Company In-Depth

20 September 2006 | 40 pages

Nagarjuna Construction (NGCN.BO)

Rookie No More; Initiating With a Buy

- **Entering the big league** — We initiate coverage on Nagarjuna with a Buy/Medium Risk (1M) rating and target price of Rs191. Among the fastest-growing construction companies in India, Nagarjuna has diversified skill sets and an improving business mix to exploit the growth opportunity in the construction sector. We expect Nagarjuna to provide 27% upside and rate its peers HCC and Gammon as Sell.
- **Strong growth outlook** — Current order backlog of Rs62bn (up 74% YoY) provides revenue visibility for three years, which we believe should support an earnings CAGR of 36% over FY06-09E. New ventures (pipeline division, projects in Middle East) and increasing focus on road and irrigation projects should further improve revenue profile, spur growth and support our revenue growth forecasts.
- **Limited margin downside** — Nagarjuna should maintain its 8.5%-9% EBITDA margins, bucking the trend of margin compression other construction companies face. We forecast steady margins as the company continues to move up the value chain from being a subcontractor to being the lead contractor. Cost management initiatives, coupled with operating leverage benefits, should be value accretive.
- **Target price of Rs191** — We value the core construction business of Nagarjuna at Rs164 per share (P/E of 16x FY08E), its BOT projects at Rs15, real estate projects at Rs6 and 130 acre landbank at Rs6. Nagarjuna's core construction business trades at 12x FY08E, a discount of ~30% to its peers.
- **Risks** — 1) New Model Concession Agreement, 2) withdrawal of tax benefits, 3) increasing material prices, 4) project risks, 5) manpower shortages, 6) BOT project risks, 7) exposure to government-funded projects, and 8) equity dilution.

See page 37 for Analyst Certification and important disclosures.

Buy/Medium Risk	1M
Price (20 Sep 06)	Rs151.00
Target price	Rs191.00
Expected share price return	26.5%
Expected dividend yield	0.7%
Expected total return	**27.2%**
Market Cap	Rs31,217M
	US$678M

Price Performance (RIC: NGCN.BO, BB: NJCC IN)

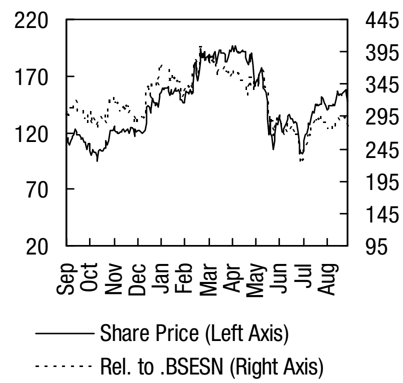

Figure 1. Nagarjuna Construction – Statistical Abstract

Year	Net Profit (Rs mn)	EPS (Rs)	EPS Growth (%)	P/E (x)	Adj P/E (x)	P / Book (x)	ROE (%)	ROCE (%)	DPS (Rs)	Div. Yield (%)
FY05A	573	3.41	24.2%	44.3	36.5	7.5	23.6%	14.3%	0.6	0.4%
FY06A	1,039	4.97	45.8%	30.4	25.0	3.3	16.4%	12.0%	0.8	0.5%
FY07E	1,671	8.00	60.9%	18.9	15.5	2.9	16.5%	12.8%	1.0	0.7%
FY08E	2,143	10.25	28.2%	14.7	12.1	2.5	18.2%	14.1%	1.2	0.8%
FY09E	2,602	12.45	21.4%	12.1	10.0	2.1	18.8%	14.4%	1.4	0.9%

Source: Company Reports, Citigroup Investment Research estimates

Deepal Delivala[1]
+91-22-6631-9857
deepal.delivala@citigroup.com

Venkatesh Balasubramaniam[1]
+91-22-5631-9864
venkatesh.balasubramaniam@citigroup.com

