

### A rare find on strong execution capability

Well placed to ride infra capex on strong execution and industry-leading profitability

**Action: Initiate with Buy; our TP of INR587 implies 43% potential upside**

Dilip Buildcon (DBL) is one of India's leading construction companies, with strong in-house execution capability and disciplined adherence to process-based work flow and monitoring. With a fleet comprising 8,200+ pieces of equipment and 24,000+ employees, it is arguably the largest domestic construction executor. Despite the ~75% stock price rally since its IPO in August 2016, we estimate another 43% upside, on the back of:

- **Industry-leading EBITDA margins at 18-20%** (vs peers at 8-10%) despite a strong 7-8% share of all NHAI (National Highways Authority of India) orders in FY15-17. EBITDA margins should remain at this level through DBL's adherence to robust contract management, project monitoring, equipment ownership, cluster-based execution, and in-house construction practices.
- **Strong financials:** With an order backlog of INR180bn, DBL has a book: bill of 2.9x. We expect DBL to win INR314bn of orders over FY17-19F, thus driving 22% revenue and ~40% PAT CAGRs over the period. With our estimated ROE of 20.7% and D/E of <1x by FY19F, DBL is one of the few companies in India's construction sector to offer such financial metrics.

**Catalysts: Increased order wins, reduction in WC and BOT monetisation**

The gradual receipt of disputed receivables from private clients, a shift towards government orders driving working capital (WC) improvement, and monetisation of its operational BOT (build-operate-transfer) asset portfolio are key stock triggers, in our view.

**Valuation: Trades at 11.3x FY19F EPS of INR36.3; initiate at Buy**

Given its strong profitability and balance sheet, together with our estimated 40% EPS CAGR over FY17-19F, we value DBL's EPC business at 15x FY19F EPS of INR36.3 (in line with the peer trading average of 15x despite a much superior financial profile). Together with INR43/sh value for its BOT portfolio (at 1x BV), we arrive at our TP of INR587, which implies 43% potential upside.

**Key risks:** aggressive competition, deterioration in WC and debt metrics.

Year-end 31 Mar	FY16		FY17F		FY18F		FY19F	
Currency (INR)	Actual	Old	New	Old	New	Old	New	
<b>Revenue (mn)</b>	40,853		50,511		62,943		74,665	
<b>Reported net profit (mn)</b>	2,199		2,566		3,504		4,964	
<b>Normalised net profit (mn)</b>	2,199		2,566		3,504		4,964	
<b>FD normalised EPS</b>	16.08		18.76		25.62		36.30	
<b>FD norm. EPS growth (%)</b>	50.8		16.7		36.6		41.7	
<b>FD normalised P/E (x)</b>	25.6	N/A	21.9	N/A	16.0	N/A	11.3	
<b>EV/EBITDA (x)</b>	10.0	N/A	8.8	N/A	6.9	N/A	5.6	
<b>Price/book (x)</b>	5.1	N/A	3.1	N/A	2.6	N/A	2.1	
<b>Dividend yield (%)</b>	0.0	N/A	0.0	N/A	0.0	N/A	0.0	
<b>ROE (%)</b>	22.4		17.8		17.8		20.7	
<b>Net debt/equity (%)</b>	220.4		134.2		107.6		75.2	

Source: Company data, Nomura estimates

Key company data: See next page for company data and detailed price/index chart.

### Global Markets Research

22 April 2017

<b>Rating</b> Starts at	<b>Buy</b>
<b>Target Price</b> Starts at	INR 587
<b>Closing price</b> 21 April 2017	INR 411
<b>Potential upside</b>	+42.9%

### Anchor themes

Public infrastructure spending and the boost from reforms should lead to a revival in the road sector. With its focus on early execution and completion, we think DBL's higher margin profile is well placed to benefit from emerging opportunities.

### Nomura vs consensus

Our TP is significantly ahead of the Street. We note that the stock is not well covered.

### Research analysts

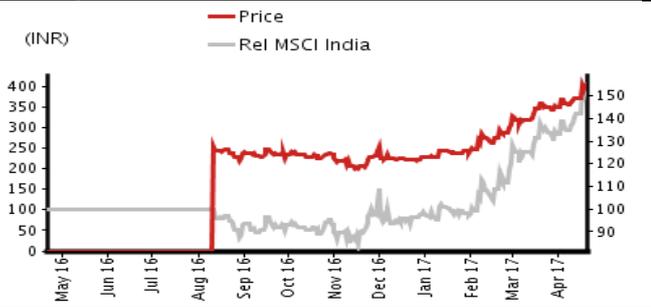
India Engineering & Construction

**Amar Kedia - NFASL**  
amar.kedia@nomura.com  
+91 22 4037 4182

**Priyankar Biswas - NFASL**  
priyankar.biswas@nomura.com  
+91 22 4037 4992

# Key data on Dilip Buildcon Ltd

## Relative performance chart



Source: Thomson Reuters, Nomura research

## Notes:

## Performance

(%)	1M	3M	12M		
Absolute (INR)	14.9	74.0		M cap (USDm)	869.7
Absolute (USD)	16.1	83.3		Free float (%)	24.4
Rel to MSCI India	15.6	66.5		3-mth ADT (USDm)	1.4

## Income statement (INRmn)

Year-end 31 Mar	FY15	FY16	FY17F	FY18F	FY19F
Revenue	26,241	40,853	50,511	62,943	74,665
Cost of goods sold	-19,325	-30,170	-37,884	-47,207	-55,999
Gross profit	6,916	10,683	12,628	15,736	18,666
SG&A	-2,077	-3,813	-4,587	-5,484	-6,231
Employee share expense	-363	-713	-1,010	-1,259	-1,493
Operating profit	4,476	6,158	7,031	8,992	10,942
EBITDA	5,655	7,992	9,172	11,429	13,558
Depreciation	-1,179	-1,835	-2,141	-2,437	-2,615
Amortisation					
EBIT	4,476	6,158	7,031	8,992	10,942
Net interest expense	-2,587	-3,805	-4,110	-4,383	-4,381
Associates & JCEs					
Other income	60	154	97	63	58
Earnings before tax	1,949	2,507	3,018	4,672	6,619
Income tax	-491	-308	-453	-1,168	-1,655
Net profit after tax	1,458	2,199	2,566	3,504	4,964
Minority interests					
Other items					
Preferred dividends					
Normalised NPAT	1,458	2,199	2,566	3,504	4,964
Extraordinary items					
Reported NPAT	1,458	2,199	2,566	3,504	4,964
Dividends	-12	-7	-8	-11	-16
Transfer to reserves	1,446	2,192	2,557	3,493	4,948

## Valuations and ratios

Reported P/E (x)	38.5	25.6	21.9	16.0	11.3
Normalised P/E (x)	38.5	25.6	21.9	16.0	11.3
FD normalised P/E (x)	38.5	25.6	21.9	16.0	11.3
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Price/cashflow (x)	25.5	13.2	10.8	6.7	5.2
Price/book (x)	6.4	5.1	3.1	2.6	2.1
EV/EBITDA (x)	13.4	10.0	8.8	6.9	5.6
EV/EBIT (x)	16.9	13.0	11.4	8.8	7.0
Gross margin (%)	26.4	26.2	25.0	25.0	25.0
EBITDA margin (%)	21.6	19.6	18.2	18.2	18.2
EBIT margin (%)	17.1	15.1	13.9	14.3	14.7
Net margin (%)	5.6	5.4	5.1	5.6	6.6
Effective tax rate (%)	25.2	12.3	15.0	25.0	25.0
Dividend payout (%)	0.8	0.3	0.3	0.3	0.3
ROE (%)	na	22.4	17.8	17.8	20.7
ROA (pretax %)	na	12.9	12.2	13.6	15.1

## Growth (%)

Revenue	55.7	23.6	24.6	18.6
EBITDA	41.3	14.8	24.6	18.6
Normalised EPS	50.8	16.7	36.6	41.7
Normalised FDEPS	50.8	16.7	36.6	41.7

Source: Company data, Nomura estimates

## Cashflow statement (INRmn)

Year-end 31 Mar	FY15	FY16	FY17F	FY18F	FY19F
EBITDA	5,655	7,992	9,172	11,429	13,558
Change in working capital	-2,895	-5,612	-3,714	-1,774	-1,095
Other operating cashflow	-557	1,885	-256	-1,236	-1,719
Cashflow from operations	2,203	4,265	5,201	8,419	10,744
Capital expenditure	-10,416	-4,503	-4,119	-1,688	-1,778
Free cashflow	-8,213	-238	1,083	6,731	8,965
Reduction in investments	-959	-109	-1,609	-1,382	-1,382
Net acquisitions					
Dec in other LT assets					
Inc in other LT liabilities					
Adjustments	3,764	391	97	63	58
CF after investing acts	-5,407	44	-429	5,412	7,642
Cash dividends	-12	-7	-8	-11	-16
Equity issue	0	0	4,496	0	0
Debt issue	3,379	-3,026	-3,271	-4,383	-4,881
Convertible debt issue					
Others	3,714	1,707	259	-1,060	-3,000
CF from financial acts	7,081	-1,327	1,476	-5,455	-7,897
Net cashflow	1,674	-1,283	1,047	-42	-255
Beginning cash	668	2,342	1,059	2,106	2,064
Ending cash	2,342	1,059	2,106	2,064	1,809
Ending net debt	19,528	24,079	24,130	23,112	19,867

## Balance sheet (INRmn)

As at 31 Mar	FY15	FY16	FY17F	FY18F	FY19F
Cash & equivalents	2,342	1,059	2,106	2,064	1,809
Marketable securities					
Accounts receivable	12,636	12,103	13,839	16,382	18,411
Inventories	9,476	15,803	17,298	19,831	22,502
Other current assets	2,653	4,440	6,990	6,990	6,990
Total current assets	27,107	33,406	40,233	45,268	49,711
LT investments	2,789	2,898	4,507	5,889	7,270
Fixed assets	11,890	14,204	16,182	15,433	14,596
Goodwill	0	0	0	0	0
Other intangible assets					
Other LT assets	3,765	2,831	4,018	5,007	5,940
Total assets	45,551	53,339	64,940	71,597	77,517
Short-term debt	16,407	17,972	19,805	18,745	15,245
Accounts payable	8,278	10,232	10,898	12,934	15,342
Other current liabilities	3,736	3,751	5,151	6,418	7,614
Total current liabilities	28,421	31,955	35,854	38,097	38,201
Long-term debt	5,463	7,167	6,431	6,431	6,431
Convertible debt					
Other LT liabilities	2,938	3,293	4,677	5,598	6,466
Total liabilities	36,822	42,414	46,962	50,125	51,097
Minority interest					
Preferred stock					
Common stock	1,171	1,171	1,368	1,368	1,368
Retained earnings	7,558	9,754	16,611	20,104	25,052
Proposed dividends					
Other equity and reserves					
Total shareholders' equity	8,730	10,925	17,979	21,471	26,420
Total equity & liabilities	45,551	53,339	64,940	71,597	77,517

## Liquidity (x)

Current ratio	0.95	1.05	1.12	1.19	1.30
Interest cover	1.7	1.6	1.7	2.1	2.5

## Leverage

Net debt/EBITDA (x)	3.45	3.01	2.63	2.02	1.47
Net debt/equity (%)	223.7	220.4	134.2	107.6	75.2

## Per share

Reported EPS (INR)	10.66	16.08	18.76	25.62	36.30
Norm EPS (INR)	10.66	16.08	18.76	25.62	36.30
FD norm EPS (INR)	10.66	16.08	18.76	25.62	36.30
BVPS (INR)	63.83	79.88	131.45	156.99	193.17
DPS (INR)	0.08	0.05	0.06	0.08	0.12

## Activity (days)

Days receivable		110.8	93.7	87.6	85.0
Days inventory		153.3	159.5	143.5	138.0
Days payable		112.3	101.8	92.1	92.2
Cash cycle	0.0	151.9	151.4	139.0	130.9

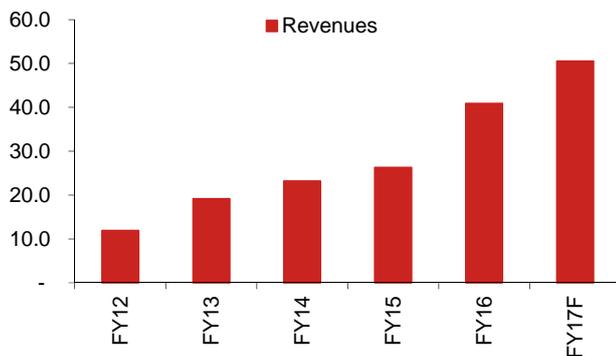
Source: Company data, Nomura estimates

# Company background

## DBL: From a local regional contractor to a national player

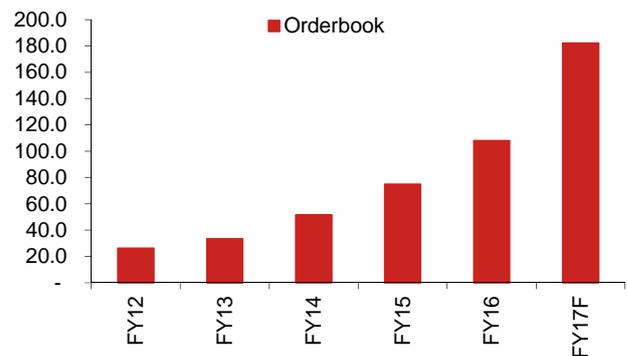
DBL is a leading domestic private sector road-focused EPC (engineering, procurement and construction) contractor. The company was incorporated in 2006 as a local contractor in Madhya Pradesh (MP). Since then, it has successfully grown from a regional player to a significant player at the national level. This is evident from Fig. 1 and Fig. 2, which highlight the company's steady sales and order book growth.

**Fig. 1: DBL has witnessed significant revenue growth...**  
(INR bn)



Source: Company data

**Fig. 2: ...and a significant rise in its order book**  
(INR bn)



Source: Company data

### DBL's unique business model has been the key driver of its success

DBL has been able to script its success story by developing a robust business model. We briefly highlight the key aspects of this model, and discuss the same in detail later.

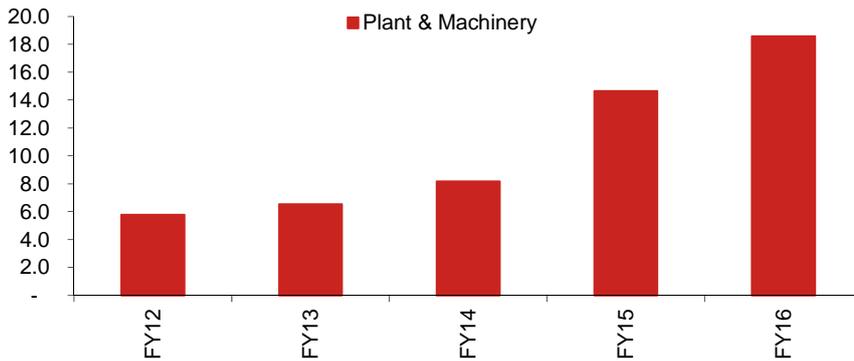
#### Project selection and management

DBL employs a relatively large team of in-house project managers, compared with its peers. The team assesses projects to be bid based on their potential for clustering with existing projects, level of land acquisition as well as regulatory and environmental clearances. Even during project execution, the intensity of project supervision is very high as we observed during our site visits in March 2017]. Management has robust systems and controls in place that enable it to monitor the progress against every milestone and take remedial measures accordingly.

#### Ownership of equipment leads to reliable execution

Arguably, DBL maintains the largest equipment fleet in the domestic industry, with equipment count in excess of 8,200 as of June 2016. Its equipment ownership and that too of a similar make across its sites allows for easier training of personnel, efficient in-house maintenance as well as the ability to negotiate discounts on bulk purchases. Further, asset ownership and in-house maintenance ensures higher availability of machinery across various project sites which aid in speedier project execution.

**Fig. 3: DBL has, over the years, spent significantly on equipment ownership**  
(INR bn)



Source: Company data, Nomura research

Hire and lease model of equipment, while it decreases initial capital outlay, leads to uncertainty regarding equipment availability, which can ultimately affect the progress of projects in several cases.

#### **All activities in-house, with minimal or no sub-contracting, saves on margins and increases reliability of execution**

DBL conducts all its activities and manufacturing in-house. This leads to increased headcount, which presently exceeds 20,000; however, this also leads to savings on margins through minimal or no sub-contracting. In addition to reducing margins loss, this can also lead to increased reliability in project execution.

Many of its peers employ extensive sub-contracting. This leads to loss of some control on the project outcome, in the form of quality of execution and timeliness, besides loss of incremental margins that accrue with in-house activities.

#### **Clustering and relatively smaller project size reduces project-specific risks**

DBL usually bids for projects with potential for project clustering. Projects bid by DBL, on average, have a ticket size of ~INR2.5bn, and with 50+ road projects, project-specific risks are diversified. Thus, within a cluster, while one project may get stuck due to certain reasons, it would not translate into idling of equipment or manpower as these can be transferred to another nearby project. This ensures optimal utilisation of manpower and machinery. Clustering of projects also allows the company to bid lower than competitors in the tenders, because with equipment and manpower already mobilised nearby, a substantial portion of mobilization-related costs are saved.

Clustering has also enabled DBL to diversify into irrigation, urban infrastructure and mining. These opportunities are pursued only when they are located near pre-existing clusters which leads to relatively low capital commitments for the company.

#### **Centralised procurement**

The company follows a policy of central procurement of raw materials for its projects as well as equipment. Such bulk purchases of raw materials lead to inventory stockpiling and also results in cost savings, which we estimate at 70-100bp of sales. Bulk procurement often leads to additional discounts, which forms the basis of savings.

Based on its robust business model, the company has been able to successfully bid for projects at more competitive prices, while also maintaining higher margins than its peers. This had led to DBL's growth.

## **Key operating segments**

DBL has traditionally been a road contractor, with roads accounting for the bulk of revenue over the past five years. The company has, of late, also focused on opportunistic growth in irrigation, urban infrastructure and more recently into mining. Accordingly, its business has been segregated into: 1) road construction; 2) irrigation; 3) urban infrastructure; and 4) mining.

### 1) Road construction

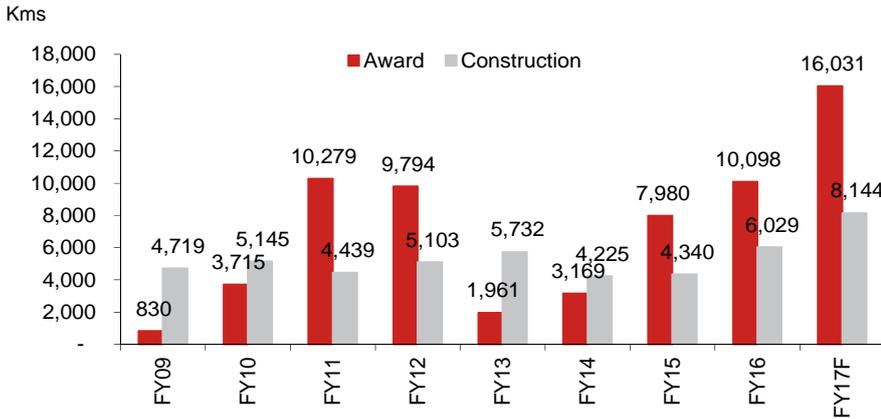
The company is primarily engaged in the road construction business. Projects that are part of road construction can be broadly classified as: Engineering, Procurement and Construction (EPC) and Build Operate and Transfer (BOT) projects.

#### Road construction presents huge opportunities as Government pushes for infrastructure development

The Governments both at the centre and states have increased the focus on infrastructure development as a result there has been a concerted push towards road development. Recently the awarding of road projects have increased to 16,000+ kms for FY17 and construction is at a record high of 8144kms, according to MORTH. The pace is expected to accelerate further with Central government expanding its spending by 3.0-3.5x over the next five years compared to the preceding five years while State governments will likely expand the spending by ~2x over the same period.

Recent reforms by the Central Government also reduce the risks of projects getting stalled or stuck as was happening earlier. Towards this end the Government has decided to award road construction projects only when 80% or more of the land has been acquired and regulatory and environmental clearances are in place. Further, relaxation of exit clauses for road asset owners and the decision to release 75% of amounts awarded through arbitration are some of the steps that will likely lead to ease of doing business for the sector.

**Fig. 4: Awards and construction of national highways have increased significantly**



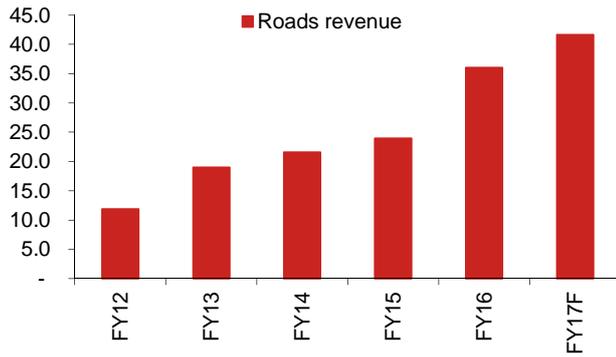
Source: MORTH

#### EPC road projects

The company largely focuses on EPC projects in road construction, as it does not entail the contractor taking traffic risk as well as financing risks. Through a more competitive cost structure, DBL has been able to bid slightly lower than competition, resulting in significant growth in its orderbook for road projects (Fig. 6). Superior execution capabilities vs peers as a result of homogenous equipment ownership and in-house execution has led to significant growth in profit from EPC road projects.

**Fig. 5: Strong execution capability has led to increased road revenue**

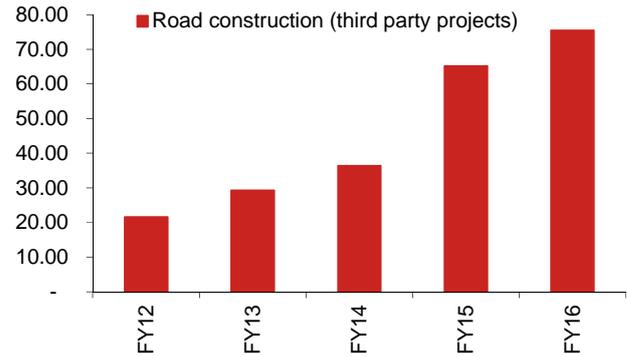
(INR bn)



Source: Company data, Nomura research

**Fig. 6: DBL's EPC road orderbook has grown significantly from third parties**

(INR bn)



Source: Company data, Nomura research

Below, Fig. 7 highlights DBL's key EPC projects (including the Zuari Bridge order in Goa). With a cumulative outstanding order book of ~INR50bn, these projects comprise 66% of road construction projects from third-parties. In addition, completion dates of these projects are targeted for before end-FY19, and would likely account for bulk of DBL's revenue over FY17-19F.

