAM Expressway	50.0%	17605	7005	0	10600	24	Aug-35	UC

Source: Company, MSFL Research, UC: Under Construction

Financials

We expect IL&FS Transportation to post 21% & 4% revenue and earnings CAGR over FY11-FY14E. Consolidated EBITDA margins are expected to remain stable at 26%. However, increase in interest cost will lead to decline in net profit margin over FY11-14E.

Exhibit 16: Consolidated Revenue growth trend

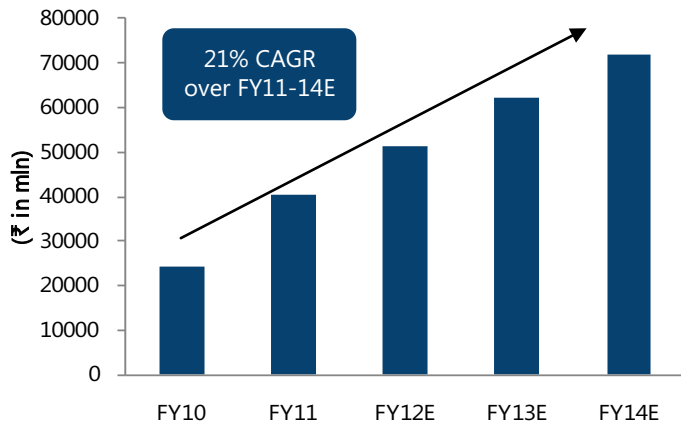


Exhibit 17: EBITDA growth trend

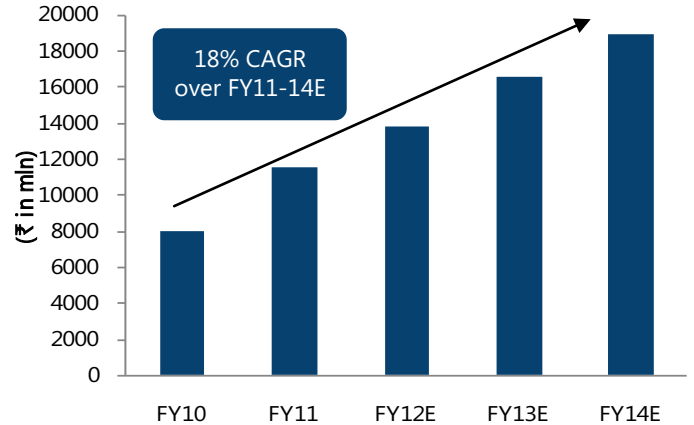


Exhibit 18: Net profit growth trend

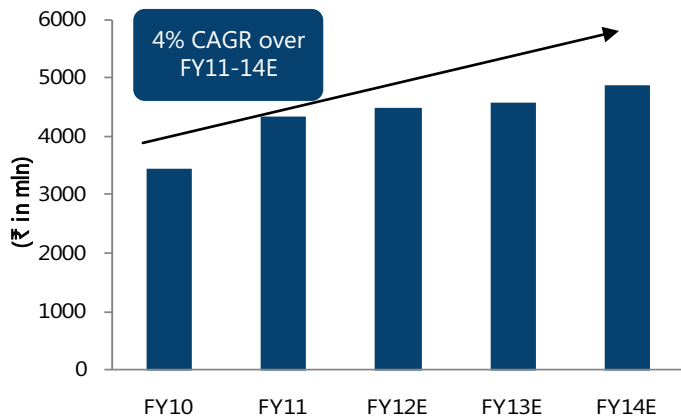


Exhibit 19: Margins under pressure

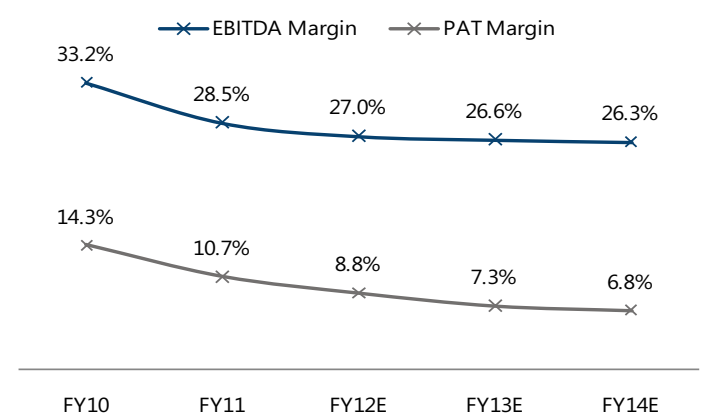


Exhibit 20: Increasing D/E

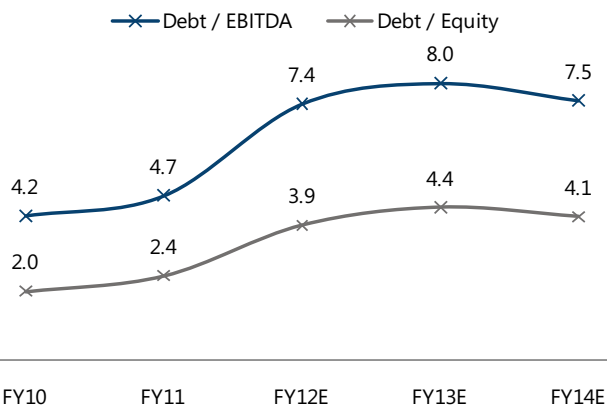
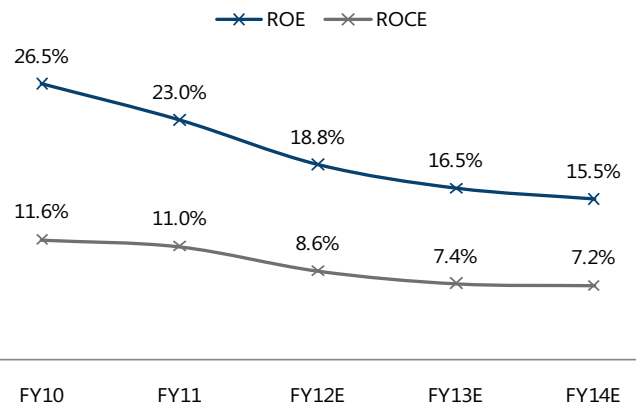


Exhibit 21: Declining return ratios



Source: MSFL Research

## Financial Summary

## Profit &amp; Loss

Particulars (₹ in mln)	2010	2011	2012P	2013P	2014P
<b>Sales</b>	<b>24079</b>	<b>40482</b>	<b>51140</b>	<b>62370</b>	<b>71769</b>
Total Expenditure	16087	28933	37342	45799	52888
<b>EBIDTA</b>	<b>7993</b>	<b>11549</b>	<b>13798</b>	<b>16571</b>	<b>18881</b>
EBIDTA Margin (%)	33.2%	28.5%	27.0%	26.6%	26.3%
Depreciation	603	614	757	913	1165
EBIT	7390	10935	13041	15658	17716
Interest cost	2941	4981	8418	11388	13041
Operating Profit	4449	5954	4623	4270	4675
Other Income	793	791	1885	2350	2408
Extraordinary Item	-	-	-	-	-
<b>PBT</b>	<b>5242</b>	<b>6740</b>	<b>6507</b>	<b>6620</b>	<b>7084</b>
Tax	1858	2242	1952	1986	2125
<b>PAT</b>	<b>3384</b>	<b>4497</b>	<b>4555</b>	<b>4634</b>	<b>4958</b>
PAT Margin (%)	38.4%	17.8%	16.3%	16.3%	16.9%
<b>Net Profit</b>	<b>3445</b>	<b>4329</b>	<b>4495</b>	<b>4563</b>	<b>4877</b>
EPS	17.7	22.3	23.1	23.5	25.1
Sales Growth (%)	97%	68.1%	26.3%	22.0%	15.1%
EBITDA Growth (%)	313%	44%	19.5%	20.1%	13.9%
Adj PAT Growth (%)	1216.5%	25.7%	3.8%	1.5%	6.9%

## Balance Sheet

Particulars (₹ in mln)	2010	2011	2012P	2013P	2014P
<b>Sources of Funds</b>					
Share Capital	1943	1943	1943	1943	1943
Reserves & Surplus	14744	20450	24230	28068	32172
<b>Networth</b>	<b>16686</b>	<b>22392</b>	<b>26173</b>	<b>30011</b>	<b>34114</b>
Secured Loans	17531	34805	75225	102501	109761
Unsecured Loans	15684	19865	26570	29529	31329
<b>Total Loans</b>	<b>33215</b>	<b>54670</b>	<b>101795</b>	<b>132030</b>	<b>141090</b>
<b>TOTAL</b>	<b>52599</b>	<b>80676</b>	<b>131651</b>	<b>165784</b>	<b>179037</b>
<b>Application of Funds</b>					
Net Fixed Assets	28285	55073	85375	123651	139093
Investment	4331	1944	1954	1943	1949
Current Assets	23242	32355	53005	51651	52869
Current Liabilities	7868	13548	13544	16310	19731
<b>Net Current Assets</b>	<b>15374</b>	<b>18807</b>	<b>39461</b>	<b>35341</b>	<b>33138</b>
Deferred Tax Asset (Net)	0	117	117	117	117
Misc. Expenditure not w/o	0	40	40	40	40
<b>TOTAL</b>	<b>52599</b>	<b>80676</b>	<b>131651</b>	<b>165784</b>	<b>179037</b>

**Cash Flow**

Particulars (₹ in mln)	2010	2011	2012P	2013P	2014P
Internal accruals	4048	4943	5312	5547	6124
(Inc)/Dec in Net Current Assets	-5850	-6141	-2331	-780	-1545
<b>Cash flow from Operations</b>	<b>3189</b>	<b>7832</b>	<b>2981</b>	<b>4767</b>	<b>4579</b>
Inc/(Dec) in Debt	12616	21199	47125	30235	9060
Inc/(Dec) in Equity	5758	0	0	0	0
Dividend & Tax	-251	-684	-715	-725	-774
<b>Cash flow from Financing</b>	<b>15226</b>	<b>17844</b>	<b>46411</b>	<b>29510</b>	<b>8286</b>
Fixed Asset formation	-5372	-14134	-31059	-39188	-16607
Inc/(Dec) in Investment	-9083	-12298	-9	11	-6
<b>Cash flow from Investment</b>	<b>-14455</b>	<b>-26432</b>	<b>-31069</b>	<b>-39177</b>	<b>-16613</b>
<b>Net Change in Cash</b>	<b>3960</b>	<b>-756</b>	<b>18324</b>	<b>-4900</b>	<b>-3748</b>

**Ratio**

Valuation Ratio	2010	2011	2012P	2013P	2014P
P/E	11.8	9.4	9.0	8.9	8.3
P/BV	2.4	1.8	1.5	1.3	1.2
EV/EBIDTA	9.1	8.24	9.87	10.15	9.28
EV/Sales	3.0	2.4	2.7	2.7	2.4
Dividend Yield (%)	1.4%	1.7%	1.5%	1.5%	1.6%
EPS	17.7	22.3	23.1	23.5	25.1
DPS	3.0	3.5	3.1	3.1	3.3
Book Value	87.7	117.1	136.5	156.3	177.4
Adj. ROE	26.5%	23.0%	18.8%	16.5%	15.5%
Adj. ROCE	11.6%	11.0%	8.6%	7.4%	7.2%