[1]Citigroup Global Market India Private Limited

Fiscal year end 31-Mar	2005	2006	2007E	2008E	2009E
Valuation Ratios					
P/E adjusted (x)	45.0	30.9	19.2	15.0	12.3
EV/EBITDA adjusted (x)	18.7	10.4	6.8	5.5	4.7
P/BV (x)	7.6	3.4	2.9	2.5	2.1
Dividend yield (%)	0.4	0.5	0.7	0.8	0.9
Per Share Data (Rs)					
EPS (adjusted)	3.41	4.97	8.00	10.25	12.45
EPS (reported)	3.39	4.97	8.00	10.25	12.45
BVPS	20.20	45.64	52.59	61.59	72.59
DPS	0.60	0.80	1.00	1.20	1.40
Profit & Loss (RsM)					
Net sales	11,885	18,404	29,121	37,959	46,599
Operating expenses	-11,087	-16,945	-26,763	-34,919	-42,854
EBIT	**798**	**1,459**	**2,358**	**3,040**	**3,745**
Net interest expense	-147	-217	-342	-418	-520
Non-operating/exceptionals	49	20	22	25	27
Pre-tax profit	**700**	**1,262**	**2,038**	**2,646**	**3,252**
Tax	-127	-223	-367	-503	-650
Extraord./Min.Int./Pref.div.	-3	0	0	0	0
Reported net income	**570**	**1,039**	**1,671**	**2,143**	**2,602**
Adjusted earnings	573	1,039	1,671	2,143	2,602
Adjusted EBIT	798	1,459	2,358	3,040	3,745
Growth Rates (%)					
EPS (adjusted)	24.2	45.8	60.9	28.2	21.4
EBIT (adjusted)	60.7	82.8	61.6	28.9	23.2
Sales	56.8	54.9	58.2	30.4	22.8
Cash Flow (RsM)					
Operating cash flow	**-673**	**-4,299**	**291**	**503**	**255**
Depreciation/amortization	109	182	263	338	403
Net working capital	-1,376	-5,519	-1,644	-1,979	-2,750
Investing cash flow	**-745**	**-1,414**	**-2,000**	**-1,750**	**-1,750**
Capital expenditure	-287	-999	-1,000	-750	-750
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	**2,133**	**7,150**	**264**	**617**	**1,470**
Borrowings	1,108	1,981	500	900	1,800
Dividends paid	-108	-188	-236	-283	-330
Change in cash	**715**	**1,437**	**-1,445**	**-630**	**-25**
Balance Sheet (RsM)					
Total assets	**9,022**	**18,492**	**22,918**	**27,842**	**33,992**
Cash & cash equivalent	1,372	2,809	1,364	735	709
Net fixed assets	1,098	1,916	2,653	3,065	3,412
Total liabilities	**5,801**	**9,062**	**12,053**	**15,115**	**18,994**
Debt	2,648	4,629	5,129	6,029	7,829
Shareholders' funds	**3,221**	**9,430**	**10,866**	**12,726**	**14,998**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	7.6	8.9	9.0	8.9	8.9
ROE adjusted	23.6	16.4	16.5	18.2	18.8
ROIC adjusted	18.8	16.2	16.4	17.2	17.5
Net debt to equity	39.6	19.3	34.6	41.6	47.5
Total debt to capital	45.1	32.9	32.1	32.1	34.3

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Contents

Investment thesis – entering the big league	4
Valuation	6
Risks	9
Company background	11
Business analysis and competitive position	12
Financial analysis and earnings outlook	18
Financial statements	21
Industry	24
Analyst Certification Appendix A-1	37

Investment thesis – entering the big league

We rate Nagarjuna Construction as Buy/Medium risk (1M) with a target price of Rs191. Our rating is supported by our forecast for a FD EPS CAGR of 36% for FY06-09E and ROE of ~18%.

India capex – going strong

Infrastructure investments in the next five years expected to be 1.5-5x that of the previous five years.

India is on a build-out phase – Capex across sectors like roads, ports, airports, power plants, power transmission & distribution, hydrocarbon infrastructure; process plants, and metals & mining infrastructure facilities is well underway. We expect sustained infrastructure investments in the next five years; and expect it to be 1.5-5x that of the previous five years.