**Fig. 7: Key outstanding EPC projects for DBL**

(INR mn for order book)

Project name	Type	Contract value	Outstandi ng O/B	Length (kms)	LOA DATE	Date of Start	Schedule Date of Completion
Vijayawada–Machilipatnam	Roads	7,407.0	7,407.0	64.6	Jan-16	Jun-16	Jun-18
Mahulia-Baharagora	Roads	6,741.0	6,741.0	71.6	Feb-16	Sep-16	Jun-18
Ghaghra Bridge to Varanasi	Roads	6,743.4	6,512.3	58.6	Mar-15	Dec-15	Jun-18
Chichra Kharagpur	Roads	6,130.8	6,130.8	55.5	Sep-16	Dec-16	Jun-19
ZUARI BRIDGE -(PACKAGE I )	Roads	4,401.0	4,250.5	-	Apr-16	Jun-16	Dec-18
Ambala –Kaithal Section of NH-65	Roads	4,577.0	4,108.9	50.9	Mar-15	Dec-15	Jun-18
ZUARI BRIDGE -(PACKAGE III )	Roads	4,176.0	4,025.9	-	Apr-16	Jun-16	Dec-18
Gwalior - Shivpuri	Roads	9,629.9	3,708.1	125.3	Feb-12	Aug-15	Sep-17
Eppurpalem	Roads	3,500.1	3,500.1	57.9	Sep-16	Dec-16	Dec-18
Allahabad to UP/MP Border	Roads	4,000.5	3,297.1	41.7	Aug-15	May-16	Jan-18

Source: Company, Nomura research

### DBL's BOT assets are largely annuity based and will be relatively easier to monetise

DBL has a large portfolio of 13 operational BOT assets and eight projects under construction as highlighted in Fig. 8. Almost the entire portfolio (with one exception) has some annuity component which provides revenue visibility for these assets. In addition, under-construction BOT projects also provide EPC opportunities for the company. As per management, DBL intends to monetise these assets either through a stake sale or complete divestment, we believe it is taking up these projects to provide EPC revenues.

We also note that participating in BOT projects is not the mainstay of the company. In fact, BOT projects are taken up in an opportunistic manner if the projects are deemed by management to have the potential to be clustered or are located close to any pre-existing cluster. This, in turn, reduces the company's need for capital investment in equipment for these projects.

In this regard, DBL has already executed an MOU with Shrem Infraventure Pvt Ltd (unlisted), according to which the investor will invest 49% equity capital in the Tujjapur AUSA Project which the company has been awarded recently under the Hybrid Annuity (HAM) mode (NPV of project is INR17.8bn). Further, with completion of two years from COD (Commercial Operation Date), the investor will acquire the balance of 51% from DBL and will be the owner.

We expect DBL will attempt to enter similar deals with other investors for its BOT projects, at least at the level of equity capital invested or higher. Further, with almost the entire portfolio under annuity coverage, the projects could possibly command higher valuations than the equity capital invested.

**Fig. 8: BOT project portfolio for DBL – mostly annuity projects, thus providing a highly visible revenue stream over the next 10-15 years**

(INR mn)

Project name	Type	State	Awarding authority	COD	Length (kms)	Capital invested	Annuity	Total Project cost
Suryavanshi Infrastructure Pvt Ltd	Toll	Madhya Pradesh	MPRDC	5-Feb-09	44.0	13.7	-	28.95
DBL Betul Sarni Tollways Ltd	Annuity + Toll	Madhya Pradesh	MPRDC	12-May-15	124.0	81.0	310.0	324
DBL Nadia Modasa Tollways Ltd	Annuity	Gujarat	R&BD GoG	31-Dec-13	108.0	57.2	349.0	207.22
DBL Mundi-Sanawad Tollways Ltd, Bhopal (M.P.)	Annuity + Toll	Madhya Pradesh	MPRDC	15-May-13	68.0	37.5	166.0	140.53
DBL Jaora-Sailana Tollways Ltd	Annuity	Madhya Pradesh	MPRDC	9-May-14	88.0	41.0	241.0	136
DBL Silwani -Sultanganj Tollways Ltd, Bhopal (M.P.)	Annuity + Toll	Madhya Pradesh	MPRDC	25-Mar-13	76.0	36.2	190.0	134.18
DBL Bankhalfata-Dogawa Tollways Ltd	Annuity	Madhya Pradesh	MPRDC	31-Mar-14	65.0	31.7	198.0	117.71
DBL Uchera-Nagod Tollways Ltd	Annuity + Toll	Madhya Pradesh	MPRDC	15-May-14	56.0	35.8	169.0	115.84
DBL Sarsarpur -Bandawar Tollways Ltd	Annuity + Toll	Madhya Pradesh	MPRDC	9-Jun-12	43.0	26.8	94.0	96.78
DBL Ashoknagar-Vidisha Tollways Ltd	Annuity + Toll	Madhya Pradesh	MPRDC	26-Jul-14	36.0	22.7	101.0	88.7
DBL Sitamau -Suwasara Tollways Ltd, Bhopal	Annuity + Toll	Madhya Pradesh	MPRDC	28-Mar-13	35.0	18.2	74.0	65.22
DBL Tikamgarh Nowgaon Tollways Ltd	Annuity + Toll	Madhya Pradesh	MPRDC	26-May-15	76.0	33.0	178.0	130.02
DBL Hata- Dargawon Tollways Ltd	Annuity + Toll	Madhya Pradesh	MPRDC	6-Mar-17	64.4	27.1	140.4	101.09
Jalpa Devi Tollways Ltd	Toll	Madhya Pradesh	NHAI	Awaited	93.5	220.0	-	901
DBL Patan-Rehli Tollways Ltd	Annuity + Toll	Madhya Pradesh	MPRDC	Awaited	86.6	66.8	352.8	261.8
DBL Mundargi Harapanahalli Tollways Ltd	Hybrid	Karnataka	KRDC	Awaited	51.2	29.3	354.6	178.96
DBL Hassan Periyapatna Tollways Ltd	Hybrid	Karnataka	KRDC	Awaited	73.7	36.2	392.4	254.61
DBL Hirekerur Ranibennur Tollways Ltd	Hybrid	Karnataka	KRDC	Awaited	55.7	32.1	525.6	198.44
DBL Lucknow Sultanpur Highways Ltd	Hybrid	Uttar Pradesh	NHAI	Awaited	127.4	284.6	156.7	2016
DBL Kalmath- Zarap Highways Ltd	Hybrid	Maharashtra	MORTH	Awaited	43.9	80.5	76.7	780.81
DBL Tuliapur Ausa Highways Ltd	Hybrid	Maharashtra	NHAI	Awaited	67.4		75.5	

Source: Company data, Nomura research

## 2) Irrigation projects

The company ventured into irrigation from FY14. These projects have been taken in DBL's home state of Madhya Pradesh (MP) to take advantage of clustering. As per management, no further investment in equipment bank is necessary as the existing equipment will be used from its existing clusters. Thus, there is convenient movement of manpower, machinery and materials to the work sites, thereby enabling the execution of such projects in a cost-effective manner. Fig. 9 highlights the present order book from irrigation.

**Fig. 9: Irrigation order book DBL**

(INR mn)

Project name	Type	Contract value	Outstanding O/B	LOA DATE	Date of Start	Schedule Date of Completion
Kundalia Major Multipurpose	Irrigation	2,700.0	1,790.3	Apr-15	May-15	May-19
Mohanpura Major Multipurpose Project	Irrigation	4,158.7	572.7	Mar-14	Mar-14	Mar-18

Source: Company data, Nomura research

**3) Urban development**

DBL diversified into urban development in FY13, with a focus on state government orders in MP. Similar to irrigation, this segment does not require additional capital investment on equipment, as the existing equipment from neighbouring clusters is used. Key projects in the order book are shown in Fig. 10 below.

DBL is also undertaking the redevelopment and re-densification of a government housing project in Bhopal (MP). The project comprises the construction of 460 housing units, and a senior citizens' home, which DBL will undertake at its cost over 5.17 hectares of land. In return, DBL will be leased 5.04 ha of land by the government consisting of various independent land parcels for a period of 30 years, which can be extended to 90 years. Such compensatory land parcels can be developed for private housing and commercial use, and can be sub-leased by DBL.

**Fig. 10: Urban development orderbook**

(INR mn)

Project name	Type	Contract value	Outstanding O/B	LOA DATE	Date of Start	Schedule Date of Completion
DISTRICT COURT	Urban Dev	1,890.2	1,871.4	Jan-16	Mar-16	Sep-18
896 EWS AND 1080 LIG GRAM BARRAI PHASE-I	Urban Dev	1,763.4	257.0	Sep-13	Sep-13	Dec-14
MARDANPUR GROUP WATER SUPPLY	Urban Dev	2,304.0	236.8	Dec-13	Dec-13	Jun-16

Source: Company data, Nomura research

**4) Mining**

DBL forayed into mining in FY16 by participating in excavation orders from leading collieries. These projects typically involve hole-drilling, excavation, loading and transportation of rock and soil. The only exception is the recently won DVC project. In this project, DBL will develop and operate a coal mine at Auranga in Jharkhand. DBL expects to develop the mine in two years, followed by a 27-year operational period, during which time it will charge INR837/MT of coal mined. The mine has estimated mineable reserves of 130mntpa, with expected peak production of 6mntpa.

**Fig. 11: Mining orderbook**

(INR mn)

Project name	Type	Contract value	Outstanding O/B	LOA DATE	Date of Start	Schedule Date of Completion
Overburden Khairagura OCP, BPA area (Telangana )	Mining	9,735.5	9,493.6	Sep-16	Nov-16	Nov-19
Nigahi OCP of NCL. (Singrauli, M.P. )	Mining	1,045.0	596.6	Jan-16	Feb-16	Jun-19

Source: Company data, Nomura research

# Investment thesis

## DBL adheres to strict business processes and systems – which is rare to see in Indian construction sector

### Following processes to the core

DBL adheres to a strict textbook approach to construction practices, as per our understanding. This means going to the extremes of monitoring its equipment and human resource utilisation and productivity, propagating a culture of working as much as possible in-house and owning equipment rather than outsourcing, to control timelines as well as costs.

Our visits to company offices as well as work sites revealed strict adherence to construction and record-keeping practices, which allow for monitoring of timelines, productivity and, most importantly, input cost. In our view, a large part of the high margins that DBL enjoys can be attributed to this strict vigil on work practices and record-keeping at the company.

### Drivers for DBL's successful construction franchise

In our view, DBL's growth is largely attributable to its efficient business model of careful selection and geographical clustering of projects, aided by its ownership of a modern equipment bank and backward integration/in-house production of structures. This model has facilitated efficiency and higher profitability for the company vs peers apart from ensuring better control over execution and thus timely completion of projects. Some of the drivers of this successful business model, specifically, are as follows:

- **Identification of projects:** DBL, as we understand, spends much time and effort in carefully selecting its projects, by taking into consideration key factors such as the potential for project clustering and risks related to land acquisition and obtaining environment clearance. It is also at this time that the company would start thinking about potential sources of key raw materials for the project. This helps DBL to plan its raw material and equipment sourcing pattern in the most cost-efficient manner as well as fits in with its cluster approach. If the company wins the project, by the time the appointed date comes, DBL would have already excavated enough aggregates from the mines allotted/identified which would be good enough for it to continue with the work plan for next several months. This advance preparation helps the company to minimise delays and also better manage costs.
- **Geographical clustering of projects:** DBL strives to bid for projects that could form part of a geographical cluster, such that it improves efficiency and profitability. By leveraging the manpower, equipment and materials that are set up at nearby work sites, it attempts to save transportation costs and investment in new equipment, thus achieving economies of scale. In line with this approach, it has diversified into related sectors such as irrigation and mining opportunistically and even into other states. While diversification or entry into other states, it lays an emphasis on profitability, ensuring the target project's proximity to other ongoing projects and suitability to use existing equipment.
- **Focus on equipment ownership:** DBL has one of the largest fleets of construction equipment in India, and this provides it with a competitive advantage, allowing it to utilise machines and equipment at their optimal levels. Most of DBL's equipment are of the same class and same brand to facilitate the training of operators and help reduce equipment down time and maintenance cost. With multiple projects in progress at any given time, ready access to such equipment is essential to its ability to execute existing projects on time and bid for additional projects.
- **DBL also maintains its equipment in-house to ensure high availability and reduce equipment cost.** Easy access to and high availability of our modern equipment fleet enables the company to undertake complex and challenging projects and complete the projects efficiently and profitably. Currently, DBL is the largest customer of Wirtgen-branded equipment and Caterpillar in India.

- **Backward integration/in-house production:** DBL uses in-house production facilities to manufacture many of the essential structures, sections or components used in its projects to ensure high quality, low cost and timely supply. While large construction companies in India largely rely on outsourcing model, DBL is one of the few large companies who still does all construction activity in-house. The scale that DBL has built up allows it to continue with in-house activity and thus save margins. However, in our view, there is ample scope for the company to further improve utilisation levels of its existing equipment thus providing it with operating leverage in time to come. By not outsourcing to other vendors, DBL is able to make higher margins than competition as well as keep a tight control on the project timelines and cost overrun.
- **Project monitoring:** DBL's record-keeping accounts for every minute detail relating to a project, from consumption of the smallest item to productivity of the equipment, e.g., the company produced a daily report for every project which mentioned a daily work plan against each key parameter (e.g., earthwork, layering, finishing and actual deliveries against those targets). Any miss against the target was identified on a daily basis and senior management was appraised to resolve concerns, if any.

#### **Excellent execution track record through strong operating systems and controls**

Through years of development, DBL has put in place systems and controls as discussed below:

- **Robust contract management:** On being awarded a project, DBL actively manages the contract by tracking its deliverables diligently and on a daily basis, thus ensuring that it is not in breach of contract at any time. Any deviations are promptly brought to the management team's attention, thus avoiding any further delays.
- **Efficient planning and project management:** DBL has a comprehensive planning department comprising ~160 employees who plan every step of projects on hand and have, over time, developed strong project management and execution capabilities. DBL's systematic project management through its efficient procurement, deployment, operation and maintenance of construction equipment and other resources for various project sites has helped it consistently deliver projects to its customers on time or even before time thus yielding reputation and higher profits.
- **Cost-effective procurement:** DBL aggregates its orders of raw materials across construction sites and procures centrally to receive bulk discounts. Through its centralized procurement process, it is able to leverage scale and achieve a high degree of procurement efficiency. Due to bulk purchases of the principal raw materials, such as steel, cement, bitumen and even the equipment, DBL is usually able to obtain volume discounts from its suppliers.
- **Centralised procurement:** for all important raw material and equipment needed for various projects. This helps in managing existing inventory and equipment base effectively and also helps the company obtain a better discount with the supplier. In India, DBL is the largest customer for bitumen and Caterpillar. This positions the company for better rates as well as preferential service for the equipment and spares.
- **Equipment tracking and management:** Given the substantial investment in construction equipment, DBL tracks and actively manages its equipment with GPS. This enables DBL to drive optimal utilisation and conduct regular maintenance to ensure high availability and efficiency of the construction equipment. It is able to monitor for hazardous practices such as undue usage of vehicles, fuel theft, time delays and labour productivity.

#### **Ownership of plant & machinery vs a lease rental model leads to better equipment availability and results in speedier execution**

This leads to the advantage that work will not normally stall due to non-availability of machinery. The other model is leasing of machinery which is the machine is leased from a third party of shift rentals. In the leasing model, mobilisation of machinery is dependent on availability of the machinery from the third party. Often in case there are work stoppages or delays, machine rentals will still be incurred, resulting in additional costs and hence loss in margins.

As an example, a JCB machine typically costs INR2.5mn, which, based on daily per shift rental (INR70,000 per shift), will largely be covered in one single road project of 30

months with the exception of the interest and operating costs. With an estimated life of 10 years, it makes economic sense to own assets. However, should there be a downturn in the sector, ownership of assets can be a potential disadvantage as costs required for servicing loans as well as maintenance still need to be incurred.

#### Ownership of small class and brand of machines increases machine reliability

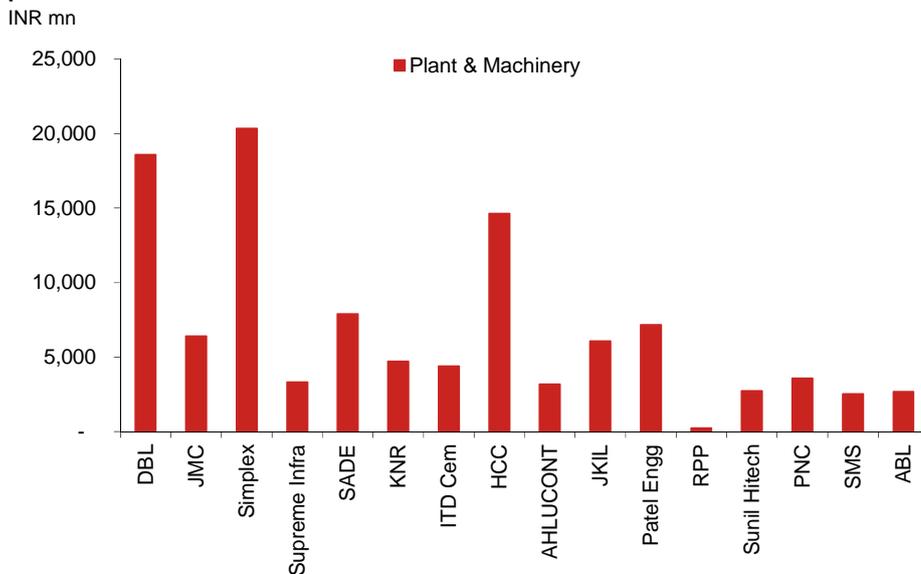
The company acquires equipment of the same class and same brand to facilitate the training of personnel (operators) and help reduce equipment downtime and maintenance cost. Homogenous fleet also ensures spare parts availability and significant savings in procurement and maintenance. With multiple projects in progress, ready access to equipment is essential to ensure projects are completed in time and within budget.

DBL is the largest owner of Caterpillar equipment globally, and is also among the leading customers for global brands such as Wirtgen, VogeLe, Metso and Schwing Stetter. This large level of procurement enables DBL to obtain favourable pricing/discounts with respect to competition. As evident from Fig. 12, DBL has one of highest levels of plant & machinery among peers.

#### DBL has been able to utilise its machinery efficiently

DBL has GPS systems installed on all its equipment for tracking. Further, with a relatively high employee base, the machines are manned by trained full-time employees, leading to maximum efficiency like reduced fuel and spares consumption. Further since all repairs and maintenance is in-house it ensures availability.

**Fig. 12: DBL has among the highest levels of plant & machinery gross block among peers**



Source: Company annual reports for FY16, Nomura research

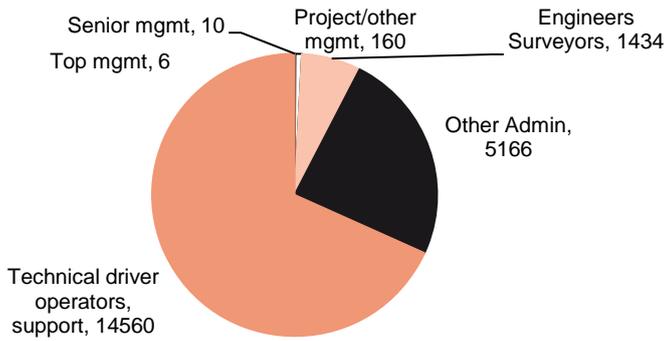
#### In-house project execution (no sub-contracting) leads to higher margin capture

DBL follows a principle of in-house project execution with a philosophy of no sub-contracting. Thus, DBL manufactures many essential structures, sections or components used in the projects to ensure high quality, low cost and timely supply. This leads to cost effectiveness and quality of work. However, since sub-contractors are not deployed, it also leads to higher inventory, as these are accounted for on DBL's books, and not on the sub-contractors' books.

With more than 24,000 employees, the company is among the largest employers in the India's construction industry. With almost all major activities, in-house dependence on sub-contractors is almost eliminated.

**Fig. 13: Large in-house execution management (as of June 2016)**

Employees



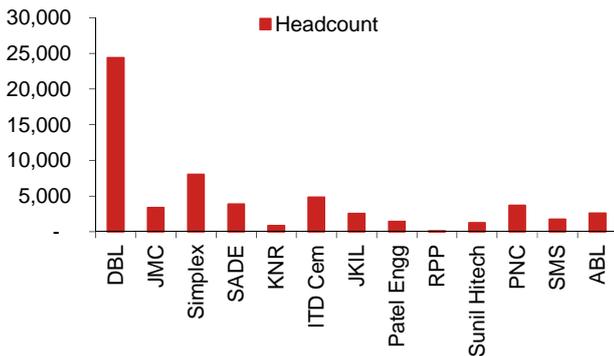
Source: Company data

**Same cannot be said of the industry where sub-contracting appears widespread**

As evident from Fig. 14 and Fig. 15 DBL has amongst the highest number of employees amongst its peers and has the highest share of own revenues (vs sub-contracted) amongst its peers. These figures illustrate that unlike what DBL and a few other players are doing, sub-contracting is relatively more widespread. These firms in fact employ relatively fewer people.