**Solvency Ratio (x)**

Debt/Equity	2.0	2.4	3.9	4.4	4.1
Debt/EBIDTA	4.2	4.7	7.4	8.0	7.5

**Turnover Ratio (x)**

Asset Turnover	0.5	0.5	0.4	0.4	0.4
Fixed Asset Turnover	1.3	1.2	1.6	0.7	0.6
Current Ratio	3.0	2.4	3.9	3.2	2.7
Inventory (days)	4.4	2.4	2.4	2.4	2.4
Debtors (days)	98.2	67.5	60.0	58.0	58.0
Creditors (days)	98.8	107.8	74.4	68.1	68.1

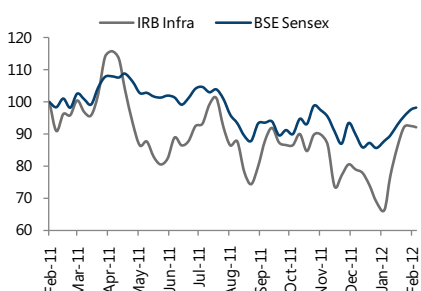
## Company Update

### Hold

CMP	₹ 168
Target Price	₹ 171
Upside Potential	2%

#### Price Performance

52 wk Hi/Lo	230/122
All time Hi/Lo	315/64
6 mnth Average Vol	1406107
Stock Beta	1.17



#### Valuation

	FY11	FY12P	FY13P
P/E (x)	12.3	11.2	11.0
P/BV (x)	2.3	2.2	2.1
RONW (%)	20.2	18.1	15.0
ROCE (%)	11.4	9.1	6.7

#### Peer Valuation (FY13)

	ITNL	Sadbhav
PE	8.9	20.3
P/BV	1.3	1.5

#### Equity Data

Market Cap. (₹ bln)	56
Face value (₹)	10
No of shares o/s (mln)	332

	Dec'10	Dec'11	Δ%
Promoters	74.95	67.55	-9.87
DFI's	3.42	6.53	90.93
FII's	13.25	17.37	31.09
Public	8.38	8.55	2.03

## IRB Infrastructure Developers Ltd.

### Riding on past glory

IRB Infrastructure, an early entrant in the road development business is the most focussed toll road developer in the country today with presence across two major growth corridors of Mumbai – Gujarat & Mumbai – Pune. However, apart from the Mum-Pune Exp. project we expect the shareholder returns on other projects to remain sub-optimal due to lower than expected traffic growth. We believe there are limited commensurate growth opportunities for IRB in the balance NHDP awards and a highly competitive environment exacerbates the situation. Also, we lower our base traffic assumption for Kolhapur project which has impacted our BOT valuation by ₹ 12. We downgrade our recommendation to Hold with a price target of ₹ 171.

#### Challenging to repeat success amidst declining scale of PPP projects & intense competition

NHAI has a planned balance awards program of 18,534kms with an estimated development cost of ₹ 1365bln. However, in spite of a significantly large opportunity, our analysis, points to reduced attractiveness under PPP mode, for majority of the planned awards. Our analysis suggests that only 6-lane projects under Phase V offer commensurate growth opportunities for large road BOT developers albeit in a highly competitive scenario.

#### Aggressiveness has always been the characteristic of business strategy

IRB Infrastructure's Ahmedabad-Vadodara bid, the first of mega highway project bid out in 2011, was perceived to be aggressive stereotyping the company as being aggressive in its bidding strategy. However, we believe that Ahmedabad-Vadodara was not the only 'aggressive' bid by IRB, closer look at the Bharuch-Surat & Surat-Dahisar projects corroborates our view of aggressiveness being the underlying of IRB's business strategy

#### EPC cashflows support non-dilutive growth

IRB Infra's order backlog stands at ₹ 91.2bln. We estimate construction revenue to grow at a CAGR of 23% over FY11-14E mainly driven by projects won in FY10. The total equity requirement for IRB over FY12-15E stands at ₹ 26.5bln. Higher margins in the EPC division aids FCFE generation and supports equity investment in its under construction group projects. We estimate a cumulative equity funding gap of ₹ 4.8bln for FY12-FY14E.

#### Valuation

We believe there are limited upside triggers for the company and the current macro scenario also limits any new project win with higher IRR. Factoring delay & a discount to the base traffic in Kolhapur project coupled with lower multiple for EPC division (5x from 7x earlier) we downgrade our recommendation to Hold with a price target of ₹ 171. Key risks include higher than expected traffic growth across projects & decline in competitive intensity in sector.

#### Summary Financial

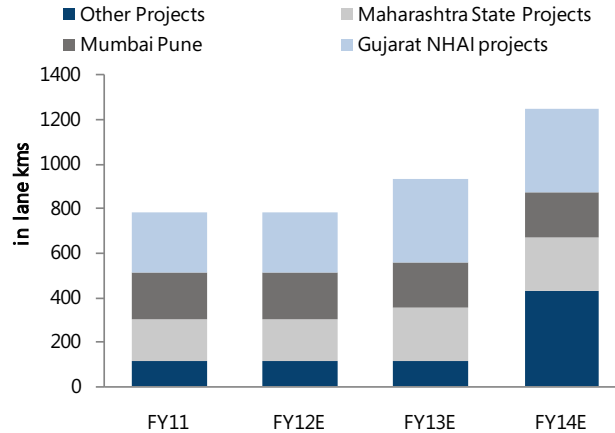
₹ in Mn	FY11	FY12P	FY13P	FY14P
Net Sales	24381	31467	41777	46104
OPBDIT	10939	13423	16350	19923
Net Profit	4524	4968	5088	5707
EPS	13.6	14.9	15.3	17.2
Networth	24326	30476	37334	41849
Debt	46255	65592	100182	118104
Fixed Assets	58706	81826	116051	134115
Net Current Assets	12443	15041	22189	26512

Built portfolio of projects along the high growth corridors of Mum-Pune & Mum-Gujarat

**Focussed road developer; presence across major growth corridors**

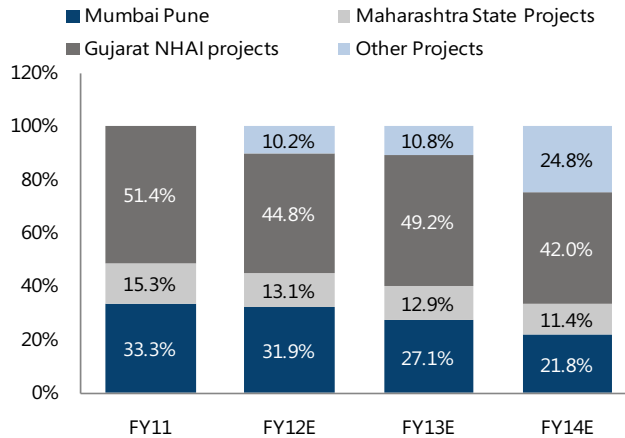
IRB Infrastructure, an early entrant in the road development business is the most focussed toll road developer in the country today with presence across two major growth corridors of Mumbai – Gujarat & Mumbai – Pune. It broke the scale barrier by bagging the BOT for Mumbai-Pune Expressway which it built upon by bagging the Surat-Dahisar, Bharuch-Surat & lately the Ahmedabad-Vadodara Expressway projects. These stretches have higher density of traffic & have higher traffic growth rates due to monopoly of these stretches in catering to the industrial corridors of Mumbai-Pune & Mumbai-Vadodara. We expect these stretches to contribute 64% of the BOT revenues for IRB Infra by FY14E.

**Exhibit 1: Region wise operational lane kms**



Source: Company, MSFL Research

**Exhibit 2: Region wise sales contribution**



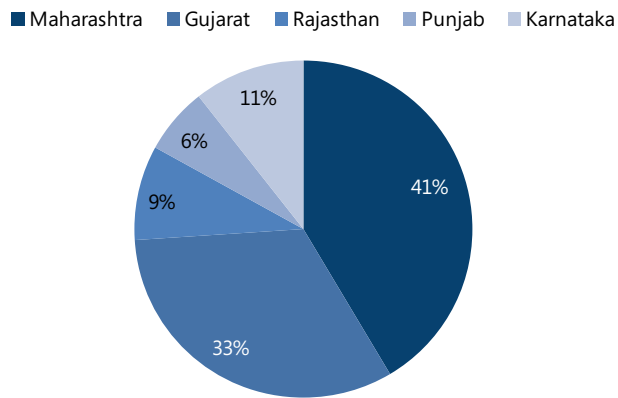
Source: Company, MSFL Research

Now, diversified portfolio across major states of Karnataka, Punjab & Rajasthan

It has diversified its geographical spread of projects by bagging projects in the states of Karnataka, Punjab & Rajasthan. It now has a total portfolio of 16 (6434 lane kms) road projects out of which 10 (3219 lane kms) projects are operational and 6 (3215 lane kms) projects are under various stages of development. The total development cost of it's portfolio stands ₹ 151bln. The National Highway stretches contribute ~80% of the total road portfolio covering 6434 lane kms. Moreover all the projects are toll based which aids revenue growth in a strong economic environment.