Strong growth outlook

Nagarjuna to grow its revenues at a CAGR of 36% over FY06-09E

We expect Nagarjuna Construction to grow its revenues at a CAGR of 36% over FY06-09E on the back of order backlog growth of 24% over FY06-09E. Our confidence stems from the following:

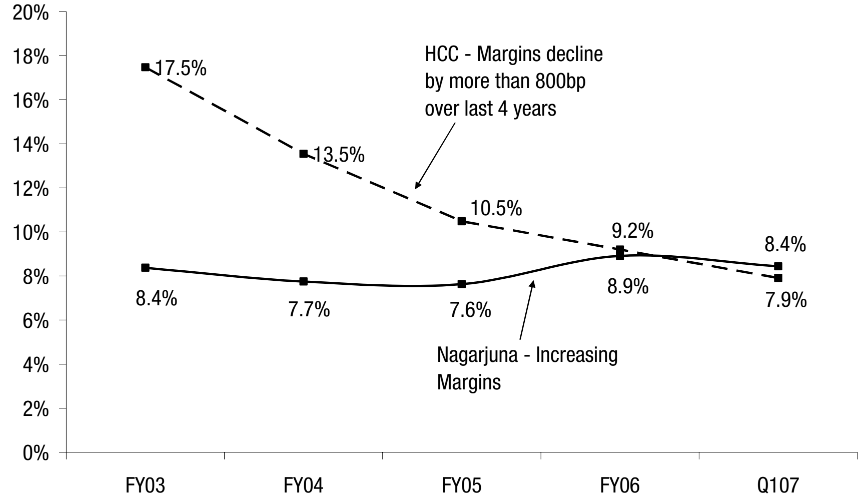
- Current order-book is about 3.4x FY06 revenues – this provides good visibility for the next 3 years.
- Order-inflows have grown at a CAGR of 75%, order-book has grown by 68% and revenues have grown at 59% CAGR over FY03-06.
- Nagarjuna's exposure to high growth sectors like transportation and irrigation should bolster order inflows.
- Recent equity issuance by the company should enable it to bid for more projects based on its increased net worth, which is a pre-qualifying criterion.

Limited margin downside

Margins to remain at 8.5-9% level

Nagarjuna should buck the trend of margin compression experienced by other construction companies, in our opinion. Nagarjuna already operates at industry average margins of ~8%-9% whereas companies with superior margins are seeing their margins erode in the face of increasing competition due to scaling up of smaller sized construction companies. Nagarjuna has moved up the value chain from being a subcontractor/JV partner to being a main contractor leading to improved margins. Better cost management, nimble operations, operating leverage and improving revenue mix should enable the company to maintain margins in the 8.5%-9% level.

Figure 2. HCC and Nagarjuna – EBITDA Margins



Source: Company Reports; Citigroup Investment Research estimates

New initiatives to provide growth fillip

Nagarjuna has plans to set up a pipeline division to capitalize on opportunities in this sector. It has also set up offices in the Middle East to participate in the capex rush in the region; the effort is paying off with a couple of order wins worth Rs8bn (road and pipeline project). The company intends to increase its focus on road and irrigation sectors, which are high-growth sectors. All of these initiatives should provide growth impetus to the company.

Valuation

SOTP-based target price of Rs191 per share

We look at NJCC as a company with four distinct parts: Cash contract business, BOT Projects, Real estate projects, and Landbank.

Figure 3. NJCC – SOTP-based Target Price of Rs191 per share.

Part	Rating Methodology	Rationale	Value
NJCC Core Construction Business	P/E of 16x, FY08E FD EPS	Discount to peers like L&T, HCC and Gammon	164
BOT Projects	P/BV		15
Transportation Projects	P/BV of 1.1	ROE:16%; COE 15%.	10
Power Projects	P/BV of 1.2	ROE:18%; COE 15%	5
Real Estate	At Book Value	Too early to impute upside from projects	6
Landbank	40% discount to quoted MV + 20% holding company discount		6
Total Sum-of- Parts Value			**191**

Source: Citigroup Investment Research estimates

Figure 4. Valuation Multiples of Construction Companies

	P/E (FY08E)
L&T (LART.BO, 1L, Rs2686)	23
Gammon (GAMM.BO, 3L, Rs369)	17
HCC (HCNS.BO, 3L, Rs103)	17
Nagarjuna	**16**

Source: Citigroup Investment Research estimates

1) We value the core construction business at P/E of 16x FY08E FD EPS – Value of Rs164 per share.