**Fig. 14: DBL has among the highest headcount in the construction industry (FY16)**

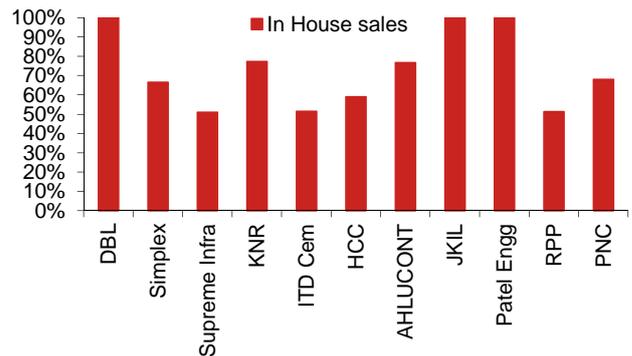
Employees include full time and temporary



Source: Company data, Nomura research

**Fig. 15: Sub-contracting appears fairly prevalent in the industry at present (FY16)**

% of sales executed in house



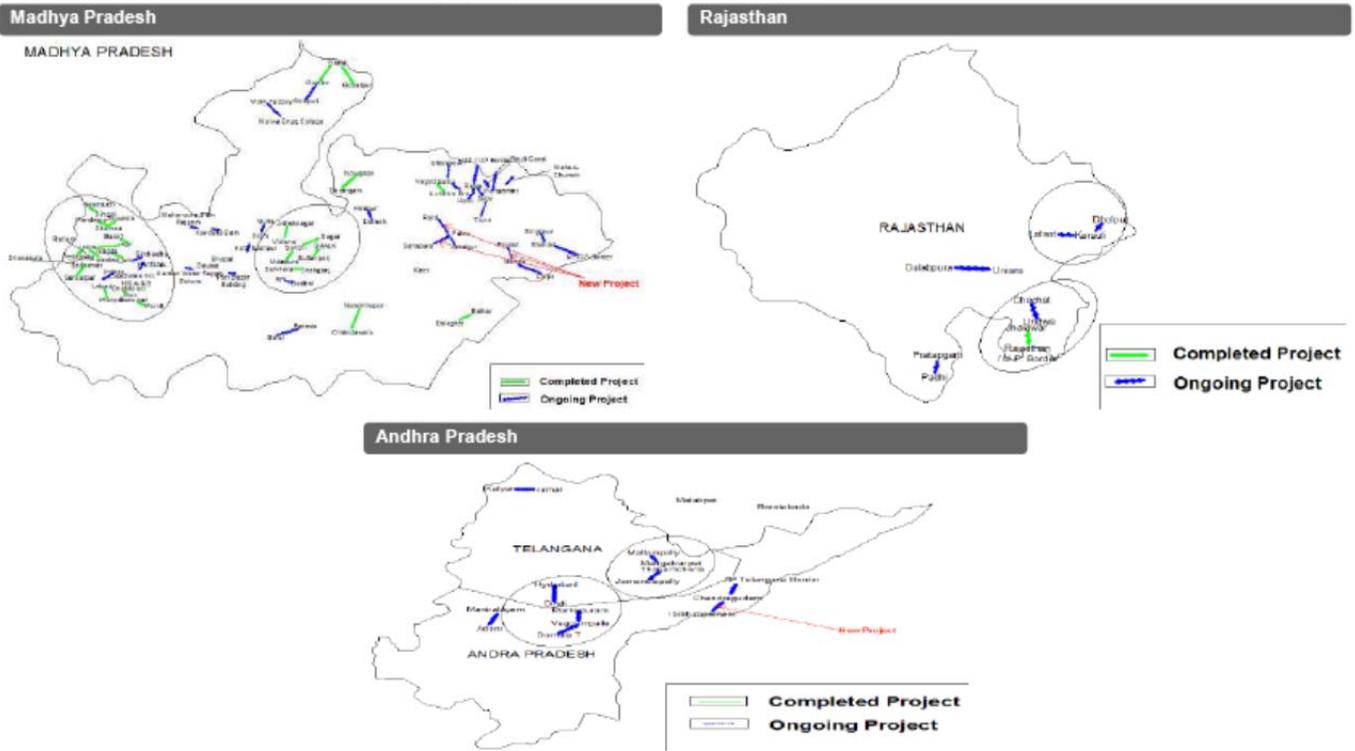
Source: Company data, Nomura research

**Geographical clustering of projects leads to economies of scale**

DBL strives to cluster projects, as evident from Fig. 16. Through this clustering, DBL is able to leverage manpower equipment and materials, which are set up at nearby sites. This leads to lower transportation costs and investments in new equipment, bringing economies of scale. This principle is not only applied to EPC projects but also to BOT projects that the company implements periodically. The clustering has also enabled the company to explore new verticals such as irrigation, mining and urban development without any significant capital investments.

**Fig. 16: Clustering of projects leads to economies of scale and enhances efficiency**

At present there are clusters in Madhya Pradesh (MP), Rajasthan and Andhra Pradesh (AP)



Source: Company data

**Smaller average project size leads to lower execution risk**

DBL’s project selection is more intense than that of its peers due to larger project teams. The company does due diligence (e.g., DBL tends to avoid projects that run through protected or reserve forests which could potentially stall due to want of environment/forest clearances). The individual projects are small (typically around INR2.8bn ticket size) spread over a large number of sites (64) (Fig. 17) which is geographically clustered. This clustering reduces execution risk; should any particular project in a cluster face execution hurdles, manpower, materials and equipment can be redeployed to nearby sites within the same cluster. This reduces idling costs to a great degree.

**Fig. 17: Large number of projects with low average ticket size reduces execution risk**

All figures are in INR mn except the number of projects

	Backlog	Contract value	Projects	Avg cont size
Private	9,788.1	28,983.9	7	4,140.6
BOT	15,788.7	30,866.7	6	5,144.5
NHAI	25,326.3	30,866.0	7	4,409.4
MORTH	42,716.3	68,870.3	25	2,754.8
Central Govt Undertakings	3,004.3	3,004.3	2	1,502.1
State Governments	11,163.7	19,213.8	17	1,130.2
<b>Total</b>	<b>107,787.3</b>	<b>181,804.9</b>	<b>64</b>	<b>2,840.7</b>
Road EPC (3rd party)	75,454.6	127,342.9	50	2,546.9
Irrigation	7,054.7	11,138.7	3	3,712.9
Urban Development	2,990.4	5,957.6	3	1,985.9
Bridge	5,454.0	5,454.0	1	5,454.0
Mining	1,045.0	1,045.0	1	1,045.0
BOT	15,788.7	30,866.7	6	5,144.5
<b>Total</b>	<b>107,787.3</b>	<b>181,804.9</b>	<b>64</b>	<b>2,840.7</b>

Source: Company RHP July 2016, Nomura research

### Higher inventory of raw materials also leads to speedier execution

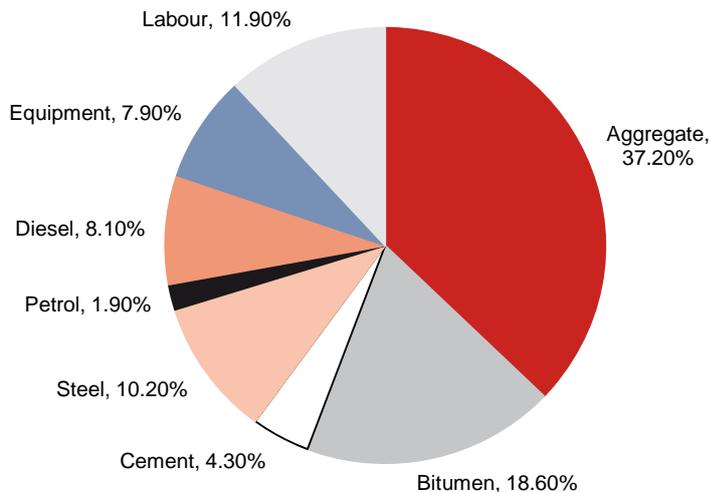
DBL maintains a relatively higher level of inventory compared to other peers to push for speedier execution. Inventory is largely composed of aggregates which constitute around 37.2% of overall cost of a road project (based on NHAI construction index; Fig. 18). The timely supply of aggregates is crucial for smooth execution of a road project. DBL accumulates the entire requirement of aggregates when the road is 20-30% complete. This helps to speed up the pace of execution. DBL also maintains an inventory of ancillary structures and sidings as well.

Separately, DBL is also one of largest customers of bitumen for Indian Oil (IOCL) in Bhopal, though inventory levels are not that significant.

We think the interest cost as a result of higher inventory (due to higher working capital debt) is more than offset by the early completion bonus that the company can earn.

**Fig. 18: NHAI cost of construction index**

Aggregates and bitumen accounts for bulk of the expenses in a road project



Source: NHAI

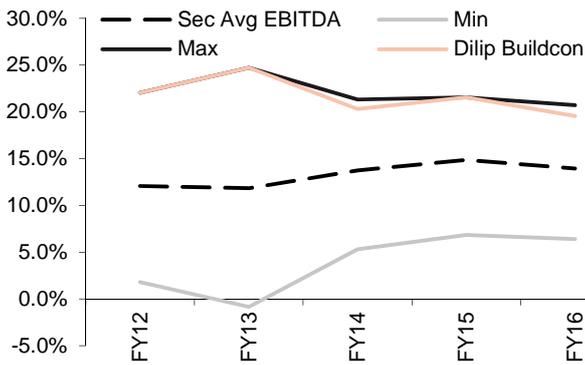
### Efforts on strict process-based approach visible in early completion track record and superior margins

#### Speedier execution due to machinery ownership and in-house execution leads to higher EBITDA margins

As discussed in the previous section, we estimate that the advantage of owned machinery and in-house manufacturing leads to DBL's EBITDA margins being higher by 320-450bps compared to the average of its peers. As evident from Fig. 19, DBL's margins are 550-700bps higher than its peers on an overall basis. We estimate that 320-450bps of this incremental margin is accounted for by in-house EPC (no-sub-contracting) and ownership of machinery and equipment.

**Fig. 19: DBL's EBITDA margins higher by 550-700bps vs peer average**

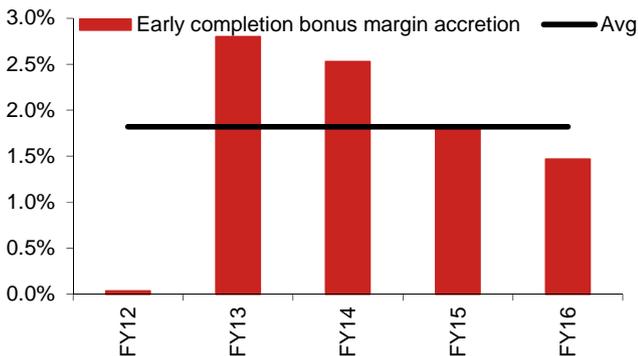
We estimate 320-450bps of incremental margins is accounted by machinery ownership and in-house EPC



Source: Nomura research. Unless otherwise mentioned the peer set consists of JMC, Simplex, Supreme Infra, SIEL, KNR, ITD Cem, HCC, Ahluwalia Contracts, JK Infra, Patel Engg, RPP Infra, Sunil Hitech, SMS and Ashok Buildcon

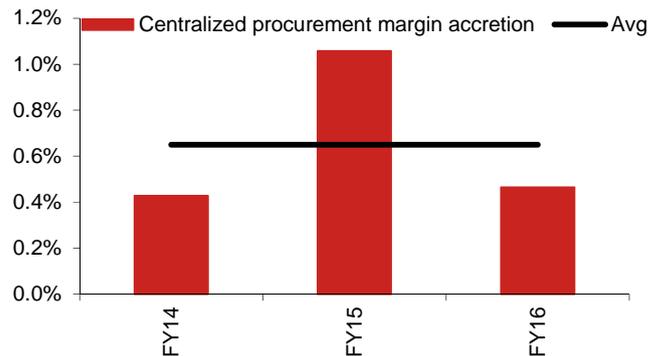
Compared to a peer with similar business model (in-house EPC and equipment ownership), DBL still has a margin advantage of 240bps on an average over the last five years. The company claims to have executed 90% of its projects either ahead of time or on schedule, leading to substantial income from early completion bonuses which according to our estimates, leads to ~180bps higher margins (Fig. 20), while we estimate the remaining ~60bps margins would have accrued from centralised bulk procurement of materials (Fig. 21).

**Fig. 20: Average boost to margins by ~180bps through early completion bonus**



Source: Company data, Nomura estimates

**Fig. 21: Average boost to margins by ~60bps through centralized bulk procurement**



Source: Company data, Nomura estimates

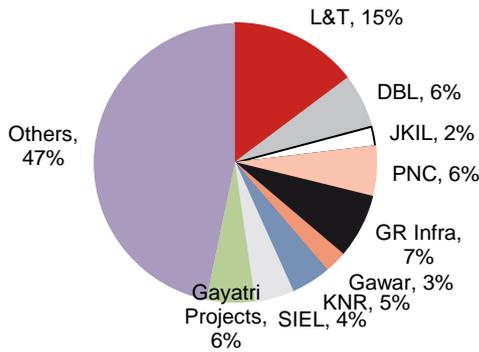
**Cost advantages has allowed DBL to be slightly more aggressive than the industry but is well within limits**

DBL has been relatively aggressive in bidding for NHAI EPC projects recently, with bids on an average lower by ~4% compared to the industry. A robust business model that allows incremental margin capture through in-housing of all key activities, equipment ownership and centralised procurement allows DBL to bid lower than competition and yet be ahead on margins. In some exceptional cases, as demonstrated in Fig. 23, the company has bid as much as 20% lower than NHAI's estimated price since the said project (FY17 – till Feb) was contiguous with an earlier project which allowed DBL to bid significantly lower than competition since manpower and equipment was already mobilised at the site.

The more efficient cost structure and the resulting ability to execute at prices lower than competition has transformed DBL from a regional player based out of Madhya Pradesh to a national player having a leading share in EPC contracts awarded (Fig. 22)

**Fig. 22: DBL has transformed from a small regional play to a significant national player for NHAI contracts**

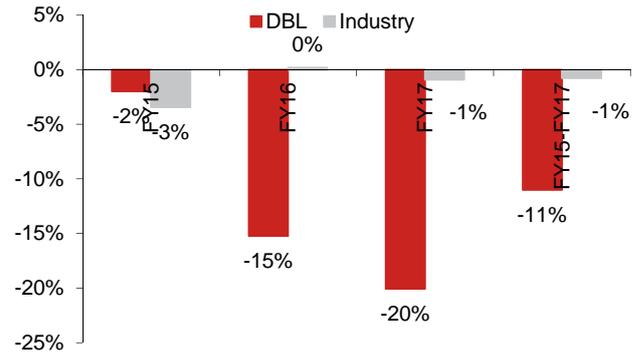
Market share in % from FY15-17



Source: NHAI, Nomura research. \*FY17 numbers are only till end of Feb'17

**Fig. 23: DBL has been slightly more aggressive in EPC bidding compared to the industry**

% difference in bid from NHAI base price for DBL and Industry



Source: NHAI, Nomura research. \*FY17 numbers are only till end of Feb'17

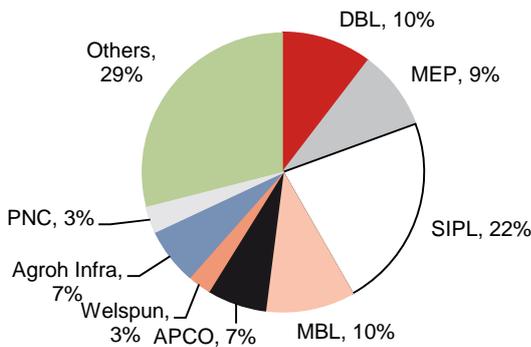
**DBL has been successful in garnering higher share in the newly introduced HAM (Hybrid Annuity) model where bidding is less competitive**

The Government is keen on awarding more projects through the Hybrid Annuity route as it decreases the cost, unlike EPC contracts, where the entire cash outlay is made by the Government. However, as very few companies have sufficient balance sheet strength to fund such projects, and with key players such as L&T (LT IN, Buy) choosing to stay away for the time being, competition is relatively lower for HAM awards. This is evident from the fact that, on an average, the HAM projects are being bid out at premiums to NHAI's estimated prices, unlike in EPC (Fig. 25).

Furthermore, DBL has been focussing on HAM projects and this is evident from the fact the company is already a major player in the industry (Fig. 24). DBL's bidding has been largely in line with industry despite having a more efficient cost structure, which highlights that bidding has been less aggressive on DBL's part compared to EPC bidding (Fig. 25).

**Fig. 24: DBL has been garnering increased share in HAM projects in FY17**

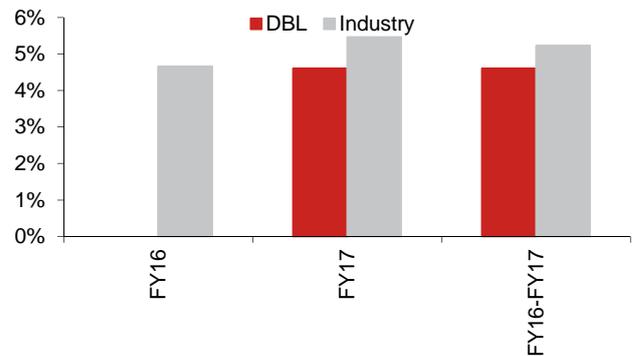
Market share in % from FY15-17



Source: NHAI, Nomura research. \*FY17 numbers are only till end of Feb'17

**Fig. 25: HAM projects are being bid at premiums which ensures decent margins**

% difference in bid from NHAI base price for DBL and Industry



Source: NHAI, Nomura research. \*FY17 numbers are only till end of Feb'17

**EBITDA margins sustainable but increased share of HAM projects and rising competition can depress margins by ~100bps**

DBL, through its speedy execution and in-house EPC, has been able to maintain an EBITDA margin differential of 550-700bps over the peer average. Excluding early completion bonus, whose impact we estimated at 180bps, DBL still has a sustainable margin advantage of 370-520bps. We view this margin delta as sustainable over the long term.

### HAM projects have lower completion bonus compared to NHAI's EPC contracts

However, of late, the company has bid successfully for several HAM projects, which have a maximum possible completion bonus of 1.5% vs 3.0% for NHAI's EPC contracts. Thus, we expect early-bonus-related margin accretion to diminish and the impact is estimated by us at 100bps over FY17-19F.

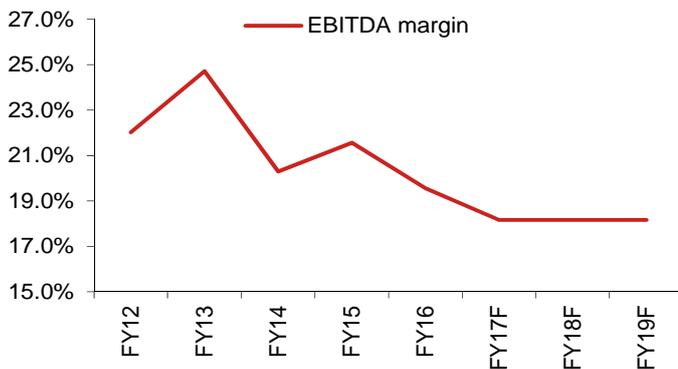
### Increased competition due to balance sheet revival of stressed firms

The Central Government has announced a slew of progressive measures to revive stalled projects in the sector as well as help repair company balance sheets. Among such schemes was the announcement by the Ministry of Road Transport and Highways (MORTH) that 75% of all arbitration awards will be released in lieu of an equivalent bank guarantee. This measure alone has led to the revival in some premier construction firms such as HCC (HCC IN, Not rated). Further, a fresh round of debt restructuring through S4A mechanism by banks where part of the debt is kept on the books as sustainable debt while the rest is converted to equity by banks will also lead to balance sheet revival.

With revival in competition, we expect margin compression as bidding, especially for EPC projects, gets more intense. However, we do expect HAM project bids to be reasonable as competition will be less. This is based on the fact that HAM projects will require capital commitments and debt raising which will be tough for financially stressed companies (financial closures will be hard to achieve for such players, in our view).

**Fig. 26: Combination of lower completion bonus and increased competition to impact margins by ~140bps (incl ~70bps for HAM) over FY17-19F**

EBITDA margin (%)



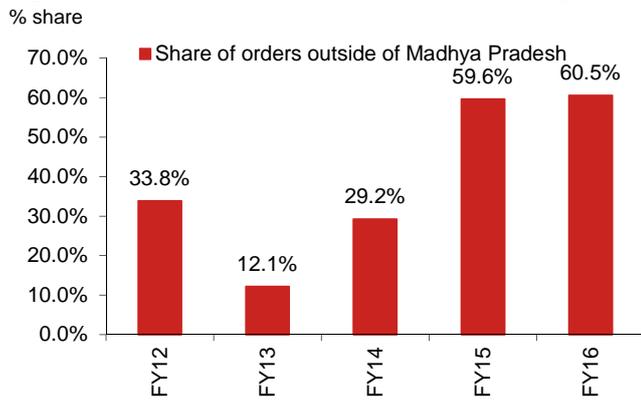
Source: Company data, Nomura estimates

### DBL has also been able to successfully diversify into other states, reducing political/geographical risk

DBL started off as a contractor based out of Madhya Pradesh (MP) and the state had traditionally accounted for the bulk of its revenues and orders. However of late DBL has actively diversified into other neighbouring states, with MP now accounting for only 16% of the orderbook as on Dec 2016 (Fig. 28). As we note from Fig. 27, the share of orders from outside MP has been generally rising.

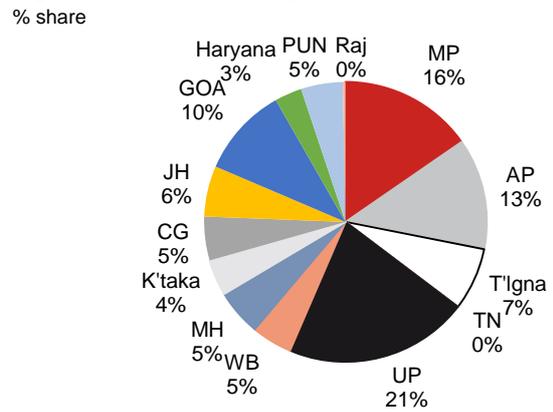
This reduces the risk for revenues at DBL in the longer run even if there is a potential change of political regime in MP post the state assembly elections scheduled to be held in 2018 (FY19).