Exhibit 3: Major presence in Gujarat and Maharashtra



Source: Company, MSFL research

Exhibit 4: Second largest players among road players

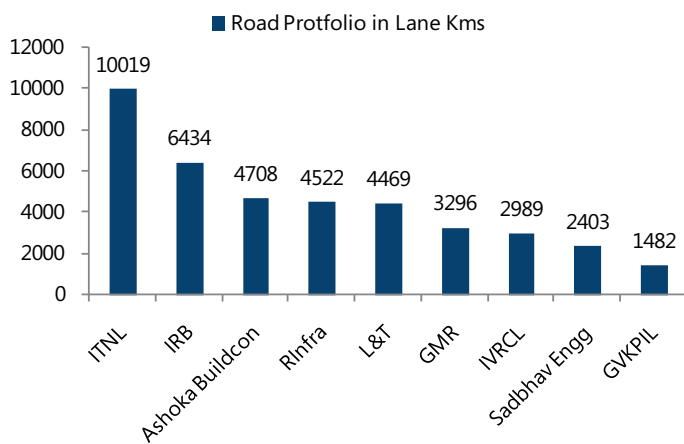


Exhibit 5: Focus on NHAH projects

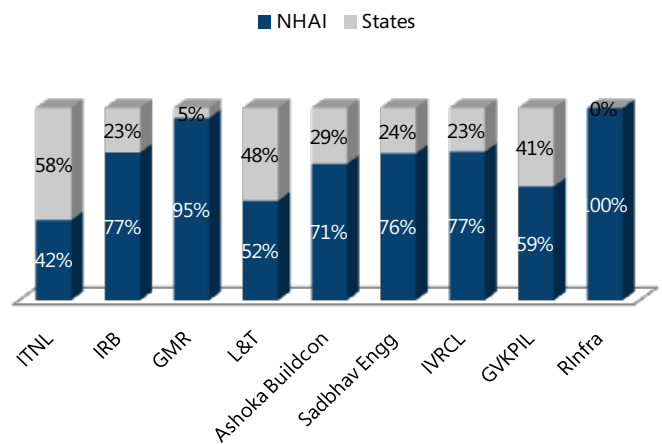


Exhibit 6: Second largest operational portfolio

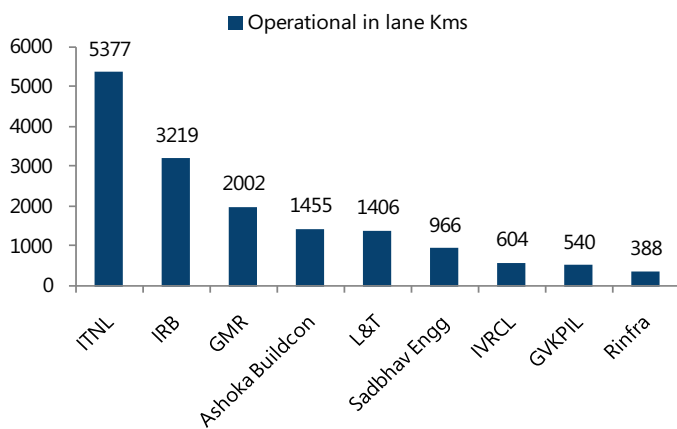
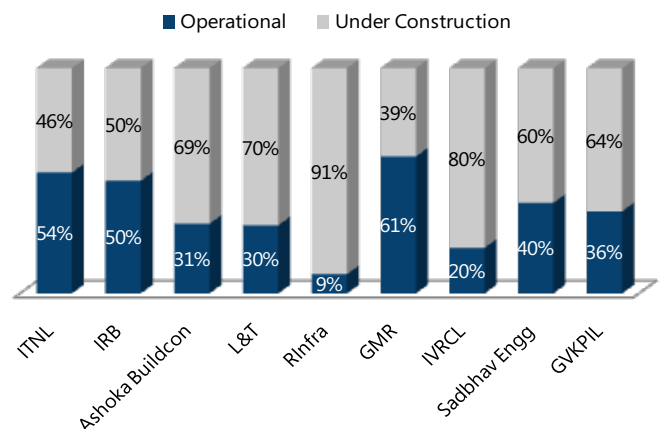


Exhibit 7: Evenly distributed operational & UC projects



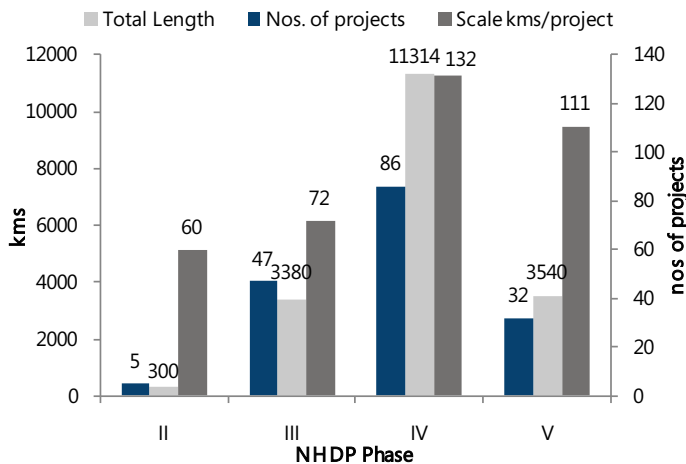
Source: Company, MSFL Research

**Challenging to repeat success amidst declining scale of PPP projects & intense competition**

NHAI has a planned balance awards program of 18,534kms with an estimated development cost of ₹ 1365bln, presenting a definitive opportunity for infrastructure developers. However, in spite of a significantly large opportunity, our analysis, points to reduced attractiveness under PPP mode of development, for majority of the planned awards.

Scale opportunity for bigger players limited to Phase V restricting any commensurate growth in asset portfolio

**Exhibit 8: Average scale of projects in kms**



Source: NHAI, MSFL Research

Our analysis suggests that only 6 laning projects under Phase V of NHDP offer commensurate growth opportunities for large road BOT developers. Hence, with completion of NHDP being the main focus & in absence of any such attractive projects being developed by NHAI in near term we expect these projects to attract high competition.

Six laning projects offer better scale opportunities for larger players.

**Exhibit 9: Phase V opportunity segmentation**

Project length based segments	Nos. of projects	Total Length (kms)	Avg. length of project (kms)
<51	3	132	44
51-100	13	993	76
100-150	11	1386	126
>150	5	1029	206

Source: NHAI, MSFL Research

Also, a detailed analysis of Phase V plan suggests that majority of the balance awards are on the Chennai-Kolkata & Mumbai-Chennai leg of the Golden Quadrilateral while the Mumbai-Delhi leg has been completely awarded. The Chennai-Kolkata leg of the GQ has majority of its length passing through coastal Andhra Pradesh covering sea ports of Vishakhapatnam, Kakinada & Paradip. While the Mumbai-Delhi leg of GQ catered to traffic supplying goods to consumption centers in the north manufactured in industrialized Gujarat & Maharashtra or traffic catering to export-import of goods to the ports of Mundra, Kandla & JNPT, the Chennai-Kolkata leg does not offer such opportunities since the consumption areas are in the hinterland away from the ports.

Majority of the projects yet to be awarded are along the east coast of the country

Exhibit 10: 3 sides of GQ yet to be six laned

Golden Quadrilateral	Corridor	NH nos	GQ Length (kms)	Ph V Length (kms)	Awarded length (kms)	Balance for Award Length (kms)
	Delhi -Kolkata	2	1454	1315	656	659
Mum-Delhi	8,8A,76,79	1383	1328	1328	-	
Mum-Chennai	4,7,46	1291	1370	542	828	
Chennai-Kolkata	5,6,60	1685	1733	487	1245	
<b>Total</b>		<b>5813</b>	<b>5746</b>	<b>3013</b>	<b>2732</b>	
NSEW	Corridor	NSEW Length (kms)	Ph V Length (kms)	Awarded length (kms)	Balance for Award Length (kms)	
	Phase I & II	7200	861	461	400	
Additional projects					407	
<b>Total</b>					<b>3539</b>	

Source: NHAI, MSFL Research

Ahmd-Vadodara not the only aggressive bid, Bharuch-Surat & Surat-Dahisar too likely to erode shareholder value

**Aggressiveness has always been the characteristic of business strategy**

IRB Infrastructure's Ahmedabad-Vadodara bid, the first of mega highway project bid out in 2011, was perceived to be high stereotyping the company as being aggressive in its bidding strategy. The market was quick to react and is reflected in the current market price of the stock. However, we believe the Ahmedabad-Vadodara was not the only 'aggressive' bid by IRB, closer look at the Bharuch-Surat & Surat-Dahisar projects corroborates our view of aggressiveness being the underlying of IRB's business strategy.

Infused ₹ 7.5bln of sub-debt in addition to ₹ 1.9bln of equity to support SPV cash flows. Reduced equity IRR for shareholders

Exhibit 11: Change in funding structure of Bharuch Surat project

		Current structure	Original structure
Negative grant paid to NHAI	₹ mln	5040	5040
Total project cost	₹ mln	15948	14695
Debt	₹ mln	6475	12076
Equity	₹ mln	1981	1981
Sub-ordinate debt by promoters	₹ mln	7492	638
Concession period	yrs	15	15
Construction period	yrs	2.5	2.5
Tolling period of concession	yrs	12.5	12.5
Yearly debt repayment (Assuming debt is repaid in equal installments over 10 years)	₹ mln	648	1208
FY11 revenue	₹ mln	1302	1302
FY11 EBIDTA	₹ mln	1133	1133

Source: Company, MSFL Research

Shorter concession period, lower than expected traffic growth & higher revenue sharing with NHAI is likely to result in requirement of ₹ 2.2bln support from the parent till FY20E

### Exhibit 12: Surat-Dahisar project structure

<b>Revenue sharing with NHAI</b>	<b>%</b>	<b>39%</b>
Yearly increment in sharing %	%	1%
Total project cost (estimated)	₹ mln	25350
Debt	₹ mln	17000
Equity	₹ mln	5099
Internal accruals	₹ mln	3251
Sub-ordinate debt by promoters	₹ mln	NA
Concession period	yrs	12
Construction period	yrs	2.5
Tolling period of concession	yrs	12
Yearly debt repayment (Assuming debt is repaid in equal installments over 10 years)	yrs	1700
NHAI share at the end of concession	%	49%

Source: Company, MSFL Research

### Riding on past glory

IRB would now have a total project portfolio of 16 road projects (including the Ahmedabad-Vadodara project) of which eleven are operational and five are under construction/development. Majority of the cash flows from the operational projects is contributed by the Mumbai-Pune project. The new projects do not meaningfully contribute to the cash flows of the company till FY2018E, leading to continued over-dependence on the Mumbai-Pune project

Cash flow from operational projects highly dependent on Mumbai-Pune project

### Exhibit 13: Year wise FCFE generation

	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E	FY18E
Mumbai Pune	2411	1615	1821	1728	1961	2918	3761
Surat Dahisar	-1796	-1036	-503	41	584	749	969
Bharuch Surat	-825	341	669	669	708	769	1134
Pune Sholapur	104	119	149	166	182	198	238
Pune Nashik	182	211	234	271	300	347	379
Thane Bhiwandi	1194	632	671	712	757	806	129
Tumkur Chitradurga	-813	-1353	-1079	-362	-105	103	313
Thane Ghorbunder	125	146	219	253	283	384	495
Ahmednagar Karmala	133	165	187	203	248	209	0
Mohol Mandrup	58	69	77	82	87	92	98
Kharpada Bridge	61	65	69	73	32	0	0
Kolhapur Project	-516	-205	-221	-175	-100	-53	-110
Pathankot Amrtisar	-932	-1718	-149	349	402	711	780
Jaipur Deoli	-2171	-2349	150	-34	185	427	682
Talegaon Amravati	-753	-892	-13	-84	29	153	278
Ahmedabad Vadodara	0	-3199	-4681	-3853	-2834	-2086	-1518
<b>Total</b>	<b>-3538</b>	<b>-7390</b>	<b>-2400</b>	<b>40</b>	<b>2719</b>	<b>5726</b>	<b>7629</b>

Source: MSFL Research

### EPC cashflows support non-dilutive growth

IRB Infra's order backlog stands at ₹ 91.2bln, where captive EPC stands at ₹ 70.7bln. We estimate construction revenue to grow at CAGR of 23% over FY11-14E mainly driven by projects won in FY10. The share of EPC in consolidated revenue is likely to remain at ~64% from current 66% over FY11-14E.