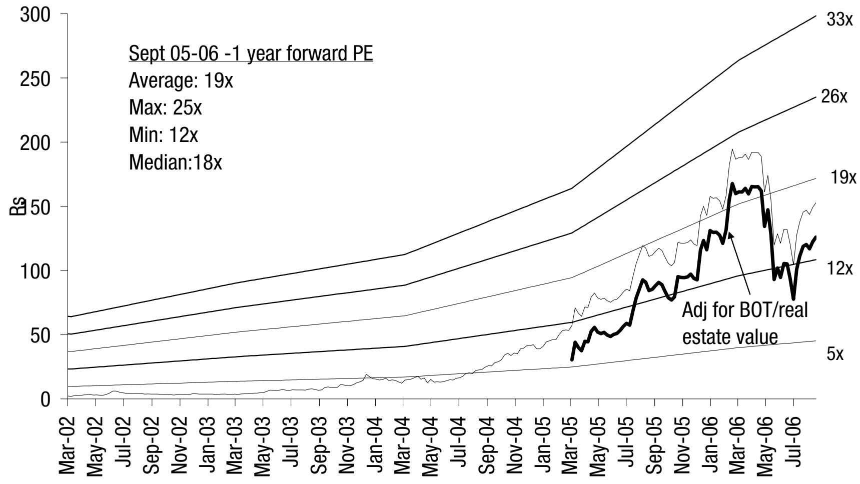
In our coverage universe, we have valued L&T's core business at a P/E multiple of 23x FY08E and HCC and Gammon at multiples of 17x each. While Nagarjuna should trade at a discount to L&T given L&T's superior skill sets, experience in handling larger projects and exposure to different markets, this discount should be much narrower vis-à-vis players like HCC and Gammon. Nagarjuna is a young company compared to the pedigree of these players – but it has caught up with them in terms of revenues and profits.

Figure 5. India – Comparative financial parameters of construction companies

Orderbook	FY03	FY04	FY05	FY06	CAGR
L&T	136,304	171,310	179,110	247,000	22%
HCC	33,460	39,750	53,810	96,720	42%
Gammon	30,785	37,467	52,000	80,000	37%
Nagarjuna	11,420	14,920	35,920	54,282	68%
Revenues	**FY03**	**FY04**	**FY05**	**FY06**	**CAGR**
L&T	72,992	95,614	130,918	146,529	26%
HCC	6,772	10,579	14,873	19,870	43%
Gammon	7,302	11,237	11,581	14,851	27%
Nagarjuna	4,537	7,582	11,885	18,404	59%
EBITDA Margins	**FY03**	**FY04**	**FY05**	**FY06**	**Q107**
L&T	10.0%	7.8%	7.4%	7.8%	7.8%
HCC	17.5%	13.5%	10.5%	9.2%	7.9%
Gammon	11.0%	9.6%	10.9%	13.0%	6.2%
Nagarjuna	8.4%	7.7%	7.6%	8.9%	8.4%
Recurring Net profit	**FY03**	**FY04**	**FY05**	**FY06**	**CAGR**
L&T	3,477	5,328	6,305	8,634	35%
HCC	241	346	661	858	53%
Gammon	209	341	572	1,028	70%
Nagarjuna	184	316	573	1,039	78%

Source: Company Reports, Citigroup Investment Research estimates

Figure 6. NJCC – 1-year rolling forward P/E bands



Source: Company Reports, Citigroup Investment Research estimates

2) We value BOT projects at Rs15 per share

We use the P/BV method to value NJCC's stake in the BOT projects.
Transportation BOT Projects - According to NJCC management, they have bid for most of their projects, which would have equity IRRs of about 16%-18%. We have assumed an overall Equity IRR of about 16% and Cost of Equity of 15% which gives us a P/BV multiple of 1.1x for the transportation BOT projects. This gives us a value of Rs10 per share for the BOT projects.