**Fig. 27: Share of orders from outside MP increasing**



Source: Company data

**Fig. 28: Orderbook split by states (9MFY17)**



Source: Company data

# Financials: strong work ethic drives profitable growth

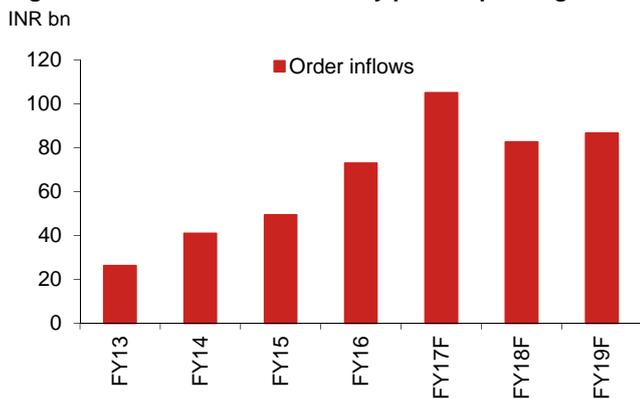
## Strong growth in orderbook and speedy execution to drive 17% p.a. revenue growth over FY17-19F

DBL has a strong orderbook of ~INR180bn currently which provides high order visibility for the next 2-3 years. Further, with revival in ordering prospects due to increased public spending on roads, we expect that an ordering level of INR75-90bn in roads alone is possible over FY17-19F. Further upside could be provided by incremental orders won in coal mining as well as in irrigation and urban development. The latter two are limited to the home state of Madhya Pradesh (MP) for the time being due to clustering benefits.

As shown in Fig. 29 below, we have only assumed order inflows from roadways in FY18F and FY19F, while in FY17F we have INR30bn of mining orders as well. In case DBL continues to win further projects in mining as well as expands meaningfully in irrigation and urban infrastructure (including possible forays into elevated Metro projects in MP and Andhra Pradesh), there could be further upside on order inflows.

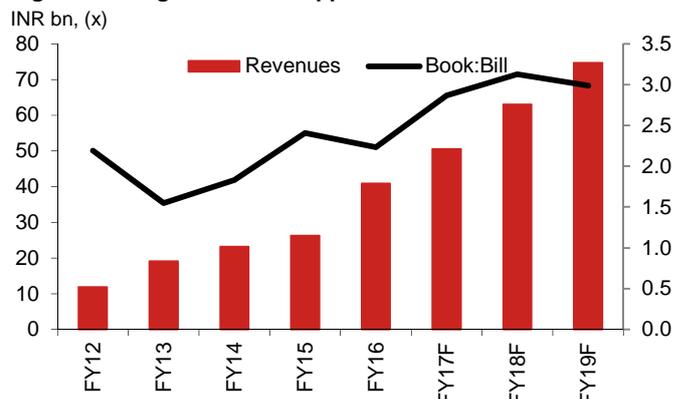
The sustained level of order inflows and speedy execution capabilities will lead to sales growth at a CAGR of 20% over FY17-19F (Fig. 30), according to our estimates. There could potentially be further upsides to our revenue growth estimates if DBL expands aggressively in other verticals, especially mining, which will not entail additional capital costs for DBL.

**Fig. 29: Order inflows sustained by public spending on roads**



Source: Company data, Nomura estimates

**Fig. 30: Strong execution supports revenue CAGR of ~20%**

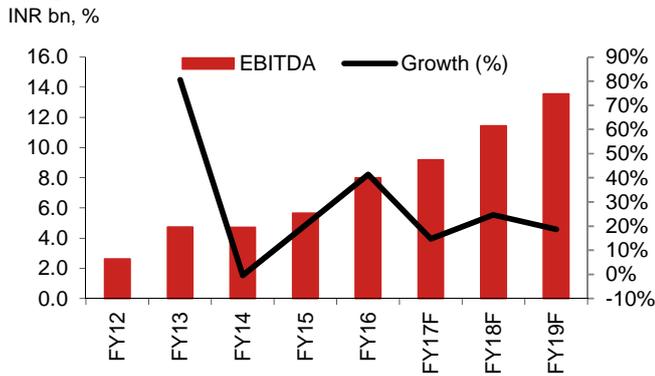


Source: Company data, Nomura estimates

## EBITDA and PAT CAGR at 17% and 28% respectively over FY17-19F as EBITDA margins decline

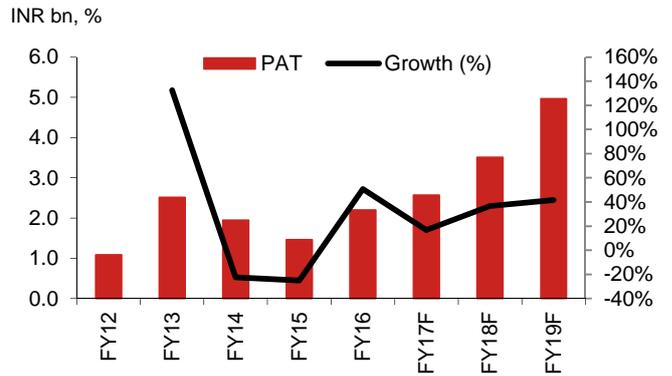
We expect that EBITDA growth will trail revenue growth as EBITDA margins are likely to face downward pressure due to: 1) increased competition on sector revival through recent progressive measures by the Centre and banks; and 2) lower completion bonus component as HAM projects have lower completion bonus compared to NHAI's traditional EPC projects.

**Fig. 31: EBITDA growth lower than revenue growth on lower margins**



Source: Company data, Nomura estimates

**Fig. 32: PAT growth at standalone due to lower net debt**



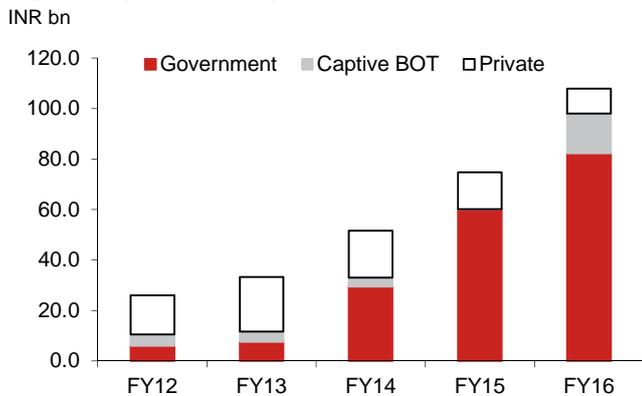
Source: Company data, Nomura estimates

## Working capital improvement could potentially be one of the biggest triggers for the stock

### DBL was initially focused on private orders but the focus has shifted to government EPC orders

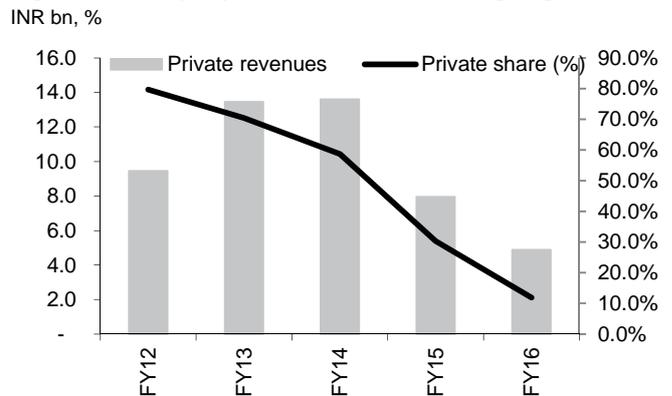
Private contracts from companies such as Essel Infra and Topworth Infra used to dominate revenues as well as orderbook in the initial years. According to management, DBL executed large-sized private orders to enable it to meet pre-bid qualifications necessary for undertaking NHAI or MORTH projects. Once the company was able to establish its credentials, it has increasingly focused on government EPC projects, which is reflected in the declining share of private parties both in revenues and order inflows (Fig. 33 and Fig. 34).

**Fig. 33: Dependence on private orders is on a decline**



Source: Company data, Nomura research

**Fig. 34: Private party share in revenues also going down**

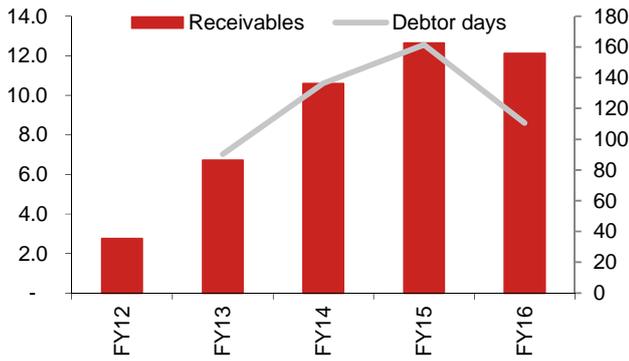


Source: Company data, Nomura research

### Higher private share led to increased receivables as well as overdue receivables

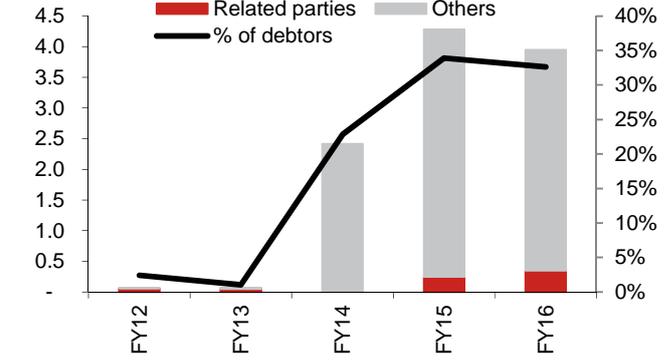
Higher share of private companies in revenues and orderbook, in the initial years, in turn led to higher receivable days. This has been a general trend in the industry over the past few years, due to worsening of balance sheets of infrastructure companies and limited ability to make timely payments. As is evident from Fig. 35 and Fig. 36, overdue receivables mainly from Essel infra and Topworth had increased significantly.

**Fig. 35: Receivables built up on higher private orders**  
(INR bn, days)



Source: Company data, Nomura research

**Fig. 36: Overdue payments shot up significantly**  
(INR bn, %)



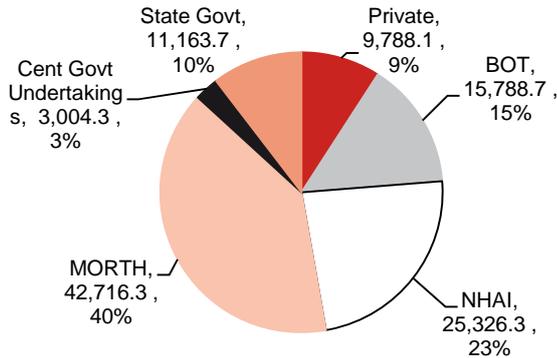
Source: Company data, Nomura research

**But increased share of government orders and collection of overdue receivables will lead to working capital release**

DBL's recent focus on bidding and winning government orders (Fig. 37) will likely lead to a significant improvement in receivable days as payments from the government are more certain and comparatively timely. Also, with the emerging trend of HAM projects coming into the portfolio, receivable days could shrink even more as payments will be due from its own subsidiary. This will eventually lead to gradual easing of receivable days as shown in Fig. 38. Further, with progress in collection of overdue receivables from Essel Infra and Topworth, we can expect the receivable days to come down even further which could lead to working capital improvement.

**Fig. 37: Higher share of government orders leads to higher collection certainty [end of FY16]**

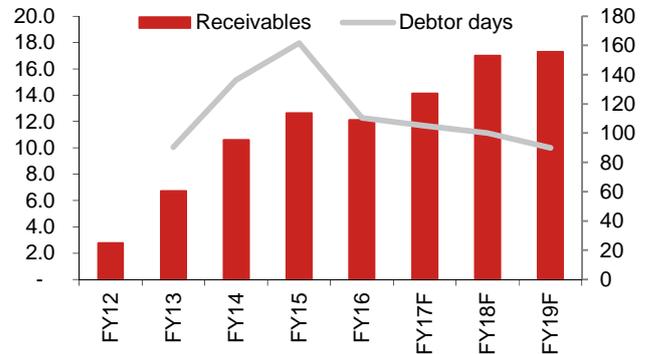
INR bn, %



Source: Company data, Nomura research

**Fig. 38: Receivables expected to moderate due to progress in collection from government orders and private overdue payments**

INR bn, days



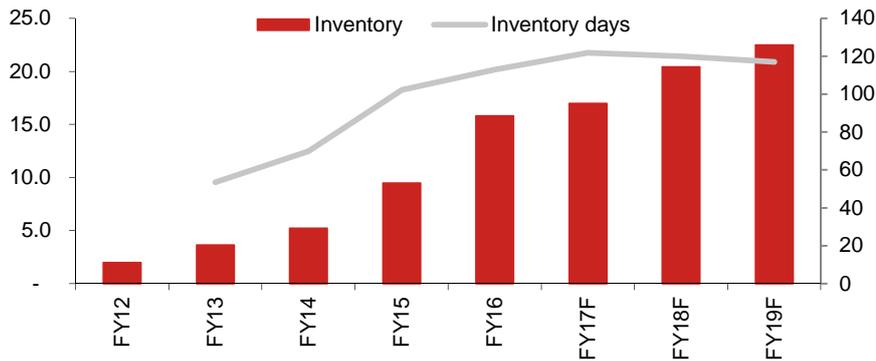
Source: Company data, Nomura estimates

**Inventory levels may continue to remain elevated**

DBL's inherent business model of carrying inventory of key raw materials from the early stages of the project to ensure speedy execution leads to relatively higher inventory levels. This trend is expected to continue at a project level. However, at the company level the inventory build-up was exaggerated due to a sharp ramp up in order backlog in FY16-17. As the company executes these projects and order backlog growth is in sync with revenue growth over FY17-19F, we expect the inventory levels to moderate from current peak (Fig. 39).

**Fig. 39: Inventory levels likely to remain elevated due to unique business model**

INR bn, days



Source: Company data, Nomura estimates

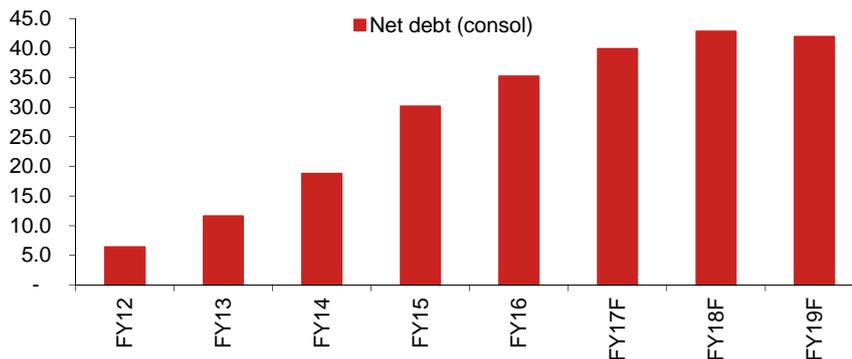
## BOT asset monetisation could potentially release locked in capital and reduce debt levels

### Consolidated net debt to rise on BOT commitments but parent net debt to reduce

With the recent spate of BOT project wins, the existing capital commitments are estimated by us to be INR7-8bn, with an additional debt amount roughly twice this level based on Hybrid Annuity (HAM) funding pattern. This should lead to increased net debt at the consolidated level due to increase in SPV debts.

**Fig. 40: Consolidated debt to increase on BOT (HAM) related capex commitments**

INR bn

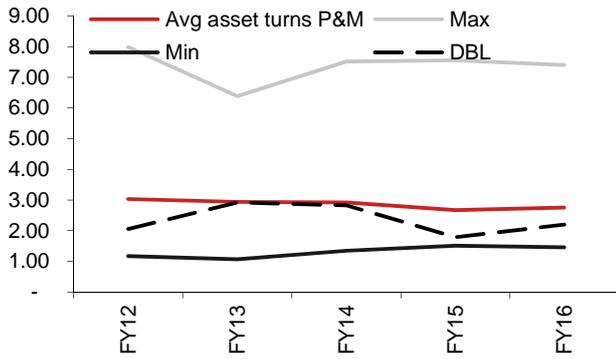


Source: Company data, Nomura estimates

### However, at the standalone level, net debt will likely decline due to lower capex requirements on plant and machinery

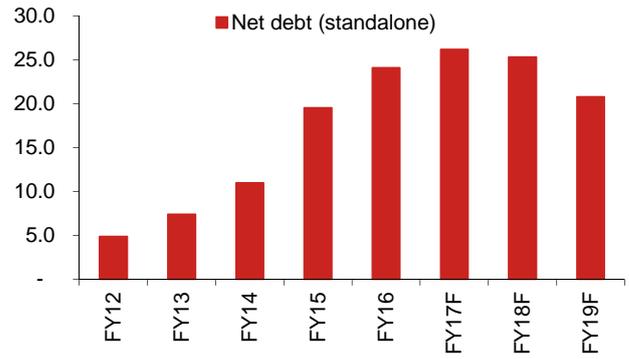
DBL has a large base of machinery which is not completely utilised, which is evident from the fact that DBL's plant & machinery turns on own contract revenue (contract revenue less sub-contracted portion) is amongst the lowest in the industry (Fig. 41). Thus, we estimate that there is significant under-utilisation at present. We estimate that execution of the current order backlog will not lead to significant investments on plant and machinery over FY17-19F. This will in turn lead to lower capex requirement leading to lowered standalone debt (Fig. 42), aided by uptick in cash flow generation.

**Fig. 41: P&M asset turns for DBL amongst the lowest**  
(x)



Source: Company data, Nomura research

**Fig. 42: Lower P&M capex needs leads to lower parent debt**  
INR bn



Source: Company data, Nomura estimates

**Divestment of operational BOT assets (mostly annuity and hybrid annuity assets) will provide capital release which can lower debt levels**

With the exception of one BOT (toll) project, all of DBL's projects are annuity, annuity plus toll and hybrid annuity projects. Based on the present project pipeline, we estimate that DBL can earn ~INR7.0bn in annuities once all projects are complete. Based on operational projects, DBL has an annuity level of INR2.1bn. The high level of revenue visibility will, in the form of annuities, make operational projects more marketable to potential buyers.

Further, even in HAM projects, the company has allotted a major portion of the bid NPV to EPC portion and a small portion (INR30mn/lane km) as O&M (operations and maintenance). Thus, correspondingly, the O&M-linked annuity portion is low relative to the EPC-linked annuity. This further reduces revenue risk for a potential buyer as O&M annuities will be linked to certification of O&M works by NHAI inspectors, which adds an element of uncertainty.

**Divested BOT assets will provide steady O&M opportunities for DBL**

DBL will likely undertake O&M activities for the investor in its BOT assets. This should potentially provide a steady revenue stream through O&M contracts estimated at INR5-6mn/km for the entire duration of the project. These O&M contracts are likely to be margin accretive as they will not entail additional investments in plant and machinery.

With ~1,244 lane kms of road under operation or under construction at the end of FY16 under the BOT portfolio, we estimate that the entire asset can provide revenue potential of **INR6-8bn** on an annual basis.

## Valuation: Inexpensive at 11x FY19F P/E

We value DBL's EPC and BOT business separately. We value EPC business at 15x (average peer multiple - Fig. 44 ) FY19F EPS of INR36 to arrive at INR544/share value for EPC business. We value the BOT assets on book value of investments which is estimated at INR43/share for FY18F. Taken together, we arrive at a target price of INR587 which implies 43% potential upside from current price levels (Fig. 43).

Our assigned multiple of 15x for DBL is in line with the sector average of 14.6x FY19F P/E (excluding outliers such as Supreme Infra and Sadbhav Engineering). The construction sector as a whole, we believe, has re-rated significantly over the past 2 years, led by the Government's push on infrastructure. Continuing build-up of opportunities in this space is likely to keep multiples elevated, especially for companies which have a proven track record of profitable growth with reasonable leverage. DBL, in our view, given its superior financial profile and proven track record, will continue to trade at least in line with sector average.

Depending on sector attractiveness, we believe the multiples could move between 12x and 18x for DBL, which would imply a fair value range of INR406-696 /share.

Given that our earnings estimates for DBL are ~20% higher than consensus for FY19F, we expect the upside to materialise on the back of both consensus earnings upgrades as well as a multiple re-rating.

**Fig. 43: SOTP valuation for DBL**

EPS FY19 - standalone	36.3	INR/share
Target PE 1Y fwd (X)	15.0	
<b>Value of EPC business</b>	<b>544</b>	
Book value of Subs - FY18	5,888.5	INR mn
No of share (mn)	136.8	
<b>BV of subsidiaries/share</b>	<b>43</b>	INR/share
<b>Implied Target price</b>	<b>587</b>	INR/share
CMP (20 April 2017)	411	
Upside	42.9%	

Source: Nomura estimates

### Peer comparison

DBL was recently listed and, due to a lack of a significant series of stock trading data, we believe that looking at peer multiples would be insightful. DBL appears cheap on most valuation metrics despite delivering industry-leading ROEs and significant potential for earnings growth.

The leverage of the company is also below the peer average, and is only higher than that of Ahluwalia, J Kumar and ITD Cementation. We also note that DBL's debt is mostly a result of capital expenditure into plant and equipment, unlike some of the other debt-laden peers whose higher debt level is due to failed or stalled BOT projects as well as stuck receivables.

Fig. 44: Peer comparison

Company	Ticker	Cap (INR)	Net Debt	P/E (x)			EV/EBITDA (x)			ROE (%)			Net Debt/EBITDA		
				FY17F	FY18F	FY19F	FY17F	FY18F	FY19F	FY17F	FY18F	FY19F	FY17F	FY18F	FY19F
JMC	JMCP IN	10.1	20.0	16.8	14.8	13.1	13.3	12.0	11.2	8.5	8.9	9.5	8.9	8.0	7.4
Simplex	SINF IN	19.8	32.4	22.1	15.9	14.0	8.0	7.5	6.9	5.7	7.5	8.8	5.0	4.7	4.3
NCC Ltd	NJCC IN	53.8	29.1	23.1	19.0	15.6	11.3	10.1	9.1	6.7	7.6	8.3	4.0	3.5	3.2
Sadbhav Engg	SADE IN	55.1	93.5	(171.7)	85.2	35.8	12.4	9.9	8.8	(0.2)	5.5	7.8	7.8	6.2	5.5
KNR Cons	KNRC IN	27.7	7.9	18.7	17.4	16.0	17.0	14.5	12.4	17.7	16.3	15.4	3.8	3.2	2.7
ITD Cem	ITCE IN	27.3	2.8	22.9	16.5	14.5	10.4	8.5	7.6	16.9	19.9		1.0	0.8	0.7
HCC	HCC IN	44.1	108.9	436.0	13.2	15.4	24.1	19.6	22.6	2.1	9.3	7.4	17.2	14.0	16.1
Ahluwalia Contracts	AHLU IN	24.0	0.5	24.1	19.3	15.6	13.1	11.2	9.5	20.8	21.1	21.3	0.3	0.2	0.2
J Kumar Infra	JKIL IN	20.4	1.0	17.6	14.1	11.4	7.9	6.3	5.1	8.7	9.9	11.3	0.4	0.3	0.2
Dilip Buildcon	DBL IN	56.2	35.3	21.9	16.0	11.3	8.8	6.9	5.6	17.8	17.8	20.7	3.8	3.1	2.6
Patel Engg	PEC IN	14.9	55.0	14.3	12.1		9.2	8.5		3.0	3.4		7.2	6.7	
PNC	PNCL IN	38.8	14.8	18.9	20.0	17.9	22.4	18.1	14.5	13.6	12.1	11.9	6.2	5.0	4.0
				<b>38.7</b>	<b>22.0</b>	<b>16.4</b>	<b>13.2</b>	<b>11.1</b>	<b>10.3</b>	<b>10.1</b>	<b>11.6</b>	<b>12.2</b>	<b>5.5</b>	<b>4.6</b>	<b>4.3</b>
Sector (ex SADE)				57.8	16.2	14.5	13.2	11.2	10.4	11.0	12.2	12.7	5.2	4.5	4.2

Source: Bloomberg [consensus forecasts for all stocks except DBL], Nomura estimates. Note: Based on share prices as of 21 April 2017.