**Exhibit 14: Projectwise order book breakup in ₹ mln**

Projects	Value in ₹ bln
Talegaon Amravati	5.2
Jaipur Deoli	9.5
Pathankot Amritsar	9.3
Sindhudurg Airport	1.5
Tumkur Chitradurga	9.8
Ahmedabad Vadodara	35.2
O&M Phase	20.6
<b>Total</b>	<b>91.2</b>

Source: Company, MSFL Research

The total equity requirement for IRB over FY12-15E stands at ₹ 26.5bln which will see through construction of all but Ahmedabad-Vadodara & Sindhudurg Airport projects. Higher margins in the EPC division aids FCFE generation and supports equity investment in its under construction group projects. We estimate a cumulative equity funding gap of ₹ 4.8bln over FY12E-FY14E based on the residual capex for projects under construction and free cash flow to equity generated by operational projects and the construction arm. We observe that the holding company may have to support Surat Dahisar & Bharuch Surat projects with additional funding due to lesser than expected traffic growth resulting in inadequate cash flows to support debt repayment and operational requirements

**Exhibit 15: Project wise equity requirement**

Projects	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E	FY18E
Mumbai Pune	0	0	0	0	0	0	0
Surat Dahisar	1042	0	0	0	0	0	0
Bharuch Surat	0	0	0	0	0	0	0
Pune Sholapur	0	0	0	0	0	0	0
Pune Nashik	0	0	0	0	0	0	0
Thane Bhiwandi	0	0	0	0	0	0	0
Tumkur Chitradurga	1044	1392	844	0	0	0	0
Thane Ghorbunder	0	0	0	0	0	0	0
Ahmednagar Karmala	0	0	0	0	0	0	0
Mohol Mandrup	0	0	0	0	0	0	0
Kharpada Bridge	0	0	0	0	0	0	0
Kolhapur Project	616	0	0	0	0	0	0
Pathankot Amrtisar	932	1718	276	0	0	0	0
Jaipur Deoli	2171	2349	0	0	0	0	0
Talegaon Amravati	753	892	208	0	0	0	0
Ahmedabad Vadodara	0	3220	4800	4080	0	0	0
<b>Total</b>	<b>6558</b>	<b>9571</b>	<b>6128</b>	<b>4080</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: MSFL Research

**Exhibit 16: Equity requirement in BOT projects**

(fig in ₹ mln)	FY12E	FY13E	FY14E	FY15E	Total
Capex	25001	38163	23415	16048	102628
Equity Requirement	7558	10571	8428	4880	31436
BOT FCFE	4480	3362	4509	4700	17052
EPC CFO	1567	1992	5809	4059	13428
Surplus/Deficit	(1510)	(5217)	1891	3879	(957)

Source: MSFL Research

Marginal shortfall in equity requirement. High reliance on EPC for equity funding

Financials

We expect IRB to post 24% & 8% revenue and earnings CAGR over FY11-FY14E. Consolidated EBITDA margins are expected to decline due to decline in construction margins and higher revenue contribution from EPC division over FY11-13E. However, change in revenue mix shall see increase in EBITDA margin from FY14.

Exhibit 17: Consolidated Revenue growth trend

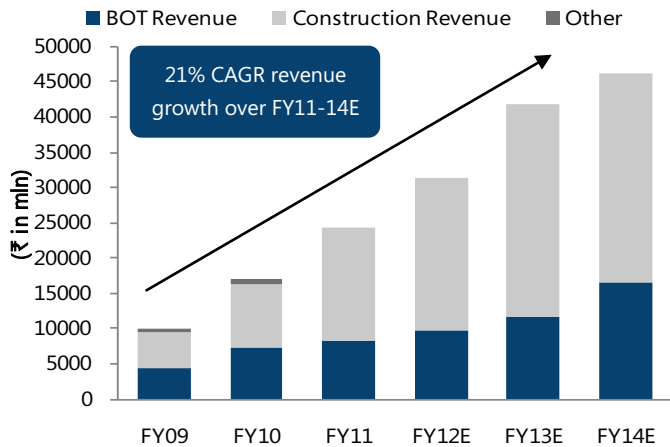


Exhibit 18: EBITDA growth trend

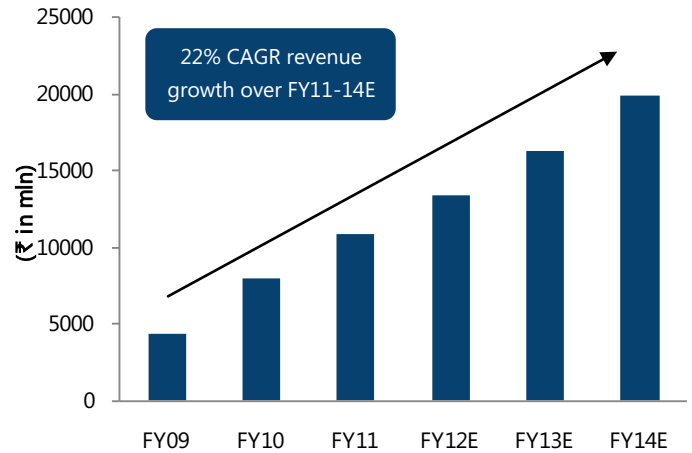


Exhibit 19: Net profit growth trend

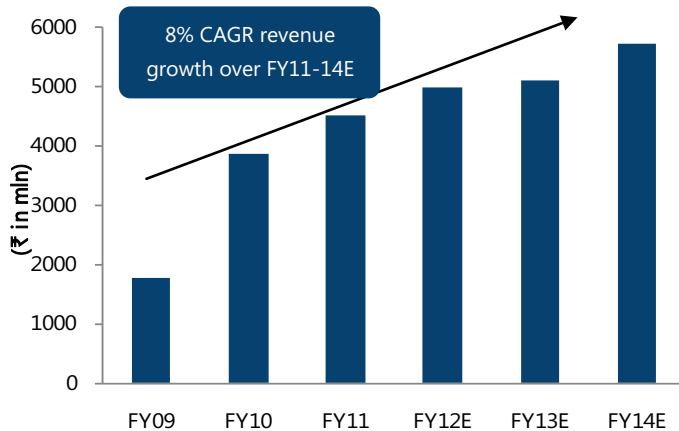


Exhibit 20: Margins under pressure

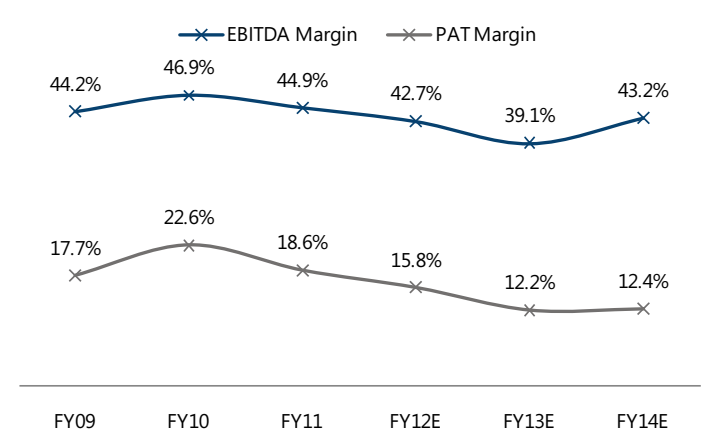


Exhibit 21: Increasing D/E

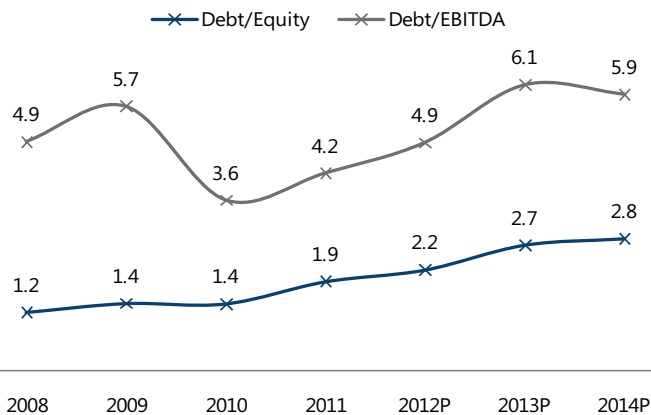
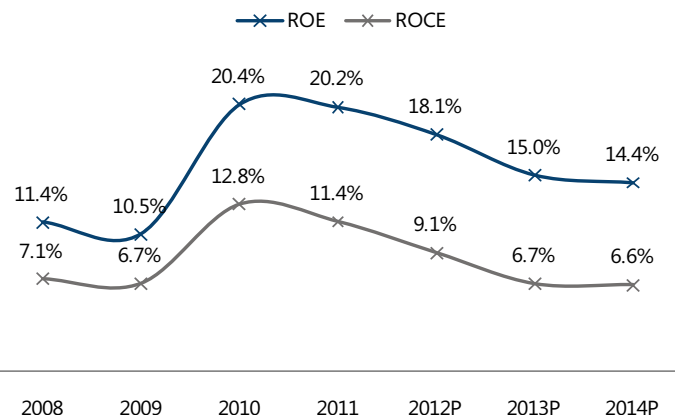


Exhibit 22: Declining return ratios



Source: Company, MSFL Research

## Valuation

We believe there are limited upside triggers for the company and the current macro scenario also limits any new project win with higher IRR. Factoring in delay in Kolhapur project and discounting the base traffic we reduce the per share contribution of this project from ₹ 15.7 to ₹ 3.9 per share. Cancellation of Goa-Panjim project and lower order inflow due to higher competition we lower our multiple for the construction arm to 5x from 7x earlier. We downgrade to Hold with a price target of ₹ 171.

### Exhibit 23: SOTP Valuation

Project	Method	NPV	Value Per Share	% of Total BOT	% of Total value
Mumbai Pune	DCF	13309	40.0	34.2%	23.3%
Bharuch Surat	DCF	5188	15.6	13.3%	9.1%
Surat Dahisar	DCF	2831	7.7	6.6%	4.5%
Thane Gorbunder	DCF	1782	5.4	4.6%	3.1%
Thane Bhiwandi	DCF	2940	8.8	7.6%	5.2%
Pune Nasik	DCF	1730	5.2	4.5%	3.0%
Pune Sholapur	DCF	794	2.4	2.0%	1.4%
NKT	DCF	760	2.3	2.0%	1.3%
Kharpada Bridge	DCF	205	0.6	0.5%	0.4%
MMK	DCF	361	1.1	0.9%	0.6%
Kolhapur	DCF	1340	4.0	3.4%	2.4%
Pathankot Amritsar	DCF	3161	9.5	8.1%	5.5%
Jaipur Deoli	DCF	5345	16.1	13.7%	9.4%
Talegaon Amravati	DCF	1872	5.6	4.8%	3.3%
Tumkur Chitradurga	DCF	2195	6.6	5.6%	3.8%
Admedabad Vadodara	DCF	-4652	-14.0	-12.0%	-8.2%
<b>Total BOT</b>			<b>117</b>	<b>100.0%</b>	<b>68.2%</b>
MRM	P/E	5x FY13E	54.6		31.8%
<b>Total</b>			<b>171.5</b>		<b>100%</b>

Source: MSFL Research

## Key Risks

### Competitive bidding a key concern

IRB Infra has been aggressive in bidding for new projects, which has resulted in lower IRR for the projects. Therefore, further aggressive bidding for new project may require parental support for the projects and would lead to stressed balance sheet

### Timely execution of project a key challenge

The under construction 6 projects which are likely to get completed by FY13, will drive revenue over FY11-13E. Therefore, any delay in execution would lead to decline in future earning of the company

### Lesser than expected order wins

We have assumed orders worth ₹ 35bln and ₹ 30bln in FY13E and FY14E respectively. Therefore, lower than expected order inflow will be a key risk for future earnings.

### Higher parental equity support to SPV

Lower than expected traffic growth for the projects impacts the cash flow of the projects resulting in an equity support from the parent company which will further stretch the parent balance sheet.