Power BOT Projects - NJCC has two BOT power projects, i.e. Himachal Sorang power project (Hydro) and Gautami Power project (gas based power plant). We have assumed Equity IRR of about 18% and Cost of Equity of 15% which gives us a P/BV multiple of 1.2x - yielding a value of Rs5 per share. (Hydel Projects usually yield RoEs of 18%)

3) Real estate projects valued at Rs6 per share

Nagarjuna has two real estate development projects – the Games Village, Ranchi Jharkand project and Andhra Pradesh Housing Board – Madhudwada Project. We have valued these projects at book value since we believe it is too early to impute any particular upside from these projects.

4) Landbank – 130 acres valued at Rs6 per share

Nagarjuna has a landbank of about 130 acres. The management estimates that its current market value is Rs2bn-3bn. In the interest of conservatism we have valued it at Rs1.5bn (60% of the average quoted market value) and have ascribed a 20% holding company discount to the same. We have arrived at a value of Rs6 per share.

Figure 7. NJCC – BOT projects and real estate investments

Project	Type	Project Cost	Debt	Equity	NJCC Stake	NJCC Stake	Per Share	Equity IRR	Cost of Equity	P/BV	Value per share
Transportation Projects											
Brindavan Infrastructure	Annuity Based	2,475	82%	18%	33%	149	1	16.0%	15.0%	1.1	1
Western UP Tollway	Toll- Based	5,300	75%	25%	30%	398	2	16.0%	15.0%	1.1	2
Bangalore Elevated Tollway	Toll- Based	7,640	75%	25%	34%	640	3	16.0%	15.0%	1.1	3
OB Infrastructure	Annuity Based	5,250	75%	25%	64%	840	4	16.0%	15.0%	1.1	4
Power											
Himachal Sorang	Hydropower Plant	5,850	80%	20%	33%	386	2	18.0%	15.0%	1.2	2
Gautami Power	Combined Cycle Gas based Power Project	14,333	70%	30%	10%	430	2	18.0%	15.0%	1.2	2
Real Estate Projects											
Games village		2,760	75%	25%	100%	690	3			1.00	3
AP Housing Project		2,500	75%	25%	89%	556	3			1.00	3
Land Bank						**1200**	**6**				**6**
Total											**27**

Source: Company Reports, Citigroup Investment Research estimates

Based on Figure 7, we arrive at a SOTP-based target price of Rs191. Alternatively, adjusted for BOT projects and Real estate investments, at our target price Nagarjuna would trade and an adjusted EV/EBITDA of 11.6x in line with HCC and Gammon.

Risks

We rate NJCC as Medium Risk. The rating differs from the High risk rating assigned by our quantitative risk rating system, which tracks 260-day historical share price volatility. This is primarily because NJCC's current order book of Rs62bn implies a sales coverage of 3.4x FY06E sales and provides us with good earnings visibility over the medium term.

The new Model Concession Agreement (MCA)

The government is working on finalizing the new Model Concession Agreement. There are a few clauses in the new MCA – like capping toll price increases to 40% of WPI; maximum capital grant of 20% and revenue sharing, which if implemented could negatively impact returns from the project. (For details – please see Industry section)

Section 80 IA benefits

Many construction companies are taking advantage of the tax benefits under Section 80 IA of the Income Tax act. We believe that there is still uncertainty as to whether these benefits can be claimed by construction companies and could lead to retrospective payment of taxes if the judiciary withdraws these benefits being claimed by the companies.

Increasing material prices

Unabated material price increases could adversely affect NJCC's profitability. Though many of the NHAI contracts awarded to NJCC have cost pass-through clauses, these clauses effectively pass on only up to 75%-80% of the cost escalation – remainder being borne by the company.

Project risks

The construction business is fraught with project risks. Any delays in project execution could lead to cost overruns and invocation of performance guarantees by the client which could affect the financial performance of Nagarjuna Construction.