## Investment risks

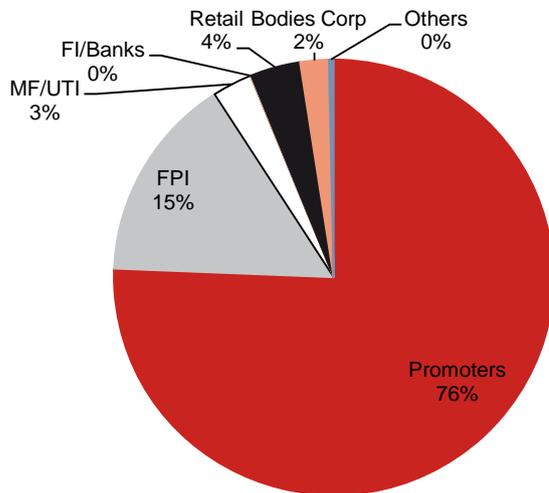
- Revival in competition through recent measures initiated to revive financially stressed infrastructure companies: recent Government initiatives to revive the infrastructure sector could lead to a revival in balance sheet health for some of the ailing construction companies. With an improvement in their balance sheet, some of these companies may resort to aggressive bidding for projects as in the past, driving down sector returns.
- Further deterioration in working capital and net debt metrics: We expect the overdue receivables from Essel Infra and Topworth to realise gradually by FY19F for DBL. However, a delay or lack of the same could drive down FCF as well as return ratios. Similarly, we expect BOT assets to be monetised by the company such that overall debt levels at the company remain reasonable. Any change in strategy from this would be a key risk.
- Slowdown in public spending on infrastructure/road projects: Over the past few years, both the Central and state Governments have shown a strong will to invest in infrastructure across the country, especially roads. While we expect this to continue and even grow further, there is a possibility that as the General elections come closer in May 2019, there could be a shift in policy focus from infrastructure spend to populist measures, which could lead to a slowdown and hence higher competition for a smaller pie.

# Management profile

## Shareholding pattern

We present below the shareholding pattern of the company as of FY17 end. We note that promoters account for the bulk of the holdings, while foreign portfolio investors account for a significant chunk of the public holding. At present ~9% of the shares of the promoters are pledged.

**Fig. 45: DBL share holding pattern**



Source: BSE filing by the company

## Profile of board of directors

We present the profile of the present board of directors grouped into non-independent and independent directors.

**Fig. 46: Profile of executive and non-executive non-independent directors**

Remuneration at the end of FY16

Name	Designation	Age (yrs)	Remuneration (INR mn)	Other directorships	Profile
Dilip Suryavanshi (promoter)	CMD	59	85.00	10 DBL subsidiaries + Other promoter entities	He has civil engineering degree and has over 32 years of experience in the construction business. He is also the President of MP Builders Association
Seema Suryavanshi (promoter)	Executive Director	54	18.00	13 DBL subsidiaries + Other promoter entities	She holds a bachelors degree in arts (honours) and has over 17 years of experience in the business of construction. She actively participates in finance, investment and various Company affairs as a co-ordinator
Devendra Jain (promoter)	Executive Director & CEO	43	85.00	7 DBL subsidiaries + Other promoter entities	He has civil engineering degree and has over 17 years of experience in the construction business. Prior to joining DBL he was an assistant professor at Mahatma Gandhi College, Bhopal and Swami Vivekananda Mahavidyala. He joined the Company on April 1, 2009

Source: Company RHP

**Fig. 47: Profile of independent directors**

Remuneration at the end of FY16

Name	Designation	Age (yrs)	Remuneration (INR mn)	Other directorships	Profile
Aditya Vijay Singh	Independent	71	0.04	1 Wildberries Resorts Private Limited	He holds a bachelors degree in science in physics honours. He has over 40 years of experience in government services and state and public sector undertakings. He retired as the Chief Secretary, Madhya Pradesh. He was also the Chairman of Narmada Valley Development Authority and as the State Election Commissioner of the Madhya Pradesh State Election
Naval Jawaharlal Totla	Independent	44	-	3 Axiom Cordages Deepak Fasteners GPT Healthcare Pvt Ltd	He holds a bachelors degree in mechanical engineering and MBA from Narsee Monjee Institute of Management Studies, Mumbai. He has over 20 years of experience in structured finance
Ashwini Verma	Independent	45	0.12	9 DBL subsidiaries	He holds a diploma in civil engineering. He has over 25 years of experience in architectural and site engineering services. He is a partner of AV & Associates
Amogh Kumar Gupta	Independent	54	0.13	9 DBL subsidiaries	He holds a masters degree in public health engineering. He has over 30 years of experience in architecture and interior designing. He is a partner of Amogh Kumar Gupta and Associates He has previously worked with the Environmental Planning & Coordination Organization Bhopal and the Town Planning Cell of Narmada Valley Development Authority, Bhopal.
Satish Chandra Pandey	Independent	76	0.08	-	He holds a bachelors degree in civil engineering. He has previously worked with the Public Works Department, Government of Madhya Pradesh for 38

Source: Company RHP

The company adheres to corporate governance norms, with majority independent director composition in key committees like audit, nomination and remuneration committees.

**Fig. 48: Core committees like audit and remuneration have majority independent directors on board**

<b>Composition of Committees</b>	
<b><u>Audit Committee</u></b>	
Satish Chandra Pandey (Chairman);	Independent
Dilip Suryavanshi;	
Devendra Jain;	
Ashwini Verma;	Independent
Aditya Vijay Singh;	Independent
Amogh Kumar Gupta;	Independent
Vaibhav Rawat (CFO, for assistance)	
Abhishek Shrivastava (Secy).	
<b><u>Nomination and Remuneration Committee</u></b>	
Satish Chandra Pandey (Chairman);	Independent
Amogh Kumar Gupta;	Independent
Ashwini Verma;	Independent
Abhishek Shrivastava (Secy).	
<b><u>Stakeholders' Relationship Committee</u></b>	
Satish Chandra Pandey (Chairman);	Independent
Dilip Suryavanshi;	
Devendra Jain;	
Amogh Kumar Gupta;	Independent
Ashwini Verma;	Independent
Abhishek Shrivastava (Secy).	
<b><u>Corporate Social Responsibility Committee</u></b>	
Satish Chandra Pandey (Chairman);	Independent
Dilip Suryavanshi;	
Devendra Jain;	
Amogh Kumar Gupta;	Independent
Ashwini Verma;	Independent
Abhishek Shrivastava (Secy).	
<b><u>Risk Management Committee</u></b>	
Dilip Suryavanshi;	
Devendra Jain;	
Amogh Kumar Gupta;	Independent
Ashwini Verma;	Independent
Abhishek Shrivastava (Secy).	

Source: Company RHP

## Key management

According to the RHP (Red Herring Prospectus) nearly 21 persons have been listed as key management personnel. However for our purposes we have included the profile of key decision makers in the company, while the remaining KMPs are mostly related to project execution and finance. We note that other than the President the other KMPs are related to the promoter.

We have included the remaining 15 KMPs under the execution team and their details are also shown below (Fig. 50).

**Fig. 49: Profile of Key management personnel**

Remuneration at the end of FY16

Name	Designation	Age (yrs)	Remuneration (INR mn)	Profile
Dilip Suryavanshi (promoter)	CMD	59	85	He has civil engineering degree and has over 32 years of experience in the construction business. He is also the President of MP Builders Association
Seema Suryavanshi (promoter)	Executive Director	54	18	She holds a bachelors degree in arts (honours) and has over 17 years of experience in the business of construction.
Devendra Jain (promoter)	Executive Director & CEO	43	85	He has civil engineering degree and has over 17 years of experience in the construction business. Prior to joining DBL he was an assistant professor at Mahatma Gandhi College, Bhopal and Swami Vivekananda Mahavidyala. He joined the Company on April 1, 2009
Bharat Singh	President	57	8.09	Total experience of 32 years in the construction industry. He is responsible for administration and management of finance and accounts. He joined the company in FY89 and his term expires in 2020
Rohan Suryavanshi (s/o promoter)	Head – Strategy and Planning	29	8.35	Two years of experience in the company. He holds an MBA from Wharton School and is responsible for business strategy and planning, financial planning and implementing ERP (Enterprise Resource Planning). Term expires in 2046.
Karan Suryavanshi (s/o promoter)	Head – Business Development	27	6.75	Five years of experience in the company. He holds an MBA from Symbiosis Centre for Management Studies and is responsible for planning, liasoning with the government, sales, marketing, business development, and management functions of our Company. Term expires in 2049

Source: Company RHP

**Fig. 50: Core execution team reporting to the KMPs**

Remuneration at the end of FY16

Name	Designation	Age (yrs)	Remuneration (INR mn)	Industry experience (yrs)	Reporting to
Vaibhav Rawat	CFO	37	2.84	11	Bharat Singh (President)
Raja Ghosh	GM –Finance, Accounts & Taxation	42	2.65	17	Bharat Singh (President)
Kumar Raman Shrivastava	SM- Legal	42	1.11	15	Bharat Singh (President)
Abhishek Shrivastav	Head –CS and Compliance Officer Financial Highlights	40	1.16	10	Bharat Singh (President)
Sanjiv K. Khare	GM - Operations	54	1.18	23	Bharat Singh (President)
Nitin Shrivastava	GM –Bidding & Contracts	41	2.74	21	Devendra Jain (CEO)
Atul Joshi	GM- Structure	49	3.68	28	Devendra Jain (CEO)
P. Marimuthu	GM –System Admin & Fuel Monitoring	54	2.81	18	Devendra Jain (CEO)
Arun Kumar K	GM - Design & Technical Audit	43	2.06	20	Devendra Jain (CEO)
Kamalakanta Mahakul	GM- HR	45	2.32	22	Devendra Jain (CEO)
Gaurav Tiwari	AGM- Mechanical	39	1.99	17	Devendra Jain (CEO)
NiteshKumar Sharma	AGM –Billing & Planning	35	2.13	15	Devendra Jain (CEO)
BadalChandra Sardar	DGM –Survey & Design	42	1.97	20	Devendra Jain (CEO)
B B Kameshwara Rao	DGM/Head–QA&QC	36	2.13	15	Devendra Jain (CEO)
Ashok K. Gupta	AGM / Head – Contract Management	45	1.95	25	Devendra Jain (CEO)

Source: Company RHP

# Indian roads sector

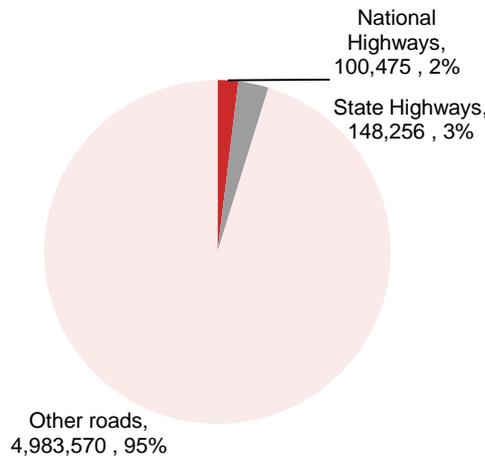
## A strong case for road development: Poor quality of road network

We believe India has one of the most extensive road networks in the world, but the quality of the network is very poor. The country has a road network of 5.23mn km, according to figures published by the Ministry of Road Transport and Highways (MoRTH), which is the second-largest road network in the world. But there are significant deficiencies in the capacity and quality of roads. There is significant stress on national highways, which form <2% of the total road length, but account for ~40% of the road traffic (source: World Road Statistics 2011 & Basic Road Statistics 2010-11, MoRTH).

Of the ~100,475km of national highways (in FY16), more than 50% are either single or double-lane. Further, more than 90% of the state highways are at or below double-lane standards (see Fig. 52 and Fig. 53). This demands significant improvement in India's highways, in our view.

**Fig. 51: Road network in India (Dec-15)- Total road length (approximately 5.23mn km)**

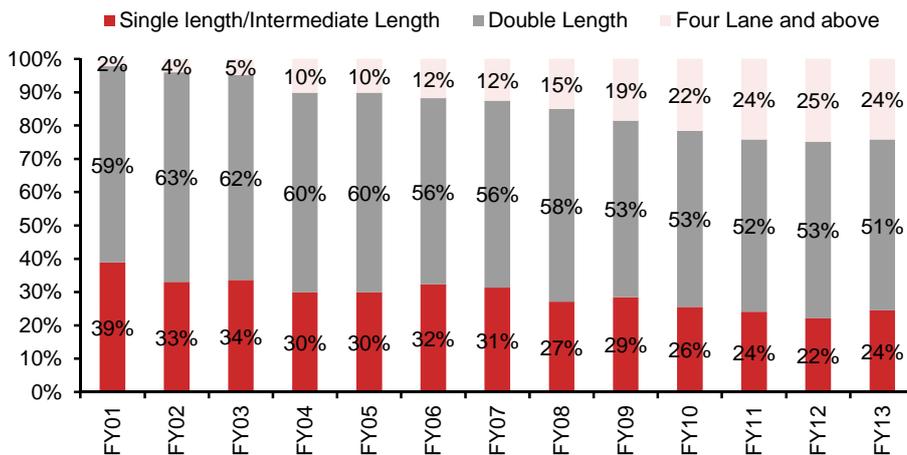
Other roads- include rural roads and district roads



Source: Annual Report 2015-16 of MoRTH

**Fig. 52: Lane-wise breakup of national highways as of end-FY13**

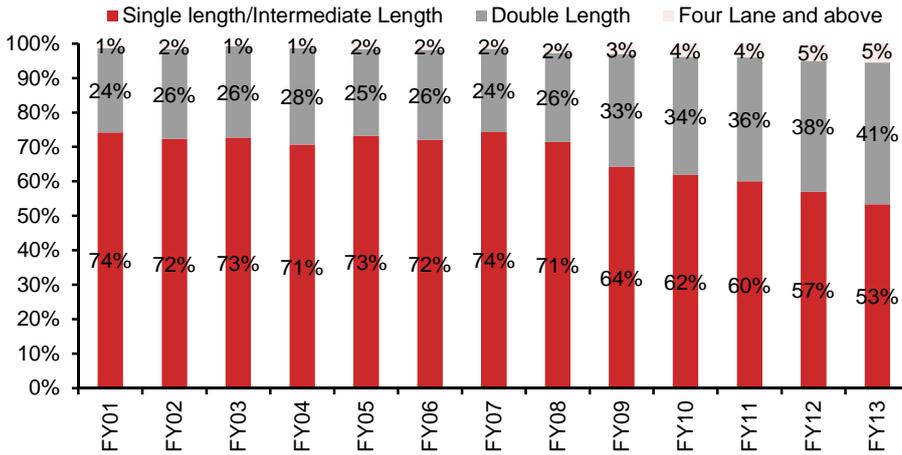
Total length of 79,116 km



Source: MOSPI Statistics Book 2016

**Fig. 53: Lane-wise breakup of state highways as of end-FY13**

Total length of 162,950 km



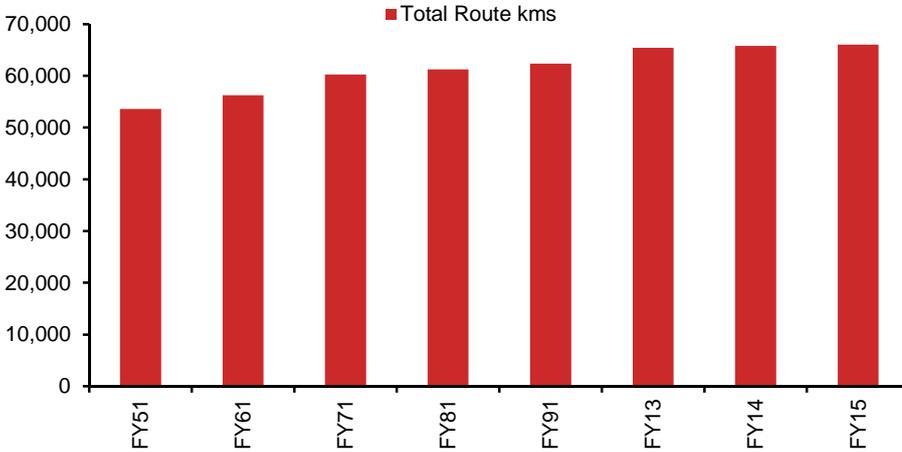
Source: MOSPI Statistics Book 2016

### Low investment in railways: higher dependence on road for passenger and freight traffic

In India, railways and road are the dominant means of transport, carrying more than 95% of the total generated traffic in the country. Since India's independence, railways have been the major means of transportation, but this has now reversed due to the prolonged period of underinvestment in railway infrastructure. Since India's independence, the railway's track length has only grown at an average rate of ~0.6% per annum. Between 2002 and 2015, the increase in railway track length was at an average of 0.8% as compared with ~3.0% increase in the length of national highways.

**Fig. 54: Growth in railway's running track in India**

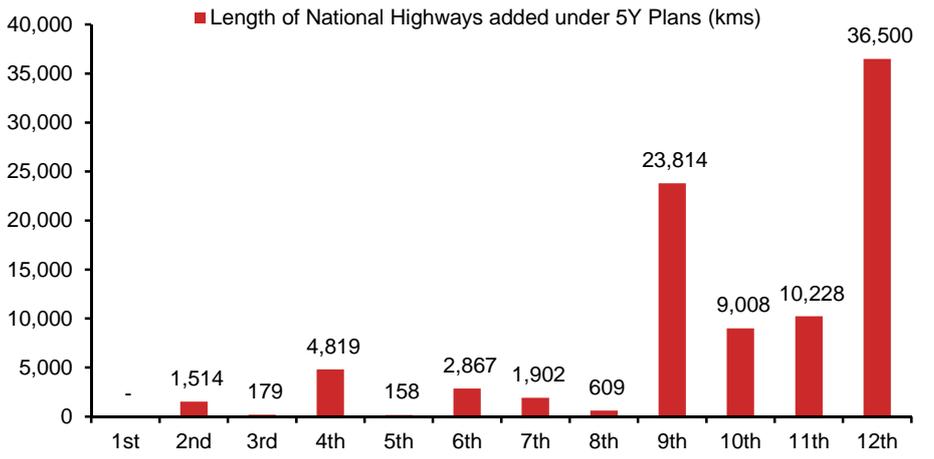
Chronic underinvestment in railways has led to slow network expansion



Source: Indian Railways

In contrast, the level of growth for roadways has been far higher. In fact, since the 9<sup>th</sup> Five Year Plan, the length of national highways added has increased significantly. While just 179kms were added during the 3<sup>rd</sup> Five Year Plan, over 36,000 kms are expected to be added by the end of the 12<sup>th</sup> Five Year Plan.

**Fig. 55: Growth in National Highway Network in various Five-Year Plan periods**

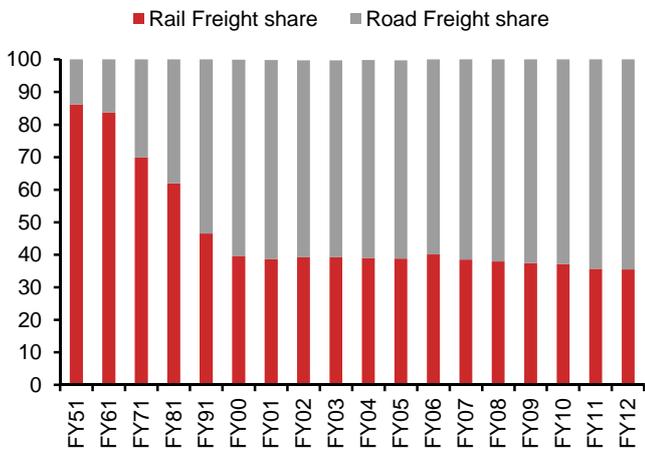


Source: MoRTH

**Consequently, the share of road traffic has increased at the expense of railways**

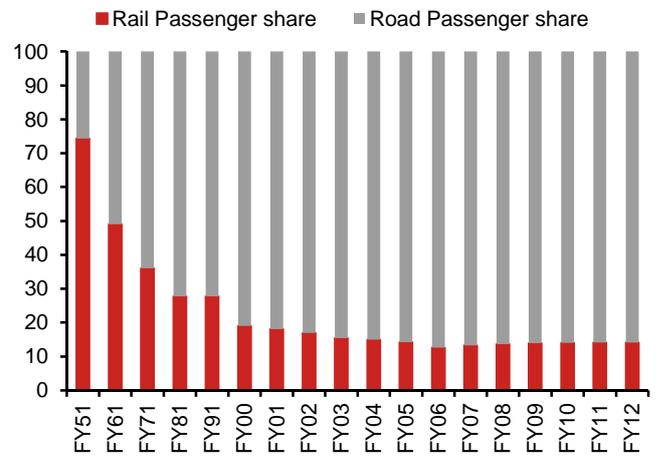
The slow expansion of the railway network has led to a gradual shift in passenger as well as freight traffic towards roads, as congestion on key railway links has increased. This was aided by the expansion of the road network which enabled quicker transportation, enough to justify the higher cost of road transport. As of FY12, nearly 64% and 86% of freight and passenger traffic were carried by roads, respectively, according to statistics available from the Ministry of Statistics and Programme Implementation (MOSPI). We believe these ratios have not changed materially since FY12 as the investment in railways has continued to remain low.