### Exhibit 24: BOT Portfolio overview

Projects	Authority	Location	Stake	Length	Type	Start CA	CP	TPC	Debt	Equity	Grant	Status
Mumbai Pune	MSRDC	Maharashtra	100%	206	Toll	Aug-04	15	13016	11814	1202	(9180)	Operational
Surat Dahisar	NHAI	Maharashtra	90%	239	Toll	Feb-09	12	25372	17507	7865	NA	Operational
Bharuch Surat	NHAI	Gujarat	100%	65	Toll	Jan-07	15	14695	12714	1981	(5040)	Operational
Pune Sholapur	MOSRTH	Maharashtra	100%	26	Toll	Mar-03	16	630	450	180	NA	Operational
Pune Nashik	MOSRTH	Maharashtra	100%	29.8	Toll	Sep-03	18	737	727	10	NA	Operational
Thane Bhiwandi	PWD	Maharashtra	100%	24	Toll	Jan-99	18.5	1040	700	340	NA	Operational
Tumkur Chitradurga	NHAI	Karnataka	100%	114	Toll	Jun-11	26	11420	8310	3110	NA	Operational
Thane Ghorbunder	MSRDC	Maharashtra	100%	14.9	Toll	Dec-05	15	2469	2066	403	NA	Operational
Ahmednagar Karmala	PWD	Maharashtra	100%	60	Toll	Dec-00	15	368	218	150	NA	Operational
Mohol Mandrup	PWD	Maharashtra	100%	33.4	Toll	May-02	16	180	110	70	NA	Operational
Kharpada Bridge	MOSRTH	Maharashtra	100%	1.4	Toll	Nov-97	17.75	320	220	100	NA	Operational
Kolhapur Project	MSRDC	Maharashtra	100%	49.9	Toll	Jul-08	30	4300	2580	1720	(270)	Operational
Pathankot Amritsar	NHAI	Punjab	100%	102.4	Toll	Nov-09	20	14453	9240	3944	1269	UC
Jaipur Deoli	NHAI	Rajasthan	100%	146.3	Toll	Dec-09	25	17330	9000	5270	3060	UC
Talegaon Amravati	NHAI	Maharashtra	100%	66.73	Toll	Nov-09	22	8880	4750	1970	2160	UC
Ahmadabad Vadodara	NHAI	Gujarat	100%	195	Toll	NA	25	36000	NA	NA	NA	UC

Source: Company, MSFL Research



## Financial Summary

## Profit &amp; Loss

Particulars (₹ in mln)	2010	2011	2012P	2013P	2014P
<b>Sales</b>	<b>17049</b>	<b>24381</b>	<b>31467</b>	<b>41777</b>	<b>46104</b>
Total Expenditure	9059	13442	18044	25427	26181
<b>EBIDTA</b>	<b>7990</b>	<b>10939</b>	<b>13423</b>	<b>16350</b>	<b>19923</b>
EBIDTA Margin (%)	46.9%	44.9%	42.7%	39.1%	43.2%
Depreciation	1819	2254	2905	4513	5555
EBIT	6171	8686	10518	11836	14368
Interest cost	2494	3572	4904	5339	7308
Operating Profit	3677	5113	5614	6497	7061
Other Income	490	645	1225	1041	1162
<b>PBT</b>	<b>4167</b>	<b>5758</b>	<b>6839</b>	<b>7537</b>	<b>8222</b>
Tax	133	1117	1863	2522	2555
<b>PAT</b>	<b>4034</b>	<b>4641</b>	<b>4976</b>	<b>5016</b>	<b>5668</b>
Minority Interest	179	117	8	-72	-40
<b>Net PAT</b>	<b>3854</b>	<b>4524</b>	<b>4968</b>	<b>5088</b>	<b>5707</b>
Net PAT Margin (%)	22.6%	18.6%	15.8%	12.2%	12.4%
EPS	11.6	13.6	14.9	15.3	17.2
Sales Growth (%)	72%	43%	29.1%	32.8%	10.4%
EBITDA Growth (%)	82%	37%	22.7%	21.8%	21.9%
Net PAT Growth (%)	119%	17%	9.8%	2.4%	12.2%

## Balance Sheet

Particulars (₹ in mln)	2010	2011	2012P	2013P	2014P
<b>Sources of Funds</b>					
Share Capital	3324	3324	3324	3324	3324
Reserves & Surplus	17075	21002	24599	28315	32650
Grant			2553	5696	5875
<b>Networth</b>	<b>20399</b>	<b>24326</b>	<b>30476</b>	<b>37334</b>	<b>41849</b>
Minority Interest	779	896	904	832	792
Secured Loans	29035	46255	65542	100132	118054
Unsecured Loans	117	0	50	50	50
<b>Total Loans</b>	<b>29152</b>	<b>46255</b>	<b>65592</b>	<b>100182</b>	<b>118104</b>
Deferred Tax Liability	267	232	232	232	232
<b>TOTAL</b>	<b>50597</b>	<b>71709</b>	<b>97203</b>	<b>138580</b>	<b>160976</b>

## Application of Funds

Net Fixed Assets	43477	58706	81826	116051	134115
Investment	451	551	339	339	339
Current Assets	11477	20384	31015	41889	47615
Current Liabilities	4816	7941	15974	19700	21103
<b>Net Current Assets</b>	<b>6661</b>	<b>12443</b>	<b>15041</b>	<b>22189</b>	<b>26512</b>
Misc. expenditure not w/o	9	9	9	9	9
<b>TOTAL</b>	<b>50597</b>	<b>71709</b>	<b>97203</b>	<b>138580</b>	<b>160977</b>

**Cash Flow**

Particulars (₹ in mln)	2010	2011	2012P	2013P	2014P
Internal accruals	5853	6895	7881	9529	11222
(Inc)/Dec in Net Current Assets	3180	1115	(5842)	(2584)	1433
<b>Cash flow from Operations</b>	<b>9033</b>	<b>8010</b>	<b>2039</b>	<b>6945</b>	<b>12656</b>
Inc/(Dec) in Debt	4315	17103	19336	34590	17922
Inc/(Dec) in Equity	-	-	-	-	-
Proceeds from NHAI Grant	-	-	2553	3142	179
Dividend & Tax	(429)	(870)	(1372)	(1372)	(1372)
<b>Cash flow from Financing</b>	<b>1431</b>	<b>16233</b>	<b>20518</b>	<b>36361</b>	<b>16729</b>
Fixed Asset formation	(10603)	(17482)	(26001)	(38738)	(23619)
Inc/(Dec) in Investment	381	(100)	211	-	-
<b>Cash flow from Investment</b>	<b>(10222)</b>	<b>(17582)</b>	<b>(25790)</b>	<b>(38738)</b>	<b>(23619)</b>
<b>Net Change in Cash</b>	<b>241</b>	<b>6661</b>	<b>(3233)</b>	<b>4568</b>	<b>5765</b>

**Ratio**

Valuation Ratio	2010	2011	2012P	2013P	2014P
P/E	14.5	12.3	11.2	11.0	9.8
P/BV	2.7	2.3	2.2	2.1	2.0
EV/EBIDTA	10.0	8.2	8.4	8.7	7.8
EV/Sales	4.7	3.7	3.6	3.4	3.4
Dividend Yield (%)	0.9%	0.9%	0.9%	0.9%	0.9%
EPS	11.60	13.6	14.9	15.3	17.2
DPS	1.5	1.5	1.5	1.5	1.5
Book Value	61.4	73.2	77.2	80.3	83.5
Adj. ROE	20.4%	20.2%	18.1%	15.0%	14.4%
Adj. ROCE	12.8%	11.4%	9.1%	6.7%	6.6%

**Solvency Ratio (x)**

Debt/Equity	1.4	1.9	2.2	2.7	2.8
Debt/EBIDTA	3.6	4.2	4.9	6.1	5.9

**Turnover Ratio (x)**

Asset Turnover	0.3	0.3	0.3	0.3	0.3
Fixed Asset Turnover	0.5	0.7	0.5	0.7	0.6
Current Ratio	2.4	2.6	1.9	2.1	2.3
Inventory (days)	36.3	24.5	9.7	10.1	9.0
Debtors (days)	6.4	5.9	51.9	54.1	48.0
Creditors (days)	14.9	72.5	178.1	166.1	161.2

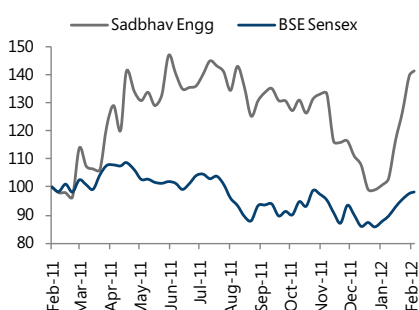
## Company Update

### BUY

CMP	₹ 138
Target Price	₹ 186
Upside Potential	35%

#### Price Performance

52 wk Hi/Lo	155/82
All time Hi/Lo	164/20
6 mnth Average Vol	96328
Stock Beta	0.62



#### Valuation

	FY11	FY12P	FY13P
P/E (x)	22.3	13.0	20.3
P/BV (x)	2.4	1.6	1.5
RONW (%)	12.0	14.1	7.3
ROCE (%)	5.5	5.3	3.2

#### Peer Valuation (FY13)

	IRB	ITNL
PE	11.0	8.9
P/BV	2.1	1.3

#### Equity Data

Market Cap. (₹ bln)	21
Face value (₹)	1
No of shares o/s (mln)	150

	Dec'10	Dec'11	Δ%
Promoters	47.52	47.46	-0.13
DFI's	18.02	18.53	2.83
FII's	22.93	20.46	-10.77
Public	11.53	13.55	17.52

## Sadbhav Engineering

### Benchmark for excellence!

Sadbhav Engineering, now an integrated road sector player with a portfolio of nine BOT road projects (2,403 lane km worth ₹ 80bln on gross cost) has consistently been ahead of its industry peers on addition of projects in times of low competitive intensity, capital management, completion of projects ahead of schedule & disciplined bidding thereby providing bandwidth in terms of capital & execution for any attractive opportunities that may come by. We believe the company offers a better risk-reward compared to its peers on aspects like project funding, order-book mix (internal/external), execution capability and working capital management. Its robust EPC potential from internal (road projects) and external (roads, mining & irrigation) orders strengthens our investment thesis. Sadbhav Engineering remains our top pick in the sector. We recommend buy with a price target of ₹ 186.

#### Focus on execution; to achieve COD well ahead

Sadbhav Engineering for the past year and a half has focussed on execution of its 4 BOT road projects won in FY10 & FY11. The management's strategy of concentrating on construction has yielded results with Sadbhav expected to achieve COD 3-6 months ahead of schedule. This not only makes Sadbhav eligible for bonus but also enables it to toll for higher duration to the extent of early completion.

#### Ahead of curve in a dynamic & challenging environment

We like the management's ability to see through the sector dynamics and being a step ahead of its peers in the industry. It is amply demonstrated by the milestones achieved. Better capital management, focus on execution & conservative bidding strategy in recent past has comfortably positioned the company with respect to funding & execution bandwidth.

#### Orderbook concerns weigh down on stock; confident of its 3<sup>rd</sup> party EPC capabilities

As on Dec'11, the order book stands at ₹ 59.4bln. Captive road BOT's order contribute 28%. With execution of captive orders expected to be completed in FY13 & a dismal order inflow in 9M1F12, the EPC growth concerns has weighed down on the stock. We are confident of Sadbhav's 3<sup>rd</sup> party EPC capabilities since the company has EPC capabilities across three segments of Road, Irrigation & Mining.