BOT projects

BOT projects have commercial risks. Errors in estimation of traffic estimates, which are a source of revenue for toll-based projects, would have an adverse impact on the overall profitability of the project. Increase in material costs and interest costs could also affect the IRRs of the project. Companies may have to bid for projects with lower equity IRRs to undertake the cash contract part of the project.

Equity dilution

Construction companies must satisfy certain net worth criteria to be eligible for bidding for contracts. Most of the construction companies have accessed the capital markets /private equity in the recent past to raise funds and increase their net worth to be eligible for bidding for these contracts. This would be a permanent feature of the business if the growth rates are to be sustained. Construction companies will also need to access markets to raise funds so that they can invest in the BOT projects. Since most of the future infrastructure projects are going to be executed via the BOT model – all construction companies will have to bid for these projects by which the construction part of the contract can be undertaken by the parent company. This will lead to equity dilution of these companies as they raise capital to invest in these projects. ESOPs issued to retain employees will also lead to equity dilution.

Shortage of skilled manpower

Most engineering & construction companies in India are facing an acute shortage of skilled engineers and technicians. NJCC is also facing attrition, though it has tried to address this by issuing ESOPs in an attempt to retain employees. Its current staff strength is about 2,535 employees.

Exposure to government funded projects

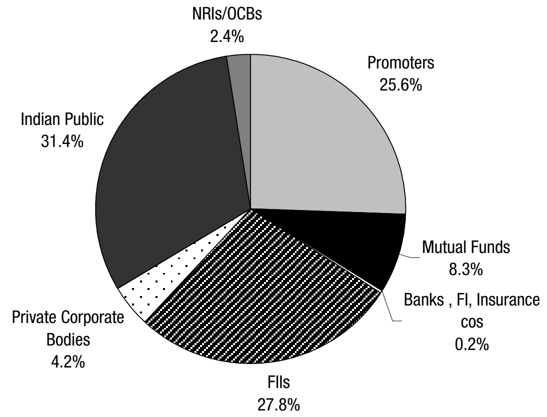
Many of the projects executed by Nagarjuna construction are state or central government funded. For example, Nagarjuna Construction has executed several irrigation projects for the Andra Pradesh State government. This exposes it to the finances of the state government and could lead to delay in payments and subsequent pressure on the working capital of the company.

Company background

Nagarjuna Construction Company (NJCC), with a promoter stake of 26%, was established over 27 years ago and is one of the fastest growing construction companies in India. NJCC is a diversified player, having executed projects across sectors and is well-positioned to capitalize on capex opportunities in areas including Transportation, Power, and Irrigation. NJCC's business can be divided in to seven segments:

- Industrial Structures and Buildings (29% of FY06 revenues) – This division undertakes construction of industrial buildings, housing projects, IT parks, sports complexes etc.
- Transportation (22% of FY06 revenues) – Implements construction & maintenance of roads & highways.
- Water and Environment (31% of FY06 revenues) – Involved in water supply projects, water treatment plants, underground drainage works, sewage treatment projects, etc.
- Electrical Division (8% of FY06 revenues) – Started in 1999, it undertakes engineering and construction of transmission lines, substations and overhead lines, etc.
- Irrigation and Hydropower (8% of FY06 revenues) – This division was set up in 2004 to take advantage of the increasing opportunities in the irrigation sector.
- Property Development (2% of FY06 revenues) – Set up in 1998, the unit is involved in the acquisition of properties for the construction and sale of houses, multi-storied apartments and commercial complexes.
- Light Engineering – Manufactures gas cylinders. Company is scaling down the unit's operations.

Figure 8. NJCC – Shareholding pattern as on 31 March 2006.