**Fig. 56: Split of freight traffic carried on roads vs rail (%)**



Source: MOSPI

**Fig. 57: Split of passenger traffic carried on roads vs rail (%)**



Source: MOSPI

**However, the progress of key projects like the Dedicated Freight Corridor (DFC) highlights railways' attempt to regain market share**

The Delhi-Mumbai and Delhi-Kolkata routes are among the busiest railway networks in India, handling a bulk of the country's freight and passenger traffic. As preference is given to passenger trains in terms of network access, freight trains are often delayed resulting in loss of business. To address the issue, the Dedicated Freight Corridor (DFC) project was proposed in 2005, but with not much visible progress. However, of late, there has been significant progress on both the Western and Eastern DFC in terms of project awards as well as execution. Based on the latest available award and commissioning timeline, the Ministry of Railways expects the DFC to be ready by December 2019.

**Fig. 58: Dedicated Freight Corridor timelines**

Significant progress on award and commissioning has been made in FY15/16

EDFC	KMs	% award	Award timeline
Work in progress (Khurja Mughalsarai Sonnagar)	871	66%	Under execution
Khurja Dadri + Ludhiana Saharanp	222	17%	By March 2016
Khurja to Saharanpur	225	17%	By June 2016
Sonnagar Dankuni			PPP

WDFC	KMs	% award	Award timeline
Work in progress (Rewari Palanpur and Vadodra, Vaitarna)	945	63%	Under execution
Palanpur JNPT, Dadri, Rewari	308	21%	By December 2015
JNPT Vaitarna	110	7%	By January 2016
Dadri-Rewari	127	9%	By March 2016

**Commissioning Schedule**

Timeline	EDFC (KMs)	WDFC (KMs)	Total KMs commissioned
FY16	56	-	56
FY18	413	544	957
FY19	448	892	1,340
FY20 (Dec 2019)	401	84	485

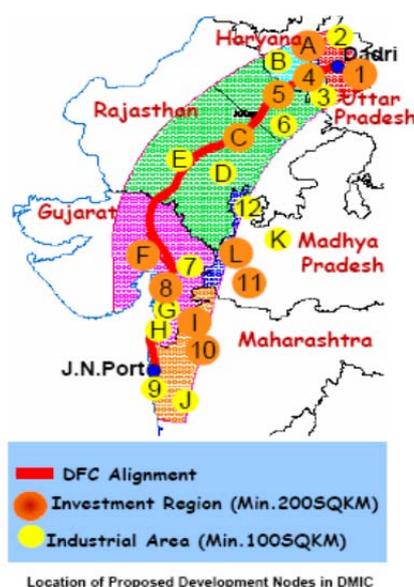
EDFC = Eastern Dedicated Freight Corridor; WDFC = Western Dedicated Freight Corridor

Source: DFCCIL, Indian Railways

**Nevertheless, DFC may still stimulate road traffic**

While railways and roadways are generally perceived as competing modes of transport, the DFC may, on the contrary, stimulate further road traffic through the development of industrial corridors along the route. The Delhi Mumbai Industrial Corridor (DMIC) is the prime example where investments of USD100bn are expected to be used to develop six large industrial corridors and smaller industrial areas along the Western DFC. Once DMIC is commissioned, the government expects the industrial output to triple in five years coupled with a 400% rise in exports from the region over the same timeline. This should lead to further growth in road traffic in the states through which the DMIC traverses.

**Fig. 59: DMIC traverses states adjoining the Western DFC**



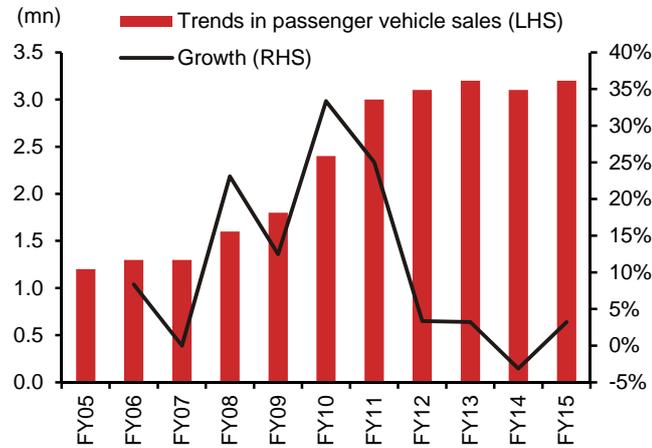
Source: DMIC

## Growth in vehicles has further added to increased road traffic

The growth in the number of passenger vehicles has been at a CAGR of 10.3% over FY05-15, while commercial vehicles grew at a CAGR of 4.2% over FY10-15, according to data from SIAM. Rising per capita income and growing middle class income coupled with easier access to finance have boosted the sale of vehicles.

**Fig. 60: Passenger vehicle sales growth**

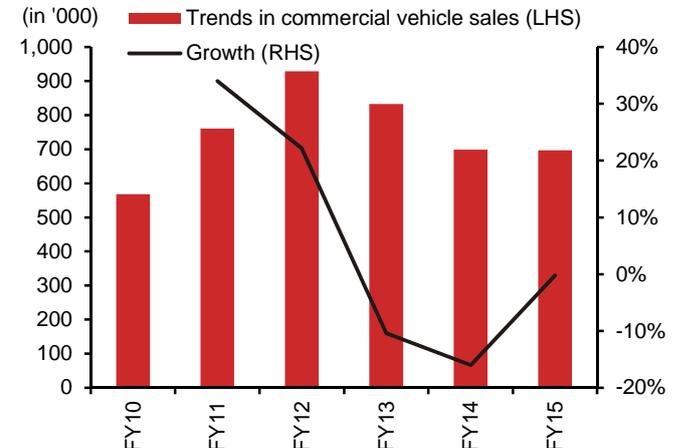
CAGR of 10%+ over FY05-15



Source: SIAM

**Fig. 61: Commercial vehicle sales growth**

CAGR of 4%+ over Fy10-15



Source: SIAM

The Planning Commission, in its 2014 report “India Transport Report: Moving India to 2032”, had projected growth in road freight at 9% pa and passenger traffic at 17% pa over the period FY12 to FY32. This increase in road traffic will necessitate further investments in road infrastructure over the long run, in our view.

**Fig. 62: Projected growth in road traffic till FY32**

	Road Freight traffic (bnNTkm)	traffic (bnNTkm)
FY12	1,385	9,329
FY17	1,987	17,272
FY22	2,949	35,043
FY27	4,321	74,079
FY32	6,559	163,109

Source: National Transport Development Policy Committee, India Transport Report: Moving India to 2032

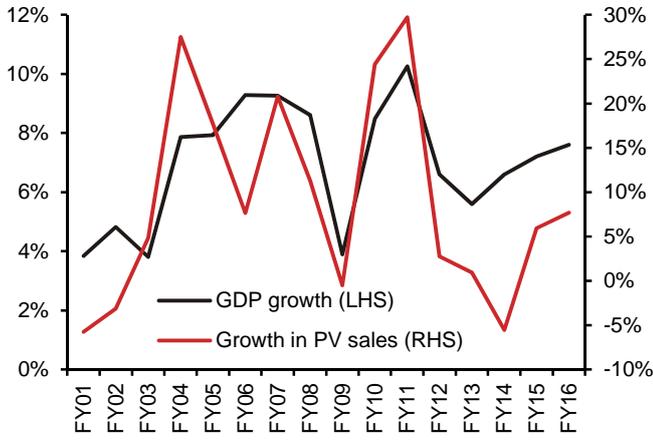
## Economic growth to propel traffic growth

Historical data from the Society of Indian Automobile Manufacturers (SIAM) suggests that India’s registered car vehicular population has grown at a 10.3% CAGR over the past decade (from FY05 to FY15) in comparison to an average economic growth of ~7.6%. This implies that car vehicular traffic has grown at a multiple of ~1.5x the GDP growth rate. In the case of commercial goods vehicles, this growth rate multiple to GDP is at around 1.35x. Even road freight traffic (in bn km tonnes) has grown at a multiple of ~1.25x the GDP growth rate over 2001-12. With national highways alone accounting for 40% of the total road traffic, the pressure on these stretches, which form < 2% of the total road network, is significant. Due to the significant long-term growth potential of India (barring some headwinds in the near-term), the growth of vehicular traffic should add more pressure on national highways, clearly making a case for investments into the road infrastructure, in our view.

The growth in car population is a function of economic growth, individual income growth, car penetration and urbanisation, while the growth in commercial truck population is more closely related to economic activity. Thus, the growth in new car population is likely to be more stable which is driven by several factors, unlike commercial vehicle

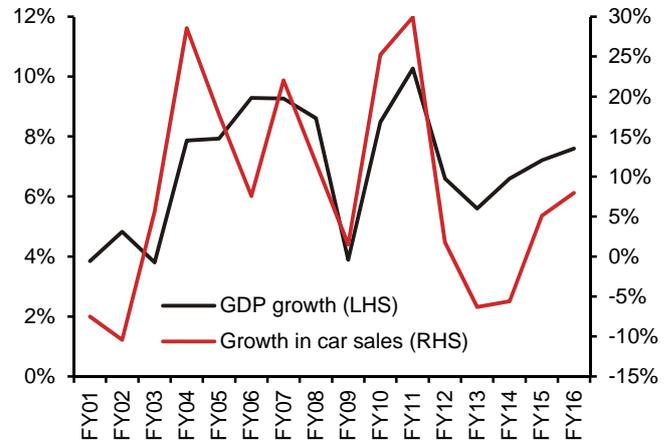
sales which are more exposed to the vagaries of the economic environment, in our view. Fig. 66 below shows that historically the sale of commercial vehicles is directionally similar to the change in IIP (Index of Industrial Production) and also explains the recent sharp decline in commercial vehicle sales.

**Fig. 63: Car population has grown at 1.5x GDP growth**



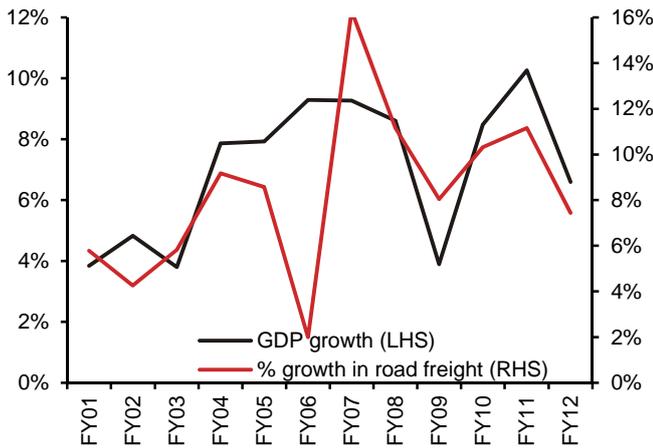
Source: SIAM

**Fig. 64: Trend of new car sales vs GDP growth**



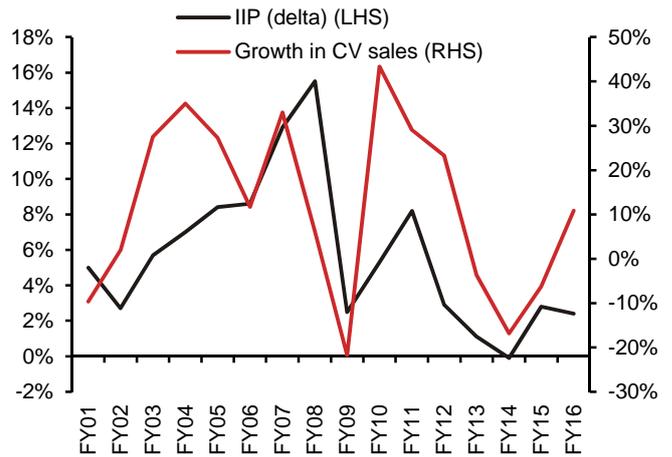
Source: SIAM

**Fig. 65: Commercial vehicle population has grown at 1.25x GDP growth**



Source: MOSPI

**Fig. 66: Strong correlation between commercial vehicle sales and the change in IIP**



Source: CMIE, SIAM

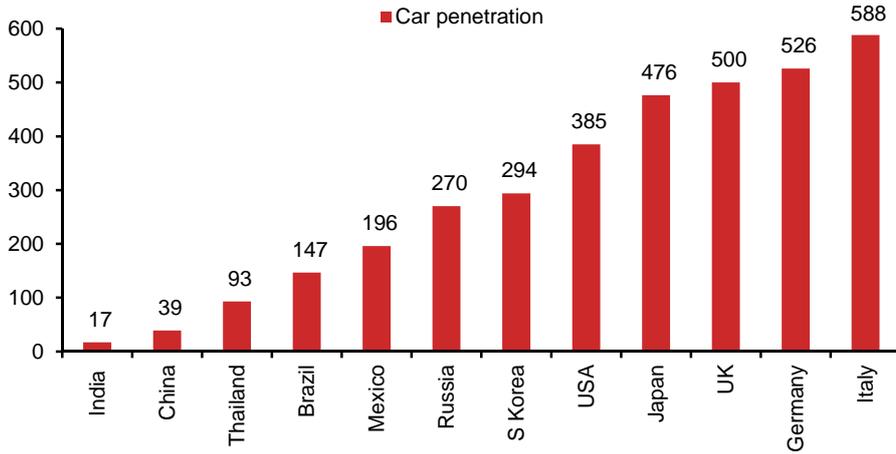
**Low passenger vehicle penetration and increased affluence will drive car sales**

The relatively low penetration of cars in India compared to emerging economies as highlighted in Fig. 67 offers significant growth potential in passenger car sales as the automobile market is highly under-penetrated. According to CRISIL Research, passenger vehicle penetration will increase from approximately 17 cars per 1,000 people in FY14 to 27 cars per 1,000 people in FY20.

Further, with the increase in disposable income and the relatively stable cost of ownership, greater urbanisation, a growing working population and easy availability of finance will further drive growth in car sales, in our view. As highlighted in Fig. 68, CRISIL Research expects car sales to gather further momentum over FY16-20 as more households are able to afford cars.

**Fig. 67: Low penetration offers high growth opportunity**

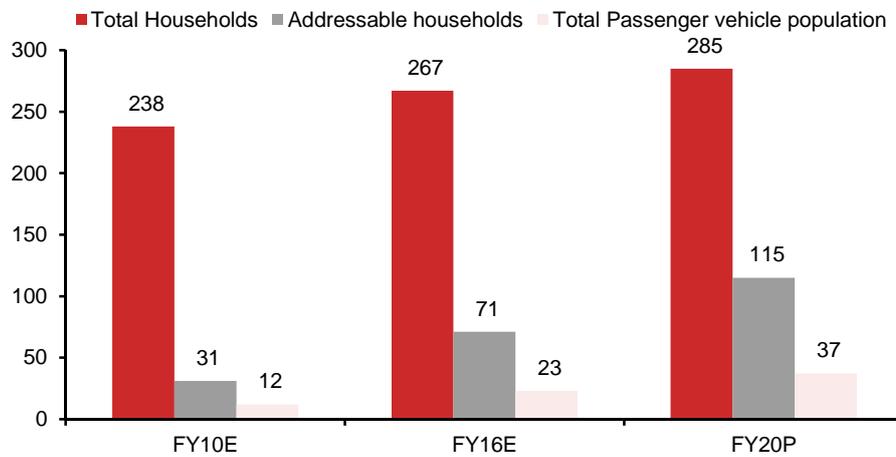
Passenger vehicles per 1,000 population



Source: CRISIL Research

**Fig. 68: Number of households that can afford a car will continue to rise significantly**

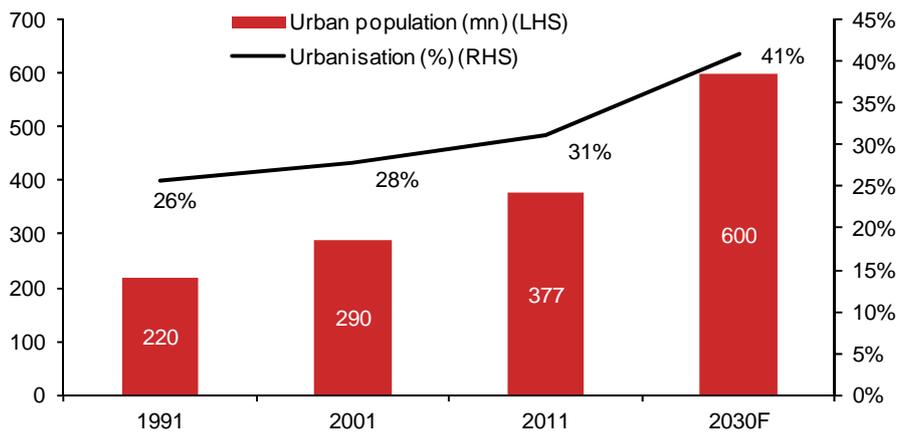
In millions of households



Source: CRISIL Research

**Increased urbanisation will further add to growth**

The urbanisation growth rate in India is likely to further propel car traffic growth, in our view. According to a study conducted by McKinsey, India’s urbanisation rate is expected to accelerate further and by 2030, 40% of India’s population will be living in cities as opposed to 31% in 2011. This implies that an average of nearly 11.7mn people will be added to cities every year, which is 35% higher than the previous decade between 2001 and 2011, when nearly 8.7mn people were added each year. We believe that higher urbanisation rate, lower car penetration along with a favourable demographic profile, are positives for passenger car traffic.

**Fig. 69: Urbanisation momentum to pick up**

Source: McKinsey Global Institute

## Road infrastructure development plans

### National Highway Development Programme (NHDP)

NHDP is one of the world's largest highway projects to date and is being undertaken in phases. The rapid expansion of passenger and freight traffic makes it imperative to improve the road network in India.

**NHDP Phase I:** NHDP Phase I was approved by the government of India in December 2000 at an estimated cost of INR303bn (1999 prices) and comprises Golden Quadrilateral ("GQ") (5,846 kms), North South-East West Corridor ("NS-EW") (981 kms), Port Connectivity (356 kms) and other national highways (315 kms).

**NHDP Phase II:** NHDP Phase II was approved in December 2003 at an estimated cost of INR343.39bn (2002 prices) and comprises NS-EW (6,161 kms) and other national highways of 486 kms length.

**NHDP Phase III:** The government of India approved the upgrading and four-laning of 4,000 kms of national highways on a build-operate-transfer ("BOT") basis at an estimated cost of INR220bn under NHDP Phase IIIA in March 2005. In April 2006 and 2007, the government of India approved additional stretches of roads for upgrading, making a total length of 12,109 kms of national highways on a BOT basis at an estimated cost of INR806.26 bn approved under NHDP Phase III.

**NHDP Phase IV:** The government of India approved the upgrading of about 20,000 kms of national highways to two lanes with paved shoulder in July 2008 at an estimated cost of INR785bn under NHDP Phase IV.

**NHDP Phase V:** In October 2006, the government of India approved the six-laning of 6,500 kms of existing four-lane highways under NHDP Phase V at an estimated cost of INR412.10 bn. The six-laning project includes 5,700kms of GQ and 800 kms of other stretches of road.

**NHDP Phase VI:** In November 2006, the government of India approved 1,000 kms of expressways at an estimated cost of INR166.80bn under NHDP Phase VI (on a design-build-finance-operate basis).

**NHDP Phase VII:** In December 2007, the government of India approved the implementation of NHDP Phase VII which envisages the construction of stand-alone ring roads, bypasses, grade separators, flyovers, elevated roads, tunnels, road over bridges, underpasses, service roads, etc. on BOT (Toll) mode at an estimated cost of INR166.80bn.

Source: MoRTH.

The progress on various NHDP projects is as mentioned below:

**Fig. 70: NHDP's implementation status (as on 31 July 2016)**

NHDP Phases	Total Length (km)	Already 4 or 6 Laned (ks)	Under Implementation (km)	Contracts Under Implementation (No.)	Balance length for award (km)
Golden Quadrilateral (GQ) <sup>1</sup>	5,846	5,846	-	-	-
NS-EW Ph. I & II <sup>2</sup>	7,142	6,465	420	35	257
Port Connectivity	435	379	56	7	-
NHDP Phase III	11,809	7,032	3,135	75	1,642
NHDP Phase IV <sup>3</sup>	13,203	2,550	5,581	82	5,072
NHDP Phase V	6,500	2,439	721	24	3,340
NHDP Phase VI	1,000	-	165	8	835
NHDP Phase VII	700	22	98	4	580
<b>NHDP Total</b>	<b>46,635</b>	<b>24,733</b>	<b>10,176</b>	<b>235</b>	<b>11,726</b>
Others (Phase I, Phase II and Miscellaneous)	1,845	1,690	155	9	-
SARDP – NE <sup>4</sup>	110	105	5	1	-
<b>Total by NHA1</b>	<b>48,590</b>	<b>26,528</b>	<b>10,336</b>	<b>245</b>	<b>11,726</b>

1 GQ connects four metropolitan cities (Delhi-Mumbai-Chennai-Kolkata-Delhi).

2 North South (NS) Corridor connects Srinagar to Kanniakumari and East West (EW) Corridor connects Porbandar to Silchar.

3 Total 20,000 kilometers was approved under NHDP Phase IV, out of which 14,799 kilometers are assigned to the NHA1 with the remaining length of 5,201 kilometers allocated to MoRTH.

4 Special Accelerated Road Development Programme for the development of road networks in the North-East Region.

Source: NHA1, ITT Transaction Update Document

### From inception, INR2.0tn has been invested for national highway development

The NHDP programme has recorded a 75% growth in the length of national highways since FY01. This growth was achieved through higher investments in roads which have evolved from being publicly-funded to those based on the PPP model at present. Till FY15, INR2.0tn has been invested as expenditure on development.