#### Valuation; Top pick in the sector

With strong EPC capability across multiple sectors & scale, higher capital efficiency and timely completion of its BOT assets Sadbhav Engineering remains our top pick. We maintain Buy with a PT of ₹ 186. We have valued the EPC entity at ₹ 86.1/share on the basis of 9x FY13P earnings whilst the BOT projects contribute ₹ 96.2/share (52%) based on a FCFE approach and one time early completion bonus of ₹ 3.6/share.

#### Summary Financials

₹ in Mln	FY11	FY12P	FY13P	FY14P
Net Sales	23415	28579	30996	38936
OPBDIT	3434	4263	5003	8999
Net Profit	928	1596	1017	1886
EPS	6.2	10.6	6.8	12.6
Networth	8717	12544	13456	15238
Debt	20029	37468	48814	50337
Fixed Assets	24379	42915	54147	53708
Net Current Assets	6291	9029	9980	13831

**Focus on execution; to achieve COD well ahead**

4 out of its 6 under construction BOT projects expected to achieve COD 3-6 months ahead of schedule. Expects bonus of ₹ 0.8bln in FY13

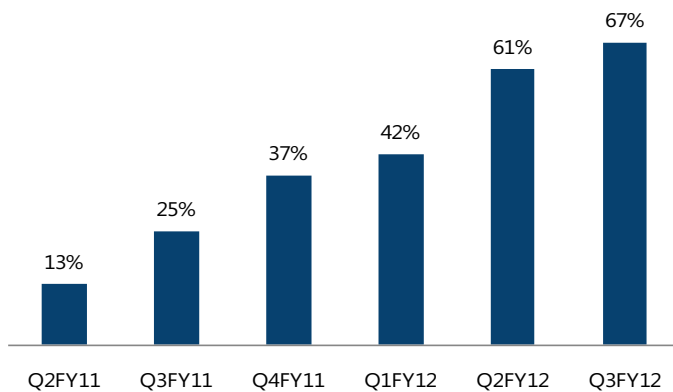
Sadbhav Engineering for the past year and a half has focussed on execution of its 4 BOT road projects won in FY10 & FY11. The management's strategy of concentrating on construction has yielded results with Sadbhav expected to achieve COD 6 months ahead of schedule for Rohtak-Panipat & Bijapur Hungud. While for other NHA1 projects of Hyderabad-Yadigiri & Dhule-Palasner it is expected to achieve COD 3 months ahead of scheduled COD. This not only makes Sadbhav eligible for bonus but also enables it to toll for higher duration to the extent of early completion. Company is expecting bonus to the tune of ₹ 0.8bln in FY13 for early completion of Bijapur Hungud and Dhule Palasner projects. Also, focus on execution has prevented any escalation in project costs. Higher execution rate has supported Sadbhav's EPC revenue CAGR of 13% with stable EBITDA & net profit margins of 10.4% & 5.2% respectively over FY11-14E.

**Exhibit 1: Projects to achieve COD ahead of scheduled time**

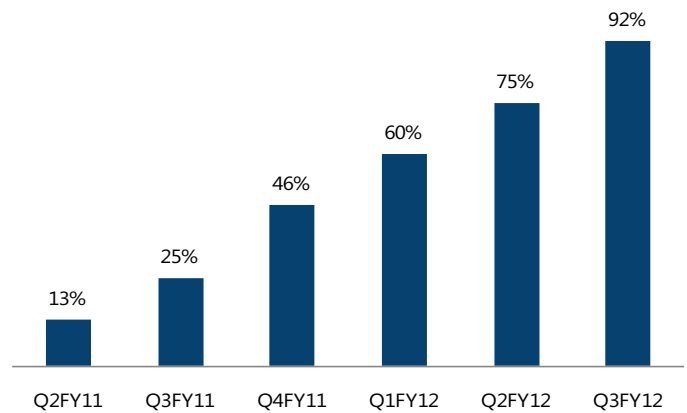
Projects	Appointed Date	Schedule COD	Expected COD
Hyderabad Yadgiri	31 July 2010	10 May 2012	March 2012
Rohtak Panipat	18 April 2011	15 October 2013	March 2013
Bijapur Hungud	5 September 2010	3 March 2013	October 2012
Dhule Palasner	18 December 2009	17 June 2012	March 2012

Source: Company, MSFL Research

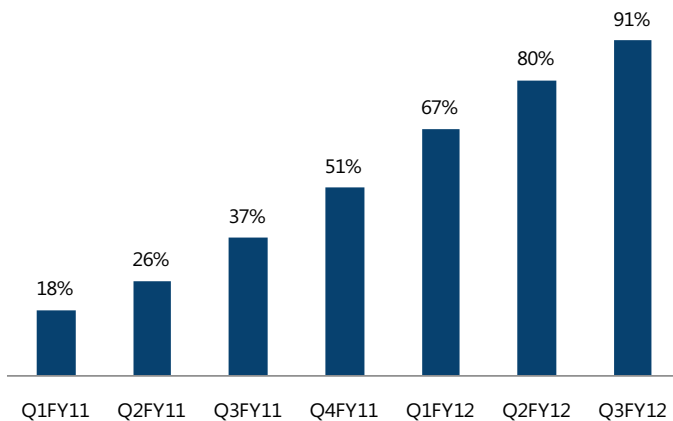
**Exhibit 2: Construction progress - Hyd-Yadgiri**



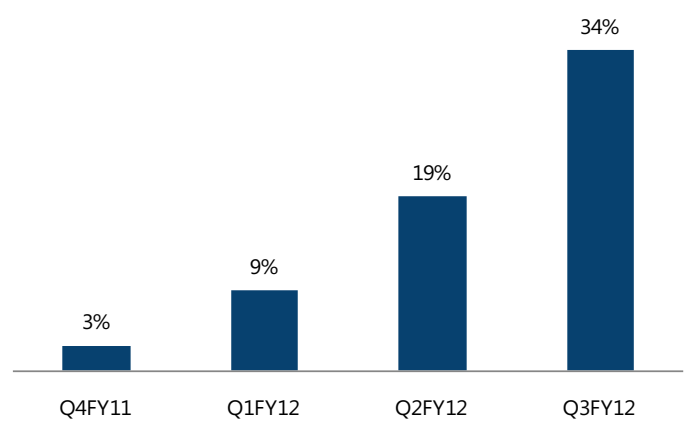
**Exhibit 3: Construction progress - Bijapur-Hungud**



**Exhibit 4: Construction progress - Dhule Palasner**



**Exhibit 5: Construction progress - Rohtak Panipat**



Source: Company, MSFL Research

**Ahead of curve in a dynamic & challenging environment**

We like the management’s ability to see through the sector dynamics/cycle by being a step ahead of its peers in the industry. It is amply demonstrated by the following milestones achieved by the company.

**Exhibit 6: Sadbhav one step ahead of industry peers**

Time Period	Sector state	Sadbhav's milestones
Mar'09 -Mar'10	Pick up in NHAI awards post global meltdown. Awards 3306kms. Competition low due to relatively higher order book for EPC players & higher technical qualification	Bags Hyderabad-Yadigiri (35kms), Rohtak-Panipat (81kms), Bijapur-Hungud (97kms) & Dhule-Palansar (8kms).
Mar'10-Mar'11	Capital formation in economy stagnates. More players attracted to NHAI awards due to improved consistency in policy & awards. Competition increases	Post order wins Sadbhav shifts focus to financing & execution. Launches rights issue of Rs 1250mln & bags PE infusion worth Rs 4bln in BOT holding company thereby securing finances for BOT projects. Achieves more than 30% execution in 1st year of construction
Mar'11-Till date	Competition intensifies resulting in aggressive bidding limiting the project IRRs. PE's get skeptical of project returns	Sadbhav bids conservatively and instead focusses on EPC contracts

Source: MSFL Research

Better capital management, focus on execution & conservative bidding strategy in recent past has comfortably positioned the company with respect to funding & execution bandwidth in a difficult macro environment ready to take advantage of any rebound in the sector fundamentals.

**Equity requirement comfortably placed; sufficient bandwidth for growth**

We estimate Sadbhav's total equity requirement over FY11-15E to be ₹ 8.5bln. PE infusion of ₹ 4bln in Sadbhav Infrastructure Projects Ltd & rights issue of ₹ 1.25bln supports the funding of equity requirement. We expect a shortfall of ₹ 1830mln over FY11-14E. A network of ₹ 6.6bln & no leverage provides SIPL with cushion for funding of any equity requirement in the near term.

**Exhibit 7: Equity commitment over FY11-FY14E**

	FY11	FY12E	FY13E	FY14E	FY15E	Total
<b>Fund requirement</b>	2838	2787	2573	257	0	<b>8455</b>
Maharashtra Border	539	740	899	257	0	<b>2434</b>
Hyderabad Yadgiri	180	420	0	0	0	<b>600</b>
Bijapur Hungud	1055	0	0	0	0	<b>1055</b>
Dhule Palansar	458	498	0	0	0	<b>956</b>
Rohtak Panipat	607	1130	1674	0	0	<b>3411</b>
<b>Sources of funds</b>						<b>6625</b>
SEL Rights issue						<b>1250</b>
SIPL PE fund infusion						<b>4000</b>
Incr. Debt post rights issue						<b>1375</b>
Deficit						<b>(1830)</b>

Source: MSFL Research

Early capital raising resulting in timely execution highlight management ability to stay ahead of the pack

Sufficiently funded for existing commitments. SIPL network of ₹ 6.6bln & further ₹ 2bln funding by Sadbhav provides bandwidth for growth

Only 28% of its orders are from captive BOT projects.

Diversification and prequalification in other segment lends credibility to its ability to win 3<sup>rd</sup> party EPC orders

**Orderbook concerns weigh down on stock; confident of its 3<sup>rd</sup> party EPC capabilities**

As on Dec'11, the company's order book stands at ₹ 59.4bln. The order book is dominated by roads (63%), followed by Irrigation (19%) and Mining (18%). Captive road BOT's order contribute 28% of the total order book. Over FY11-9MFY12 it has recorded an order inflow of ₹ 22.57bln out of which a single road EPC order contributes ₹ 14.1bln. Sadbhav, as on date has submitted bids worth ₹ 43.8bln across the three segments wherein mining is the key segment. With execution of captive orders expected to be completed in FY13 & a dismal order inflow, the EPC growth concerns has weighed down on the stock.

Although in the current macro environment NHAI awards have been the saviour for infrastructure /construction companies. we believe Sadbhav has consciously restrained from bidding aggressively while its peers have been quite aggressive in bagging BOT road projects. We expect this strategy to payoff in the longer term and remain hopeful of order inflow in Q4FY12 & Q1FY13. We are confident of Sadbhav's 3<sup>rd</sup> party EPC capabilities. Our confidence stems from the fact that the company.