**Fig. 71: Central government expenditure on the national highway programme**

	Length of National Highways (kms)	Development (INR bn)	Maintenance (INR bn)
FY01	57,737.0	12.1	0.6
FY02	58,112.0	16.1	0.7
FY03	58,112.0	51.4	6.3
FY04	65,569.0	51.9	7.3
FY05	65,569.0	49.6	6.8
FY06	66,590.0	87.5	8.4
FY07	66,590.0	139.4	7.8
FY08	66,754.0	123.4	9.8
FY09	70,548.0	146.7	9.7
FY10	70,934.0	146.6	10.5
FY11	70,934.0	168.7	14.9
FY12	76,818.0	252.9	10.8
FY13	79,116.0	163.2	14.6
FY14	92,468.2	280.9	18.0
FY15	97,958.1	268.4	24.9

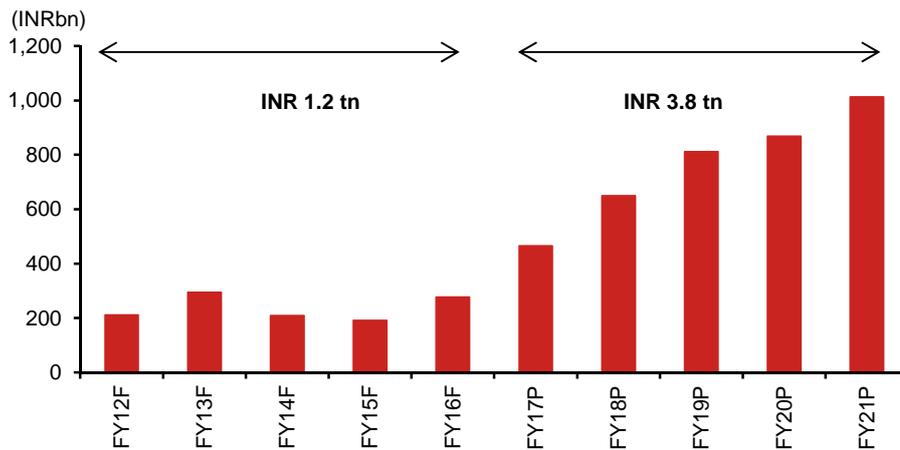
Source: MOSPI

### Investments in national highways are set to triple, according to CRISIL

Against an investment of INR1.2tn over FY12-16, CRISIL estimates INR3.8tn of investments in the development of national highways over FY17-21. This will largely be

funded by the government of India, which will account for over 50% of the investments as compared with 44% in the past five years.

**Fig. 72: National highways: Development expenditure**



Source: Crisil estimates. E: Estimated; P: Projected

## Policy paralysis + private developers' irrational exuberance brought new project awards to a standstill

### Aggressive awarding and the availability of financing led to increased private participation

In the initial years of the NHDP, private participation in road projects was quite limited as most of the projects were funded by government finances. Till March 2005, less than 1,500 km of road length was awarded on a BOT basis compared to total award of ~7,000 km of road length. Weak government financing and the slow progress of the NHDP made private participation vital for the programme to achieve its objective. Between 2005 and 2008, the award of road projects picked up momentum with higher private participation. NHAI awarded close to ~7,600 km of road projects during that period, out of which >50% of projects were awarded on a toll basis (PPP mode). To an extent, this was possible as there was easy availability of equity capital during the period. In 2009, during the global financial crisis, the road awards by NHAI hit a temporary road block as private developers found it tough to arrange for funding due to the tight liquidity environment, and even the funding cost rose, impacting road developers' internal rate of return (IRR).

In 2009, India received a new stable government. The new government had set aggressive targets of building ~20km/day (or ~7,300 km/year) of national highways compared to average road awards of ~1,900 km/year in the past five years (2004-09). The government also brought out reforms addressing the issues related to the Request for Qualification, tolling, clauses in concession agreement, etc, that were being faced by private developers.

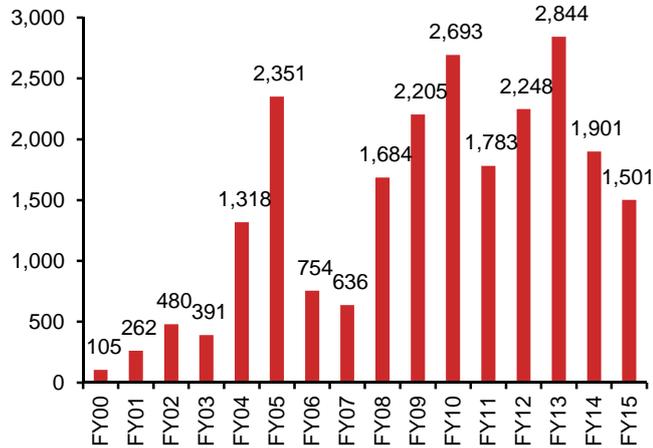
Helped by: 1) reforms; 2) good IRRs being made by private developers on the projects awarded during 2005-07; 3) the easy availability of equity capital along with 4) the award of road projects with high traffic density, participation from private developers intensified. During FY10-12, NHAI made a giant leap in awarding close to 15,000 km of road projects with majority of them being awarded on a toll basis. During this phase of the awards, there was irrational exuberance among private developers and some of the stretches were bid out with a high negative grant or higher revenue share percentage for the government. Since all the projects were being awarded on a BOT basis, EPC opportunities in the road sector almost dried up. This resulted in EPC contractors also bidding for projects on a BOT basis.

**But issues related to land acquisitions, regulatory clearances and policy paralysis led to a complete standstill of the road sector**

The award activity hit a road block as the execution of infrastructure projects including roads was marred by issues related to land acquisition, environment & forest clearances as the government went into policy paralysis. These delays had a snowballing effect on the overall growth of the economy. Developers who had bid aggressively found it difficult to achieve the financial closure of projects as the viability of these projects was questionable (impacted by delays as well as falling traffic due to a weak economy). Lenders also tightened lending norms as the health of balance sheets of private developers/EPC contractors started to deteriorate with rising debtor levels (due to execution delays). Even many lenders introduced stringent conditions such as a 100% right of way, clearance and significant contribution from promoters before the sanction/disbursement of the loan.

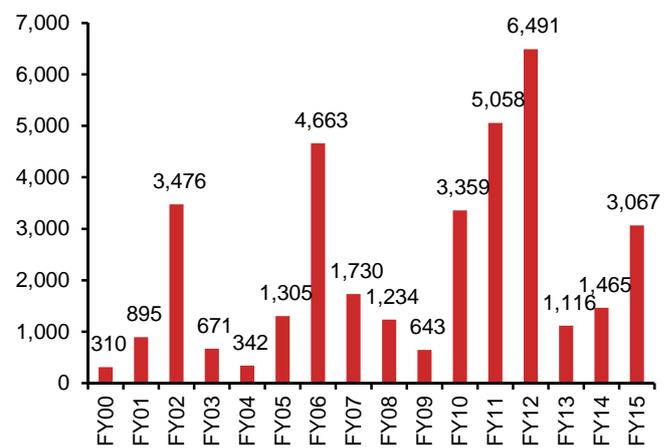
The condition of developers/EPC contractors had worsened because of sticky inflation which kept the cost of debt high, and eventually weighed on the highly leveraged balance sheet of EPC contractors/developers. Poor balance sheet along with falling traffic growth (due to a weak economy) significantly lowered the appetite for road projects which brought the awarding activity to almost a standstill. In FY14 and FY15, NHAI was only able to award projects of road length of ~1,100 km and 479 km, respectively.

**Fig. 73: Number of projects awarded (km) by NHAI**  
Kms



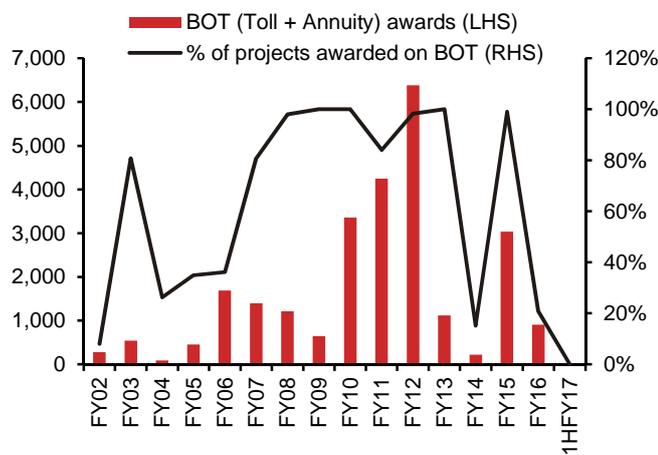
Source: NHAI

**Fig. 74: Lane construction (km)**  
Kms



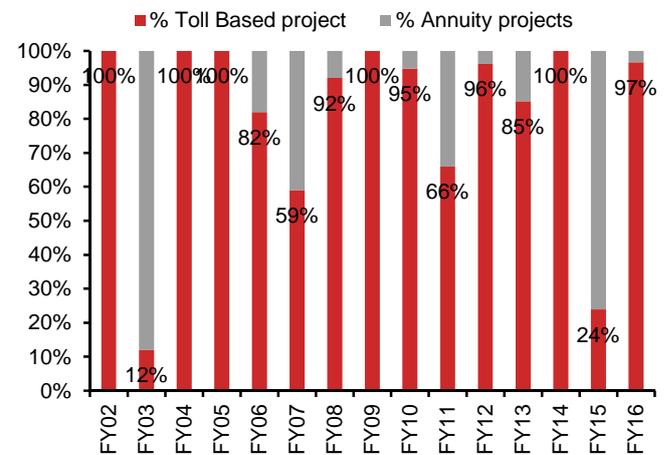
Source: NHAI

**Fig. 75: Trend of award of road projects on a BOT basis**



Source: NHAI

**Fig. 76: Split between BOT road projects**



Source: NHAI

## Government has now taken steps to put the house in order

To revive the road sector, the government has made attempts to resolve the issues pertaining to the sector. We highlight some of the positive steps which have been taken by the government to revive the sector:

- 1) Delinking of forest and environment clearance:** In Mar-13, the Supreme Court passed an order to delink forest clearance from environment clearance for linear projects. Since mid-2011, the Ministry of Environment linked forest and environment clearances which prevented developers from starting work on projects till both were in place. In effect, the work on highways could not start even if there was a small stretch on which forest clearance was required. With this order, developers could start the construction of projects without getting the forest clearance.
- 2) Projects to be awarded only when 80% of Right of Way has been secured:** Earlier projects were stalled due to lack of various clearances and land acquisition hurdles. In this regard, the Cabinet Committee on Economic Affairs (CCEA) has ruled that projects can only be awarded only when at least 80% of the Right of Way has been secured.
- 3) Relaxation of the exit clause for developers:** The government has announced that cash-strapped developers which are unable to complete projects will be allowed to exit the projects, i.e. substitution with another developer, subject to the approvals from NHAI and the lender. Earlier, there were different rules regarding the exit of road developers from their projects, depending on the year in which they had bagged projects. For the projects awarded after 2009, developers are allowed to fully exit projects after two years of operation, and for projects awarded prior to 2009, developers could sell a 74% stake post-commissioning of the project.
- 4) Classifying debts for BOT projects as secured loans:** The Reserve Bank of India has allowed, subject to certain conditions, to offer loans to PPP road projects to be treated as secured loans. This means debt will come at a lower cost for developers.
- 5) Restructuring of projects by rescheduling the premium:** The aggressive bids from private players further became messy with the government's own unpreparedness in meeting its obligations such as acquiring land on time. These delays have added to the cost and for over a year now, the government has been trying to renegotiate stressed projects. Very recently, the government has allowed premium rescheduling of stressed road projects which will be evaluated on a case to case basis. According to the recommendations, developers can defer premium payment only if they are left with not enough funds to pay the premium, after undertaking debt servicing and operation and maintenance costs, from the toll revenue.
- 6) Amended Arbitration Act allows for recovery of 75% of award amounts:** The CCEA has recommended that government agencies will release 75% of the award amount against margin-free bank guarantee in cases where an arbitration award has been challenged. This move is expected to benefit contractors which have payments stuck under arbitration. MoRTH has estimated that INR700bn worth of claims are tied up in arbitration at present.
- 7) One-time fund infusion for projects that are at least 50% complete:** Projects that were at least 50% complete as on 1 November 2014, but are stuck due to financial constraints, will receive a one-time cash infusion from NHAI. This fund infusion is applicable only for BOT projects. The assistance will be provided subject to the constraint that interest at bank rate plus 2% will be recovered from annuities payable (in the case of BOT annuity projects).

**Fig. 77: Deteriorated balance sheets of developers & contractors**

(x)

Net debt to equity	FY13	FY14	FY15	FY16
<b>Developers</b>				
IRB Infrastructure	2.5	2.9	2.5	2.8
GMR Infrastructure	3.5	3.9	4.6	6.0
Sadbhav Engineering	3.3	3.6	3.9	3.8
Reliance Infrastructure	0.7	0.7	0.8	0.8
Ashoka Buildcon	1.7	1.8	2.2	1.7
GVK Power & Infrastructure	2.5	3.4	5.4	8.2
<b>Average</b>	<b>2.4</b>	<b>2.7</b>	<b>3.2</b>	<b>3.9</b>
<b>Contractors</b>				
Simplex Infrastructure	2.0	2.0	2.2	2.0
NCC	1.3	1.0	0.6	0.7
HCC	10.9	13.8	15.0	7.4
J Kumar Infraprojects	0.3	1.0	0.6	0.2
Punj Lloyd	2.0	2.9	7.2	NA
L&T	1.4	1.7	1.7	1.7
<b>Average</b>	<b>3.0</b>	<b>3.7</b>	<b>4.6</b>	<b>2.4</b>

Source: Bloomberg

**Fig. 78: Some of the recent deals in Indian toll roads**

Date	Acquirer	Seller	Project name	States	Equity Stake	Amount (INR bn)
Aug-16	Goldman Sachs	Essel Highways	NA	NA	NA	15.0
Aug-16	BIF India (Brookfield Asset Mgmt consortium)	Gammon Infraprojects	6 road and 3 power assets	Various	100%	5.65+Debt
Jan-16	I Squared Capital	Various	Madhucon Agra Jaipur Expressways	Rajasthan/UP	74%	
			Western UP Tollway Ltd	Uttar Pradesh	100%	5.0
			Jaipur Mahua Tollways Pvt. Ltd	Rajasthan	74%	
Jan-16	PSP Investments	Isolux Corsan	Maharashtra-Gujarat border to Hazira (133km)	Gujarat	100%	>151
			Panipat to Jalandhar (291km)	Haryana	100%	
			Kishangarh to Beawar (94km)	Rajasthan	100%	
			Varanasi to Aurangabad (192km)	UP/Bihar	100%	
FY15-FY16	CPPB Canada	L&T IDPL	Operational road assets	Various	5%	20.0
FY15	Tata Opportunites Fund	Tata Projects	Various infra assets	Various	NA	3.7

Source: The Hindu Business line, Economic Times, VC Circle

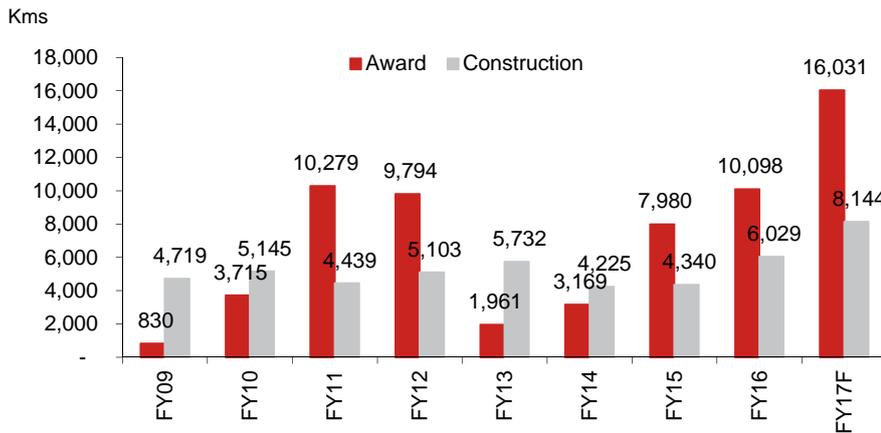
**Awards and construction of national highways have gathered pace of late**

The focus on the development of road and specifically national highway infrastructure is evident from the Union Budget in FY17. While the Union Budget has set a target for constructing 10,000km of national highways in FY17, the targets set by MoRTH are more ambitious at 15,000kms of construction and 25,000 kms of project awards. Overall, the infrastructure outlay in the FY17 Union Budget has been raised to INR2,212.46bn.

The pace of project awards and construction has gathered momentum of late and in FY15, MoRTH was able to achieve its stated targets after a gap of several years. With the proposal of the new BOT models such as the Hybrid Annuity Model and initiatives to clear stalled road projects (which can be attributed to policy-related issues since FY11

and the irrational exuberance by construction firms), we expect project awards and execution momentum to gather pace in the near-term.

**Fig. 79: Awards and construction of National Highways have gathered momentum**



Source: PIB. FY17F numbers based on targets set by MoRTH

### State highways are also being provided impetus

For expanding the road networks in India, including particular state highways which are part of the secondary road transportation network, state governments have invested, including by way of PPP, through the government of India's viability gap funding (VGF) programme.

Under the VGF programme, the funding will be in the form of a capital grant at the stage of construction of the project and will be an amount equal to the lowest bid for capital subsidy, but subject to a maximum of 20.0% of the total project cost.

State roads tend to suffer from low investment, inadequate carriageway width to meet traffic demand, weak pavement and bridges, congested stretches passing through cities and towns, poor safety features and road geometrics and inadequate formation width in hilly and mountainous regions, among others.

**Fig. 80: Twelfth Plan (2012-17) programme for state road developments**

	State Highways		Major District Roads	
	Kilometres	% of Existing / Total	Kilometres	% of Existing / Total Length
Two laning	30,000	30	20,000	8.5
Four laning	5,000	8	1,000	4
Strengthening	41,500	25	66,500	25
Improvement in Riding Quality Programme	50,000	30	80,000	30

Source: Twelfth Five Year Plan (2012-2017), Economic Sectors, Volume II

### Public Private Partnership models for roadways

India awarded INR1.97tn worth of PPP projects till FY15. Another USD31bn worth of PPPs are expected to be executed for national highways over the next five years. The key models for PPP awards are:

#### BOT (toll)

On BOT (toll) projects, construction, operation, maintenance and tolling responsibility rest with the concessionaire during the entire concession period, which is typically between 20 and 30 years.

For projects offered on a BOT basis, bidders bid on a two-stage basis. Stage-one is the pre-qualification stage whereby a bidder's technical and financial expertise is assessed along with its track records on similar projects. In stage two, pre-qualified bidders are invited to submit bids for such projects.

To boost the interest in PPP projects, companies can enjoy 100.0% tax exemption in road projects for five years and have 30.0% tax relief over the next five years which may be availed of within 20 years.

### **BOT (annuity)**

On BOT (annuity) projects, while construction, operation and maintenance also rest with the concessionaire during the concession period, toll is collected by the relevant authority through a bidding process with the concessionaire receiving annuity payments through the concession period. The tax exemptions and bidding procedure are similar to BOT (toll).

### **EPC (Engineering Procurement and Construction)**

Projects that are not viable under the BOT (toll) mode, such as projects in remote regions, are also carried out by executing EPC contracts. The model EPC contract agreement assigns the responsibility for investigations, design and construction to a contractor for a lump-sum price determined through a competitive bidding process. The model EPC agreement provides a contractual framework that specifies the allocation of risks and rewards, equity of obligations between the government of India and the contractor, predictability of costs, force majeure, termination and dispute resolution.

### **Hybrid Annuity Model (HAM)**

The model is a variant of PPP and may be adopted for projects not viable for the BOT (toll) mode. Under the model, 40.0% of the project cost is to be provided by the government of India as "construction support" (which is disbursed in five equal instalments of 8.0% each and the timing of each such payment is linked to the percentage of the project cost spent by the private developer) to the private developer during the construction period and the balance 60.0% of the project cost will be recovered by the concessionaire as annuity payments over the concession period along with the interest on the outstanding amount to the concessionaire. There is a separate provision for operation and maintenance payments by the government of India to the concessionaire. The private developer does not bear traffic risk and inflation risk as the projects are inflation-indexed. For financial year 2017, 28 highways projects have already been identified to be implemented on the basis of the hybrid annuity model.

## **State-level highway development plans**

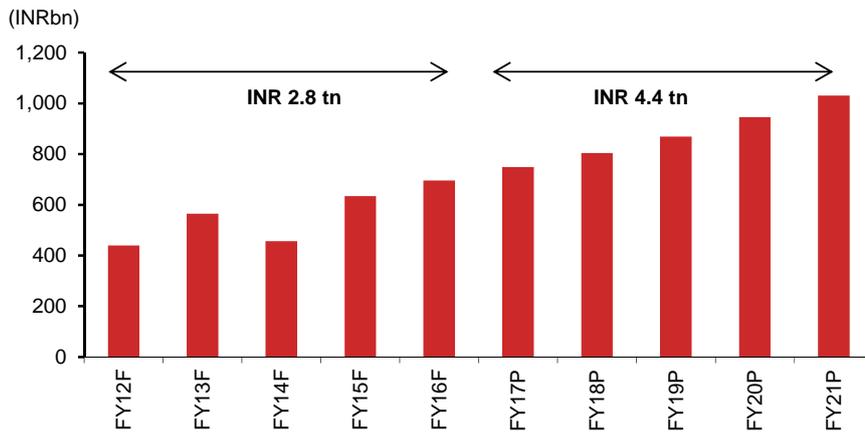
### **State roads investments estimated at INR4.4tn (FY17-21)**

State highways are a key part of the secondary road transportation of India and account for, together with national highways, a major part of India's road traffic. State governments have invested through the PPP mode, often utilising the VGF programme. Under VGF, funding will be in the form of a capital grant which should not exceed 20% of the total project cost. This grant will be provided during the construction stage of the project. In such PPP awards, the bidding parameter is the lowest bid for capital subsidy or grant.

CRISIL expects a CAGR of 8% between 2017 and 2021 in investment growth in state roads propelled by higher budgetary allocations by state governments. This may appear lower than the 12% CAGR achieved during 2012-16, but we note that this was from a significantly lower base.

**Fig. 81: State roads: Investments**

INR bn



Source: Crisil estimates. E: Estimated; P: Projected

# Appendix A-1

## Analyst Certification

We, Amar Kedia and Priyankar Biswas, hereby certify (1) that the views expressed in this Research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this Research report, (2) no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this Research report and (3) no part of our compensation is tied to any specific investment banking transactions performed by Nomura Securities International, Inc., Nomura International plc or any other Nomura Group company.

## Issuer Specific Regulatory Disclosures

The terms "Nomura" and "Nomura Group" used herein refers to Nomura Holdings, Inc. and its affiliates and subsidiaries, including Nomura Securities International, Inc. ('NSI') and Instinet, LLC('ILLC'), U. S. registered broker dealers and members of SIPC.

### Materially mentioned issuers

Issuer	Ticker	Price	Price date	Stock rating	Sector rating	Disclosures
Dilip Buildcon	DBL IN	INR 405	20-Apr-2017	Buy	N/A	
Larsen & Toubro	LT IN	INR 1681	20-Apr-2017	Buy	N/A	A1,A2

- A1 The Nomura Group has received compensation for non-investment banking products or services from the subject company in the past 12 months.
- A2 The Nomura Group has had a non-investment banking securities related services client relationship with the subject company during the past 12 months.

### Dilip Buildcon Ltd (DBL IN) INR 405 (20-Apr-2017) Buy (Sector rating: N/A)

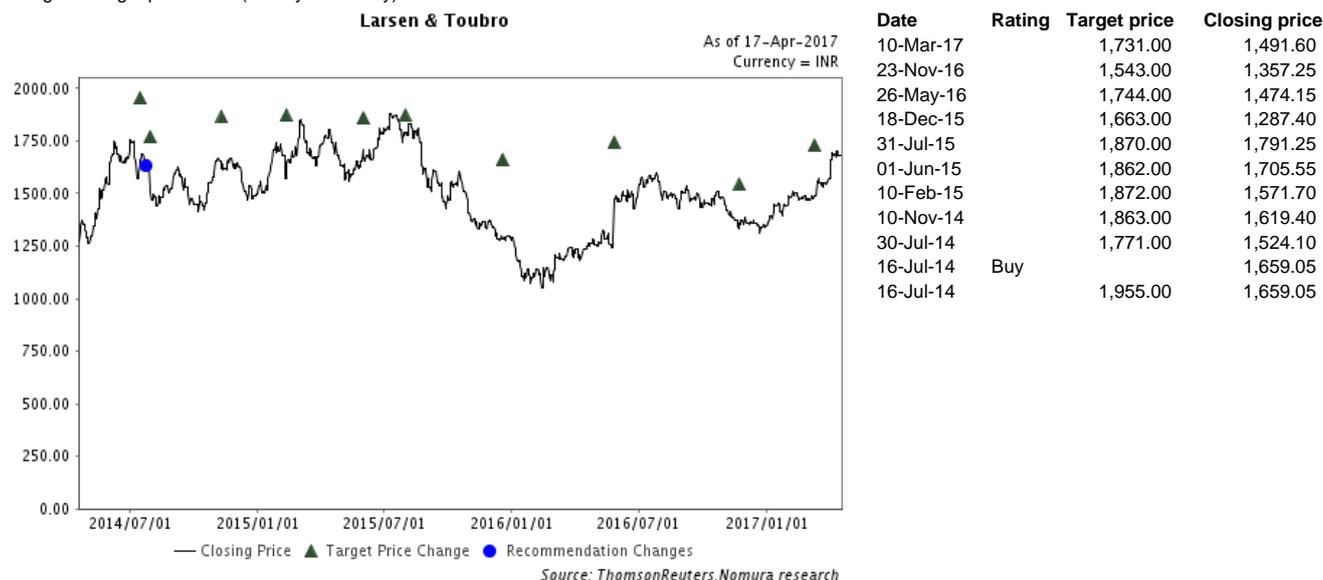
Chart Not Available

**Valuation Methodology** We value DBL's EPC business at 13x of FY19F standalone EPS of INR29.3 and value the BOT assets at Book Value (BV) of FY18F to yield a TP of INR587. The benchmark index for this stock is MSCI India.

**Risks that may impede the achievement of the target price** Increased competition; further deterioration of working capital and execution/ordering slowdown in the sector

### Larsen & Toubro (LT IN) INR 1681 (20-Apr-2017) Buy (Sector rating: N/A)

Rating and target price chart (three year history)



For explanation of ratings refer to the stock rating keys located after chart(s)

**Valuation Methodology** We value L&T on sum-of-the-parts basis for its various segments to arrive at our target price of INR1,731. For each segment, we use multiples comparable to their respective benchmarks. We use the EV/EBITDA metric for

almost all segments expect for financial services and development portfolio where we value the business on the P/B metric The benchmark index for the stock is MSCI India.

**Risks that may impede the achievement of the target price** Downside risks include further delays in the recovery of the investment cycle, greater-than-expected decline in margins, continued deterioration in working capital requirement, and adverse movement in foreign exchange and commodity prices.

## Important Disclosures

### Online availability of research and conflict-of-interest disclosures

Nomura Group research is available on [www.nomuranow.com/research](http://www.nomuranow.com/research), Bloomberg, Capital IQ, Factset, MarkitHub, Reuters and ThomsonOne. Important disclosures may be read at <http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx> or requested from Nomura Securities International, Inc., or Instinet, LLC on 1-877-865-5752. If you have any difficulties with the website, please email [grpsupport@nomura.com](mailto:grpsupport@nomura.com) for help.

The analysts responsible for preparing this report have received compensation based upon various factors including the firm's total revenues, a portion of which is generated by Investment Banking activities. Unless otherwise noted, the non-US analysts listed at the front of this report are not registered/qualified as research analysts under FINRA rules, may not be associated persons of NSI or ILLC, and may not be subject to FINRA Rule 2241 restrictions on communications with covered companies, public appearances, and trading securities held by a research analyst account.

Nomura Global Financial Products Inc. ("NGFP") Nomura Derivative Products Inc. ("NDPI") and Nomura International plc. ("Nlplc") are registered with the Commodities Futures Trading Commission and the National Futures Association (NFA) as swap dealers. NGFP, NDPI, and Nlplc are generally engaged in the trading of swaps and other derivative products, any of which may be the subject of this report.

### Distribution of ratings (Nomura Group)

The distribution of all ratings published by Nomura Group Global Equity Research is as follows:

51% have been assigned a Buy rating which, for purposes of mandatory disclosures, are classified as a Buy rating; 37% of companies with this rating are investment banking clients of the Nomura Group\*. 0% of companies (which are admitted to trading on a regulated market in the EEA) with this rating were supplied material services\*\* by the Nomura Group.

41% have been assigned a Neutral rating which, for purposes of mandatory disclosures, is classified as a Hold rating; 51% of companies with this rating are investment banking clients of the Nomura Group\*. 0% of companies (which are admitted to trading on a regulated market in the EEA) with this rating were supplied material services by the Nomura Group

8% have been assigned a Reduce rating which, for purposes of mandatory disclosures, are classified as a Sell rating; 7% of companies with this rating are investment banking clients of the Nomura Group\*. 0% of companies (which are admitted to trading on a regulated market in the EEA) with this rating were supplied material services by the Nomura Group.

As at 31 March 2017.

\*The Nomura Group as defined in the Disclaimer section at the end of this report.

\*\* As defined by the EU Market Abuse Regulation

### Distribution of ratings (Instinet, LLC)

The distribution of all ratings published by Instinet, LLC Equity Research is as follows:

53% have been assigned a Buy rating which, for purposes of mandatory disclosures, are classified as a Buy rating; Instinet LLC has provided investment banking services to 0% of companies with this rating within the previous 12 months.

41% have been assigned a Neutral rating which, for purposes of mandatory disclosures, is classified as a Hold rating; Instinet LLC has provided investment banking services to 0% of companies with this rating within the previous 12 months.

6% have been assigned a Reduce rating which, for purposes of mandatory disclosures, are classified as a Sell rating; Instinet LLC has provided investment banking services to 0% of companies with this rating within the previous 12 months.

### Definition of Nomura Group's equity research rating system and sectors

The rating system is a relative system, indicating expected performance against a specific benchmark identified for each individual stock, subject to limited management discretion. An analyst's target price is an assessment of the current intrinsic fair value of the stock based on an appropriate valuation methodology determined by the analyst. Valuation methodologies include, but are not limited to, discounted cash flow analysis, expected return on equity and multiple analysis. Analysts may also indicate expected absolute upside/downside relative to the stated target price, defined as (target price - current price)/current price.

## STOCKS

A rating of **'Buy'**, indicates that the analyst expects the stock to outperform the Benchmark over the next 12 months. A rating of **'Neutral'**, indicates that the analyst expects the stock to perform in line with the Benchmark over the next 12 months. A rating of **'Reduce'**, indicates that the analyst expects the stock to underperform the Benchmark over the next 12 months. A rating of **'Suspended'**, indicates that the rating, target price and estimates have been suspended temporarily to comply with applicable regulations and/or firm policies. Securities and/or companies that are labelled as **'Not rated'** or shown as **'No rating'** are not in regular research coverage. Investors should not expect continuing or additional information from Nomura relating to such securities and/or companies. Benchmarks are as follows: **United States/Europe/Asia ex-Japan**: please see valuation methodologies for explanations of relevant benchmarks for stocks, which can be accessed at: <http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx>; **Global Emerging Markets (ex-Asia)**: MSCI Emerging Markets ex-Asia, unless otherwise stated in the valuation methodology; **Japan**: Russell/Nomura Large Cap.

## SECTORS

A **'Bullish'** stance, indicates that the analyst expects the sector to outperform the Benchmark during the next 12 months. A **'Neutral'** stance, indicates that the analyst expects the sector to perform in line with the Benchmark during the next 12 months. A **'Bearish'** stance, indicates that the analyst expects the sector to underperform the Benchmark during the next 12 months. Sectors that are labelled as **'Not rated'** or shown as **'N/A'** are not assigned ratings. Benchmarks are as follows: **United States**: S&P 500; **Europe**: Dow Jones STOXX 600; **Global Emerging Markets (ex-Asia)**: MSCI Emerging Markets ex-Asia. **Japan/Asia ex-Japan**: Sector ratings are not assigned.

## Target Price

A Target Price, if discussed, indicates the analyst's forecast for the share price with a 12-month time horizon, reflecting in part the analyst's estimates for the company's earnings. The achievement of any target price may be impeded by general market and macroeconomic trends, and by other risks related to the company or the market, and may not occur if the company's earnings differ from estimates.

## Disclaimers

This publication contains material that has been prepared by the Nomura Group entity identified on page 1 and, if applicable, with the contributions of one or more Nomura Group entities whose employees and their respective affiliations are specified on page 1 or identified elsewhere in the publication. The term "Nomura Group" used herein refers to Nomura Holdings, Inc. and its affiliates and subsidiaries including: Nomura Securities Co., Ltd. ('NSC') Tokyo, Japan; Nomura International plc ('Nlplc'), UK; Nomura Securities International, Inc. ('NSI'), New York, US; Instinet, LLC ('ILLC'); Nomura International (Hong Kong) Ltd. ('NIHK'), Hong Kong; Nomura Financial Investment (Korea) Co., Ltd. ('NFIK'), Korea (Information on Nomura analysts registered with the Korea Financial Investment Association ('KOFIA') can be found on the KOFIA Intranet at <http://dis.kofia.or.kr>); Nomura Singapore Ltd. ('NSL'), Singapore (Registration number 197201440E, regulated by the Monetary Authority of Singapore); Nomura Australia Ltd. ('NAL'), Australia (ABN 48 003 032 513), regulated by the Australian Securities and Investment Commission ('ASIC') and holder of an Australian financial services licence number 246412; PT Nomura Sekuritas Indonesia ('PTNSI'); Nomura Securities Malaysia Sdn. Bhd. ('NSM'), Malaysia; NIHK, Taipei Branch ('NITB'), Taiwan; Nomura Financial Advisory and Securities (India) Private Limited ('NFASL'), Mumbai, India (Registered Address: Ceejay House, Level 11, Plot F, Shivsagar Estate, Dr. Annie Besant Road, Worli, Mumbai- 400 018, India; Tel: +91 22 4037 4037, Fax: +91 22 4037 4111; CIN No: U74140MH2007PTC169116, SEBI Registration No. for Stock Broking activities : BSE INB011299030, NSE INB231299034, INF231299034, INE 231299034, MCX: INE261299034; SEBI Registration No. for Merchant Banking : INM000011419; SEBI Registration No. for Research: INH000001014 and Nlplc, Madrid Branch ('Nlplc, Madrid')). 'CNS Thailand' next to an analyst's name on the front page of a research report indicates that the analyst is employed by Capital Nomura Securities Public Company Limited ('CNS') to provide research assistance services to NSL under an agreement between CNS and NSL. 'NSFSPL' next to an employee's name on the front page of a research report indicates that the individual is employed by Nomura Structured Finance Services Private Limited to provide assistance to certain Nomura entities under inter-company agreements. The "BDO-NS" (which stands for "BDO Nomura Securities, Inc.") placed next to an analyst's name on the front page of a research report indicates that the analyst is employed by BDO Unibank Inc. ("BDO Unibank") who has been seconded to BDO-NS, to provide research assistance services to NSL under an agreement between BDO Unibank, NSL and BDO-NS. BDO-NS is a Philippines securities dealer, which is a joint venture between BDO Unibank and the Nomura Group.

THIS MATERIAL IS: (I) FOR YOUR PRIVATE INFORMATION, AND WE ARE NOT SOLICITING ANY ACTION BASED UPON IT; (II) NOT TO BE CONSTRUED AS AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY ANY SECURITY IN ANY JURISDICTION WHERE SUCH OFFER OR SOLICITATION WOULD BE ILLEGAL; AND (III) OTHER THAN DISCLOSURES RELATING TO THE NOMURA GROUP, BASED UPON INFORMATION FROM SOURCES THAT WE CONSIDER RELIABLE, BUT HAS NOT BEEN INDEPENDENTLY VERIFIED BY NOMURA GROUP.

Other than disclosures relating to the Nomura Group, the Nomura Group does not warrant or represent that the document is accurate, complete, reliable, fit for any particular purpose or merchantable and does not accept liability for any act (or decision not to act) resulting from use of this document and related data. To the maximum extent permissible all warranties and other assurances by the Nomura Group are hereby excluded and the Nomura Group shall have no liability for the use, misuse, or distribution of this information.

Opinions or estimates expressed are current opinions as of the original publication date appearing on this material and the information, including the opinions and estimates contained herein, are subject to change without notice. The Nomura Group is under no duty to update this document. Any comments or statements made herein are those of the author(s) and may differ from views held by other parties within Nomura Group. Clients should consider whether any advice or recommendation in this report is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The Nomura Group does not provide tax advice.

The Nomura Group, and/or its officers, directors and employees, may, to the extent permitted by applicable law and/or regulation, deal as principal, agent, or otherwise, or have long or short positions in, or buy or sell, the securities, commodities or instruments, or options or other derivative instruments based thereon, of issuers or securities mentioned herein. The Nomura Group companies may also act as market maker or liquidity provider (within the meaning of applicable regulations in the UK) in the financial instruments of the issuer. Where the activity of market maker is carried out in accordance with the definition given to it by specific laws and regulations of the US or other jurisdictions, this will be separately disclosed within the specific issuer disclosures.

This document may contain information obtained from third parties, including ratings from credit ratings agencies such as Standard & Poor's. Reproduction and distribution of third-party content in any form is prohibited except with the prior written permission of the related third-party. Third-party content providers do not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. Third-party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Third-party content providers shall not be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs) in connection with any use of their content, including ratings. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.

Any MSCI sourced information in this document is the exclusive property of MSCI Inc. ('MSCI'). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, re-disseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI and the MSCI indexes are services marks of MSCI and its affiliates.

The intellectual property rights and any other rights, in Russell/Nomura Japan Equity Index belong to Nomura Securities Co., Ltd. ("Nomura") and Frank Russell Company ("Russell"). Nomura and Russell do not guarantee accuracy, completeness, reliability, usefulness, marketability, merchantability or fitness of the Index, and do not account for business activities or services that any index user and/or its affiliates undertakes with the use of the Index.

Investors should consider this document as only a single factor in making their investment decision and, as such, the report should not be viewed as identifying or suggesting all risks, direct or indirect, that may be associated with any investment decision. Nomura Group produces a number of different types of research product including, among others, fundamental analysis and quantitative analysis; recommendations

contained in one type of research product may differ from recommendations contained in other types of research product, whether as a result of differing time horizons, methodologies or otherwise. The Nomura Group publishes research product in a number of different ways including the posting of product on the Nomura Group portals and/or distribution directly to clients. Different groups of clients may receive different products and services from the research department depending on their individual requirements.

Figures presented herein may refer to past performance or simulations based on past performance which are not reliable indicators of future performance. Where the information contains an indication of future performance, such forecasts may not be a reliable indicator of future performance. Moreover, simulations are based on models and simplifying assumptions which may oversimplify and not reflect the future distribution of returns.

Certain securities are subject to fluctuations in exchange rates that could have an adverse effect on the value or price of, or income derived from, the investment.

With respect to Fixed Income Research: Recommendations fall into two categories: tactical, which typically last up to three months; or strategic, which typically last from 6-12 months. However, trade recommendations may be reviewed at any time as circumstances change. 'Stop loss' levels for trades are also provided; which, if hit, closes the trade recommendation automatically. Prices and yields shown in recommendations are taken at the time of submission for publication and are based on either indicative Bloomberg, Reuters or Nomura prices and yields at that time. The prices and yields shown are not necessarily those at which the trade recommendation can be implemented.

The securities described herein may not have been registered under the US Securities Act of 1933 (the '1933 Act'), and, in such case, may not be offered or sold in the US or to US persons unless they have been registered under the 1933 Act, or except in compliance with an exemption from the registration requirements of the 1933 Act. Unless governing law permits otherwise, any transaction should be executed via a Nomura entity in your home jurisdiction.

This document has been approved for distribution in the UK and European Economic Area as investment research by Nlplc. Nlplc is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Nlplc is a member of the London Stock Exchange. This document does not constitute a personal recommendation within the meaning of applicable regulations in the UK, or take into account the particular investment objectives, financial situations, or needs of individual investors. This document is intended only for investors who are 'eligible counterparties' or 'professional clients' for the purposes of applicable regulations in the UK, and may not, therefore, be redistributed to persons who are 'retail clients' for such purposes. This document has been approved by NIHK, which is regulated by the Hong Kong Securities and Futures Commission, for distribution in Hong Kong by NIHK. This document has been approved for distribution in Australia by NAL, which is authorized and regulated in Australia by the ASIC. This document has also been approved for distribution in Malaysia by NSM. In Singapore, this document has been distributed by NSL. NSL accepts legal responsibility for the content of this document, where it concerns securities, futures and foreign exchange, issued by their foreign affiliates in respect of recipients who are not accredited, expert or institutional investors as defined by the Securities and Futures Act (Chapter 289). Recipients of this document in Singapore should contact NSL in respect of matters arising from, or in connection with, this document. Unless prohibited by the provisions of Regulation S of the 1933 Act, this material is distributed in the US, by NSI, a US-registered broker-dealer, which accepts responsibility for its contents in accordance with the provisions of Rule 15a-6, under the US Securities Exchange Act of 1934. The entity that prepared this document permits its separately operated affiliates within the Nomura Group to make copies of such documents available to their clients.

This document has not been approved for distribution to persons other than 'Authorised Persons', 'Exempt Persons' or 'Institutions' (as defined by the Capital Markets Authority) in the Kingdom of Saudi Arabia ('Saudi Arabia') or 'professional clients' (as defined by the Dubai Financial Services Authority) in the United Arab Emirates ('UAE') or a 'Market Counterparty' or 'Business Customers' (as defined by the Qatar Financial Centre Regulatory Authority) in the State of Qatar ('Qatar') by Nomura Saudi Arabia, Nlplc or any other member of the Nomura Group, as the case may be. Neither this document nor any copy thereof may be taken or transmitted or distributed, directly or indirectly, by any person other than those authorised to do so into Saudi Arabia or in the UAE or in Qatar or to any person other than 'Authorised Persons', 'Exempt Persons' or 'Institutions' located in Saudi Arabia or 'professional clients' in the UAE or a 'Market Counterparty' or 'Business Customers' in Qatar. By accepting to receive this document, you represent that you are not located in Saudi Arabia or that you are an 'Authorised Person', an 'Exempt Person' or an 'Institution' in Saudi Arabia or that you are a 'professional client' in the UAE or a 'Market Counterparty' or 'Business Customers' in Qatar and agree to comply with these restrictions. Any failure to comply with these restrictions may constitute a violation of the laws of the UAE or Saudi Arabia or Qatar.

Notice to Canadian Investors: This research report is not a personal recommendation and does not take into account the investment objectives, financial situation or particular needs of any particular individual or account. It is made available to you in reliance on NI 31-103, section 8.25.

For report with reference of TAIWAN public companies or authored by Taiwan based research analyst:

**THIS DOCUMENT IS SOLELY FOR REFERENCE ONLY.** You should independently evaluate the investment risks and are solely responsible for your investment decisions. NO PORTION OF THE REPORT MAY BE REPRODUCED OR QUOTED BY THE PRESS OR ANY OTHER PERSON WITHOUT WRITTEN AUTHORIZATION FROM NOMURA GROUP. Pursuant to Operational Regulations Governing Securities Firms Recommending Trades in Securities to Customers and/or other applicable laws or regulations in Taiwan, you are prohibited to provide the reports to others (including but not limited to related parties, affiliated companies and any other third parties) or engage in any activities in connection with the reports which may involve conflicts of interests. **INFORMATION ON SECURITIES / INSTRUMENTS NOT EXECUTABLE BY NOMURA INTERNATIONAL (HONG KONG) LTD., TAIPEI BRANCH IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT BE CONSTRUED AS A RECOMMENDATION OR A SOLICITATION TO TRADE IN SUCH SECURITIES / INSTRUMENTS.**

**NO PART OF THIS MATERIAL MAY BE (I) COPIED, PHOTOCOPIED, OR DUPLICATED IN ANY FORM, BY ANY MEANS; OR (II) REDISTRIBUTED WITHOUT THE PRIOR WRITTEN CONSENT OF A MEMBER OF THE NOMURA GROUP.** If this document has been distributed by electronic transmission, such as e-mail, then such transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this document, which may arise as a result of electronic transmission. If verification is required, please request a hard-copy version.

The Nomura Group manages conflicts with respect to the production of research through its compliance policies and procedures (including, but not limited to, Conflicts of Interest, Chinese Wall and Confidentiality policies) as well as through the maintenance of Chinese walls and employee training.

**Additional information regarding the methodologies or models used in the production of any investment recommendations contained within this document is available upon request by contacting the Research Analysts listed on the front page. Disclosures information is available upon request and disclosure information is available at the Nomura Disclosure web**

**page:** <http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx>

Copyright © 2017 Nomura International (Hong Kong) Ltd. All rights reserved.