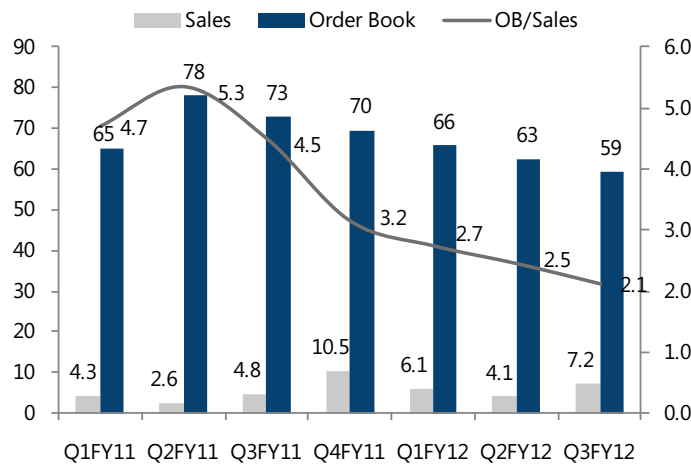
- ✓ Is pursuing opportunities from road developers who have bagged orders but do not have an inhouse EPC capability
- ✓ Has EPC capabilities across three segments of Road, Irrigation & Mining
- ✓ Is actively pursuing JV's for prequalification in DFCC orders

**Exhibit 8: Segmental order book as on Dec 31, 2011**

Sector	Value (₹ bln)
Road	37.2
Mining	10.4
Irrigation	11.8
<b>Total</b>	<b>59.4</b>

Source: Company

**Exhibit 9: Trailing OB/Sales trend**



Source: Company, MSFL Research

**Working capital remains under control**

Unlike its peers Sadbhav's working capital cycle remains well under control at 83 days. Although it has slightly deteriorated by 17 days as compared to that on Mar'11 due to decline in current liabilities, we expect Sadbhav to generate positive cash flows from operations.

One of the few companies in the sector which generate positive CFO in its EPC business

**Exhibit 10: Working Capital Analysis**

<b>Working Capital Analysis (Days)</b>	<b>Dec -11</b>	<b>Sep-11</b>	<b>Sep-10</b>	<b>Mar-11</b>
<b>Current Assets</b>	<b>159</b>	<b>174</b>	<b>301</b>	<b>223</b>
Inventory	12	12	13	11
Sundry Debtors	78	79	129	113
Other Current Assets	3	3	1	1
Loans & Advances	67	80	159	97
<b>Current Liabilities</b>	<b>77</b>	<b>98</b>	<b>224</b>	<b>157</b>
<b>Net Current Assets</b>	<b>83</b>	<b>75</b>	<b>77</b>	<b>66</b>

Source: Company, MSFL Research

Financials

We expect Sadbhav Engg to post 18% & 27% revenue and earnings CAGR over FY11-FY14E. Consolidated EBIDTA margins are expected to increase due to higher revenue contribution from BOT division over FY11-14E. Besides, lesser increase in interest cost will also increase PAT margin in FY14E.

Exhibit 11: Consolidated Revenue growth trend

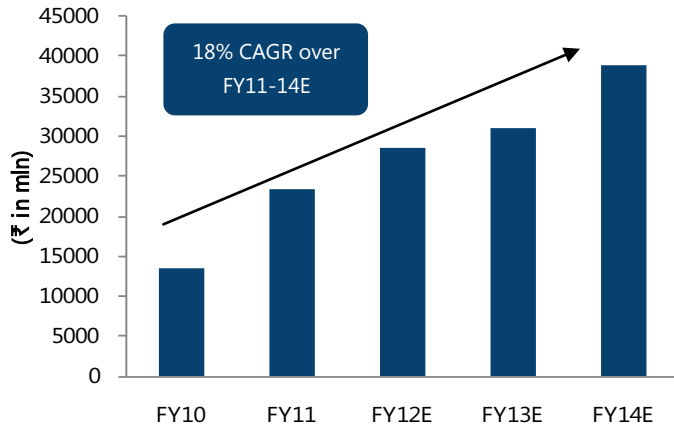


Exhibit 12: EBITDA growth trend

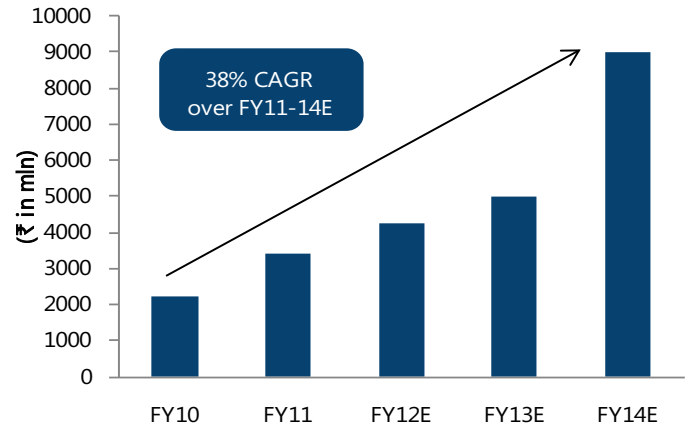


Exhibit 13: Net profit growth trend

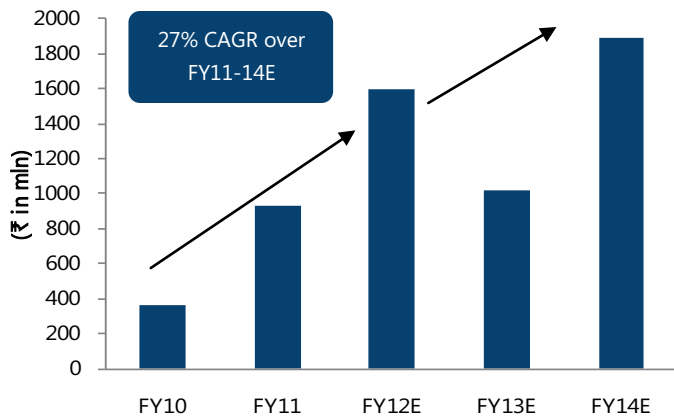


Exhibit 14: Margins under pressure

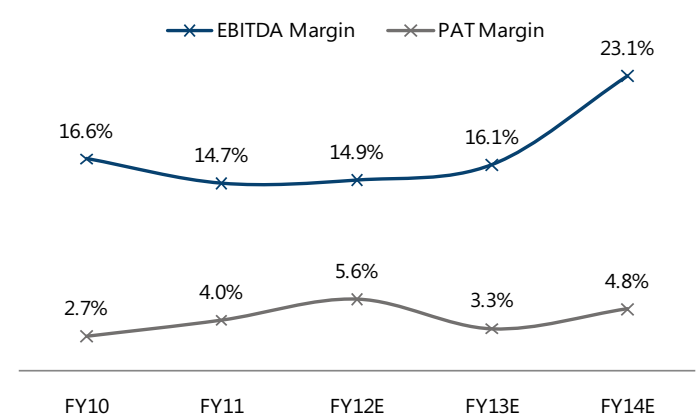


Exhibit 15: Leverage remains high

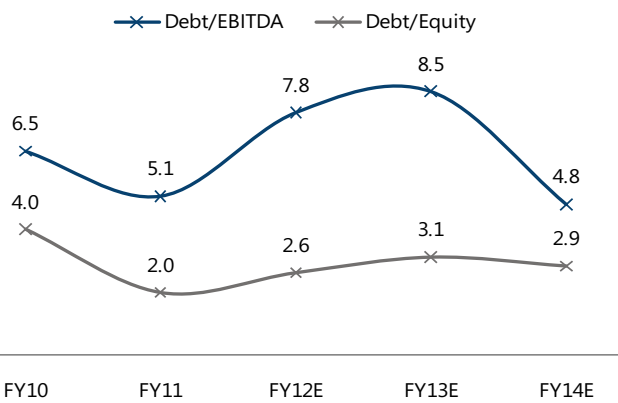
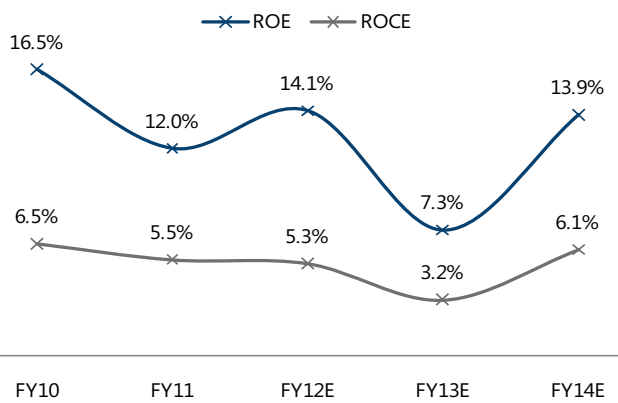


Exhibit 16: Declining return ratios



Source: MSFL Research



## Valuation – Maintain Buy

Positive FCFE from both its BOT & EPC business, strong 3<sup>rd</sup> party EPC presence & de-linking of EPC & BOT businesses makes Sadbhav Engineering our top pick in the sector

With strong EPC capability across multiple sectors & scale, entry in railway EPC works, higher capital efficiency and timely completion of its BOT assets Sadbhav Engineering remains our top pick in the sector. We maintain Buy with a PT of ₹ 186. We have valued the EPC entity at ₹ 86.1/share on the basis of 9x FY13P earnings. Factoring in Sadbhav Engineering's 20% stake dilution in SIPL, the road BOT projects contribute ₹ 96.2/share (52%) to the TP based on a DCF-FCFE approach.

At CMP of ₹ 138 the stock is trading at 13.0 & 20.3x FY12E & FY13E consolidated earnings respectively and 1.6x & 15x FY12E & FY13E consolidated BV respectively while adjusting to its BOT value it is trading at 3.9x FY12E & 6.2x FY13E consolidated earnings.

### Exhibit 17: SOTP - based valuation

Component	Method	Value per Share (₹)
Core entity	9x FY13P EPS	86.1
One time early completion bonus		3.6
Road BOTs	DCF	96.2
<b>Total</b>		<b>185.9</b>

Source: MSFL Research

## Key Risks

### Slower order inflow

The order inflow has been sluggish for Sadbhav Engg during last 12 months. Any further delay in order inflow will lead to a muted earning growth for company in FY13E.

### High competition

Competition in this industry will remain intense. Although, the opportunity is large, with the fragmented nature of industry, the existing and new players will continue to be a source of competition impacting the market share & profitability.

## Financial Summary

## Profit &amp; Loss

Particulars (₹ in mln)	2010	2011	2012P	2013P	2014P
<b>Sales</b>	<b>13387</b>	<b>23415</b>	<b>28579</b>	<b>30996</b>	<b>38936</b>
Total Expenditure	11163	19927	24317	25993	29937
<b>EBIDTA</b>	<b>2224</b>	<b>3434</b>	<b>4263</b>	<b>5003</b>	<b>8999</b>
EBIDTA Margin (%)	16.6%	14.7%	14.9%	16.1%	23.1%
Depreciation	564	789	803	1334	2314
EBIT	1660	2646	3459	3669	6685
Interest Cost	1132	1435	1356	2245	3947
Operating Profit	528	1210	2103	1424	2738
Other Income	199	199	241	419	555
Extraordinary Items	-	-	-	-	-
<b>PBT</b>	<b>726</b>	<b>1409</b>	<b>2344</b>	<b>1843</b>	<b>3293</b>
Tax	459	673	844	900	1301
<b>PAT</b>	<b>268</b>	<b>736</b>	<b>1500</b>	<b>943</b>	<b>1992</b>
PAT Margin (%)	2.0%	3.1%	5.3%	3.0%	5.1%
EPS	2.4	6.2	10.6	6.8	12.6
Minority Interest	-95	-157	-40	-184	22
Profit from Associate	0	0	55	-110	-84
<b>Net Profit</b>	<b>363</b>	<b>928</b>	<b>1596</b>	<b>1017</b>	<b>1886</b>
Sales Growth (%)		74.9%	22.1%	8.5%	25.6%
EBITDA Growth (%)		54.4%	24.1%	17.4%	79.9%
PAT Growth (%)		175.2%	103.8%	-37.2%	111.3%

## Balance Sheet

Particulars (₹ in mln)	2010	2011	2012P	2013P	2014P
<b>Sources of Funds</b>					
Share Capital	125	150	150	150	150
Reserves & Surplus	3480	8567	12394	13306	15088
<b>Net Worth</b>	<b>3605</b>	<b>8717</b>	<b>12544</b>	<b>13456</b>	<b>15238</b>
Secured Loans	12912	17035	36519	47595	48529
Unsecured Loans	1642	830	864	964	993
<b>Total Loans</b>	<b>14554</b>	<b>20029</b>	<b>37468</b>	<b>48814</b>	<b>50337</b>
Minority Interest	583	2017	2033	1849	1871
<b>TOTAL</b>	<b>18883</b>	<b>30924</b>	<b>52206</b>	<b>64281</b>	<b>67607</b>

## Application of Funds

Net Fixed Assets	13001	24379	42915	54147	53708
Investments	864	254	263	153	69
<b>Net Current Assets</b>	<b>5015</b>	<b>6291</b>	<b>9029</b>	<b>9980</b>	<b>13831</b>
Misc Expense not w/o	4	-	-	-	-
<b>TOTAL</b>	<b>18883</b>	<b>30924</b>	<b>52206</b>	<b>64280</b>	<b>67607</b>

**Cash Flows**

Particulars (₹ in mln)	2010	2011	2012P	2013P	2014P
Internal accruals	832	1525	2304	2277	4306
Other adjustments	932	1430	171	-	-
(Inc)/Dec in Net Current Assets	(1090)	(552)	(210)	685	(780)
<b>Cash flow from Operations</b>	<b>674</b>	<b>2403</b>	<b>2265</b>	<b>2961</b>	<b>3526</b>
Inc/(Dec) in Debt	4214	1,956	17439	11346	1523
Inc/(Dec) in Equity	-	5,892	2392	-	-
Dividend & Tax	(105)	(105)	(105)	(105)	(105)
<b>Cash flow from Financing</b>	<b>4109</b>	<b>7743</b>	<b>19726</b>	<b>11242</b>	<b>1418</b>
Fixed Asset formation	(3867)	(9901)	(19339)	(12566)	(1874)
(Inc)/Dec in Investment	(741)	616	(125)	-	-
<b>Cash flow from Investment</b>	<b>(4607)</b>	<b>(9285)</b>	<b>(19464)</b>	<b>(12566)</b>	<b>(1874)</b>
<b>Net Change in Cash</b>	<b>175</b>	<b>860</b>	<b>2527</b>	<b>1637</b>	<b>3070</b>

**Ratios**

Valuation Ratio	2010	2011	2012P	2013P	2014P
P/E	57.0	22.3	13.0	20.3	11.0
P/BV	5.7	2.4	1.6	1.5	1.4
EV/EBIDTA	15.6	11.5	12.7	12.8	6.9
EV/Sales	2.6	1.7	1.9	2.1	1.6
Dividend Yield (%)	0.3%	0.4%	0.4%	0.4%	0.4%
EPS	2.4	6.2	10.6	6.8	12.6
DPS	0.4	0.6	0.6	0.6	0.6
Book Value	24.1	58.2	83.7	89.8	101.7
Adj. ROE	16.5%	12.0%	14.1%	7.3%	13.9%
Adj. ROCE	6.5%	5.5%	5.3%	3.2%	6.1%

**Solvency Ratio (x)**

Debt/Equity	4.0	2.0	2.6	3.1	2.9
Debt/EBIDTA	6.5	5.1	7.8	8.5	4.8

**Turnover Ratio (x)**

Asset Turnover	1.4	0.9	0.7	0.5	0.6
Fixed Asset Turnover	3.0	2.3	2.5	2.4	1.1

Appendix – SPV Credit Ratings

Company	Project	Rating	Rating Agency	Outlook
<b>Ashoka Buildcon</b>				
Ashoka Highways (Durg)Limited	Durg Bypass - Maharashtra border	BBB/Positive	CRISIL	Rating Assigned
Jaora Nayagaon Toll Road Company Private Limited	Jaora – Nayagaon	BBB-	CARE	Rating Assigned
PNG Tollway Private Limited	NH-3 Pimpalgaon – Nashik – Gonde	LBBB-/Stable	ICRA	Rating Reaffirmed
Ashoka Sambalpur-Baragarh Tollway Private Limited	NH-6 Sambalpur-Baragarh	BBB-/Stable	CRISIL	Rating Reaffirmed
Ashoka Highways (Bhandara) Limited	NH-6 Bhandara Road	BBB-(SO)/Stable	CRISIL	Outlook Downgraded
Viva Highways Private Limited	Indore – Edalabad	A+(SO)/Stable	CRISIL	Rating Reaffirmed
Ashoka Infrastructure Limited	Pune – Shirur	A-(SO)/Stable	CRISIL	Outlook Downgraded
Ashoka-DSC Katni Bypass Road Private Limited	Katni Bypass	A-(SO)/Stable	CRISIL	Outlook Downgraded
Ashoka Infraways Private Limited	Dewas Bypass	A-(SO)/Stable	CRISIL	Outlook Downgraded
Jayaswals Ashoka Infrastructure Limited	Wainganga Bridge	A	CARE	Rating Reaffirmed
<b>IL&amp;FS Transportation</b>				
North Karnataka Expressway Ltd	Belgaum to Maharashtra border	AAA(SO)/Stable	CRISIL	Rating Assigned
West Gujarat Expressway Ltd	Jetpur–Gondal	BBB-	CARE	Rating Reaffirmed
NOIDA Toll Bridge Company Limited	Delhi to NOIDA	A	CARE	Rating Upgraded
Gujarat Road and Infrastructure Company Limited	Vadodra-Halol and Ahmedabad-Mehsana	BBB-	CARE	Rating Reaffirmed
Thiruvananthapuram Road Development Company Ltd	Thiruvananthapuram City Roads (Phase I)	BBB(SO)	CARE	Rating Reaffirmed
Andhra Pradesh Expressway Limited	Kotakatta - Kurnool	BBB	CARE	Rating Reaffirmed
Rajasthan Infrastructure Development Company of Rajasthan Limited		BBB-	CARE	Rating Reaffirmed
ITNL Road Infrastructure Development Company Limited	Beawar Gomti Road	BBB	CARE	Rating Upgraded
Hazaribagh Ranchi Expressway Limited	Hazaribagh - Ranchi Road	BBB	CARE	Rating Reaffirmed
Moradabad Bareilly Expressway Limited	Moradabad Bareilly Road	BBB-	CARE	Rating Reaffirmed
Jorabat Shillong Expressway Limited	Jorabat-Shillong	BBB+(ind)/Stable	FITCH	Rating Assigned
Chenani Nashri Tunnelway Limited	Chenani to Nashri	BBB+(ind)/Stable	FITCH	Rating Assigned
<b>IRB Infra</b>				
SPV	Projects	Rating	Agency	Rating Action
Mhaiskar Infrastructure Private Limited	Mumbai Pune	AA- (ind)/stable	FITCH	Rating Upgraded
IDAA Infrastructure Private Limited	Bharuch Surat	BBB-(ind)/stable	FITCH	Outlook Downgraded

IRB Surat Dahisar Tollway Private Limited	Surat to Dahisar	BBB-(ind)/stable	FITCH	Rating Assigned
IRB Kolhapur Integrated Road Development Company Pvt. Ltd	Kolhapur City	A- (ind) SO /stable	FITCH	Rating Assigned
IRB Jaipur Deoli Tollway Private Limited	Jaipur to Deoli	BBB-(ind) /stable	FITCH	Rating Assigned
IRB Pathankot Amritsar Toll Road Private Limited	Pathankot to Amritsar	BBB-(ind)/Stable	FITCH	Rating Assigned
IRB Talegaon Amravati Tollway Private Limited	Talegaon - Amravati	BBB-(ind)/Stable	FITCH	Rating Assigned

**Sadbhav Engg**

Ahmedabad ring road infrastructure limited	Ahmedabad Ring Road	A	CARE	Rating Reaffirmed
Aurangabad Jalana Tollway limited	Aurangabad-Jalna	BBB-	CARE	Rating Assigned
Hyderabad Yadgiri Tollway private limited	Hyderabad- Yadgiri Section	BBB-	CARE	Rating Assigned
Bijapur Hungund Tollway private limited	Bijapur – Hungund	BBB-(ind)/Stable	FITCH	Rating Assigned
Maharashtra border check post network limited	Maharashtra border check post at 22 locations	BBB-	CARE	Rating Reaffirmed
Rohtak-panipat tollway private limited	Rohtak-Panipat	BBB-(ind)/Stable	FITCH	Rating Assigned
Dhule Palesner Tollway limited	MP/ Maharashtra Border-Dhule section	BBB	CARE	Rating Reaffirmed
Mumbai-Nasik Expressway Limited	Vadape-Gonde	BBB+	CARE	Rating Assigned

**MSFL Disclaimer:**

All information/opinion contained/expressed herein above by MSFL has been based upon information available to the public and the sources, we believe, to be reliable, but we do not make any representation or warranty as to its accuracy, completeness or correctness. Neither MSFL nor any of its employees shall be in any way responsible for the contents. Opinions expressed are subject to change without notice. This document does not have regard to the specific investment objectives, financial situation and the particular needs of any specific person who may receive this document. This document is for the information of the addressees only and is not to be taken in substitution for the exercise of judgement by the addressees. All information contained herein above must be construed solely as statements of opinion of MSFL at a particular point of time based on the information as mentioned above and MSFL shall not be liable for any losses incurred by users from any use of this publication or its contents.

**Analyst declaration**

We, **Rahul Metkar & Ashish Kumar**, hereby certify that the views expressed in this report are purely our views taken in an unbiased manner out of information available to the public and believing it to be reliable. No part of our compensation is or was or in future will be linked to specific view/s or recommendation(s) expressed by us in this research report. All the views expressed herewith are our personal views on all the aspects covered in this report.

**MSFL Investment Rating**

The ratings below have been prescribed on a potential returns basis with a timeline of up to 12 months. At times, the same may fall out of the price range due to market price movements and/or volatility in the short term. The same shall be reviewed from time to time by MSFL. The addressee(s) decision to buy or sell a security should be based upon his/her personal investment objectives and should be made only after evaluating the stocks' expected performance and associated risks.

**Key ratings:**

Rating	Expected Return
Buy	> 15%
Accumulate	5 to 15%
Hold	-5 to 5%
Sell	< -5%
Not Rated	-

**Marwadi Shares & Finance Limited**

**Institutional Business Group, MSFL**  
 @p-sec, 306, Gresham Assurance House  
 132, Mint Road, Fort, Mumbai - 400 001  
 Tel : + 91 22 30947100 / 102 Fax : +91 22 2269 0478

**Registered Office**  
 Marwadi Financial Plaza, Nava Mava Main Road,  
 Off 150 FT. Ring Road, Rajkot - 360 005  
 Tel : + 91 281 2481313 / 3011000