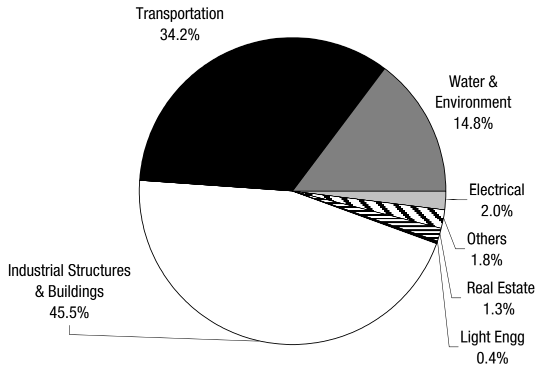
Source: Company

Business analysis and competitive position

De-risking the business model – Spreading the revenue base

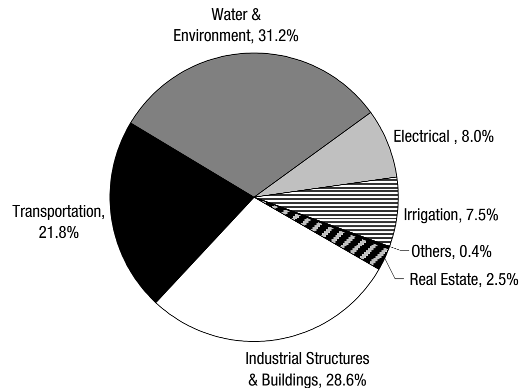
NJCC is present in various sectors which helps diversify its business model and mitigate the risk of overexposure to one sector. Though industrial structures, building projects, and transportation projects form a substantial portion of its current order-book, it has started new divisions like the electrical and real estate divisions to tap opportunities in these segments.

Figure 9. NJCC – FY03 Revenues segment-wise



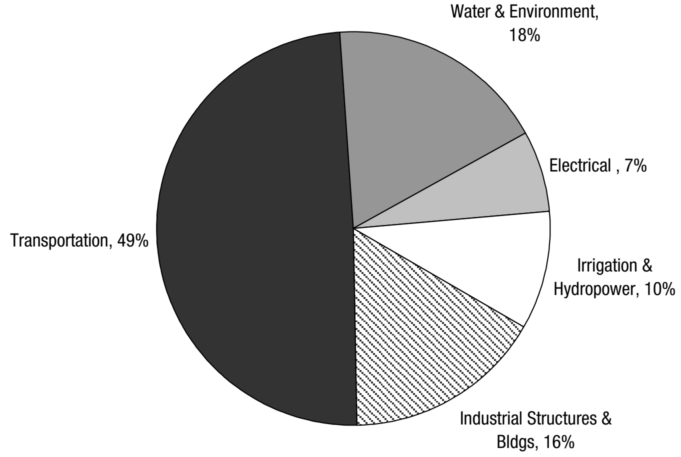
Source: Company

Figure 10. NJCC – FY06 Revenues segment-wise



Source: Company

Figure 11. NJCC – Breakup of current order book



Source: Company Reports

Established track record and diversified skill sets

Nagarjuna is one of the well-established players in the construction business. It has executed several projects in various sectors. This positions the company to leverage these skills and take advantage of opportunities in various sectors.

Figure 12. NJCC – Key projects executed

Project	NJCC Scope of work	Client	Project Value (Rs mn)
Industrial Structures and Buildings			
Indira Gandhi International Airport	Terminal IA building at the airport	Indira Gandhi International Airport, New Delhi	202
AP Industrial Infrastructure Corp, Hyd	A.C Indoor Stadium, Swimming Pool, Main Athletic Stadium at Gatchibowli	Andhra Pradesh Industrial Infrastructure Corporation, Hyderabad	527
Residential Apartments, Pocharam, Hyderabad	Construction of Residential Apartments	CESMA International Pvt. Ltd, Singapore	849
Shilpakalavedika	Indoor Auditorium		120
Transportation			
Delhi-Samalkha highway	Six Laning of NH-1 for 15 kms	NHAI	362
Ghaziabad Hapur Highway	Four laning NH-24	NHAI	1,153
Ahmedabad Vadodara Expressway	Total length of 50 km. of new formation.	NHAI	3,567
Water Division			
Underground drainage scheme - Bellary City			337
Krishna Drinking Water Supply Project	Pipe line Project	Hyderabad Metropolitan Water Supply and Sewerage Board.	1,350
Electrical			
System improvement Project, Chittoor		AP Power Transmission Corp.	737
67 kilometre 220kV transmission line project		AP Power Transmission Corp.	65

Source: Company Reports

Nagarjuna has also won several awards:

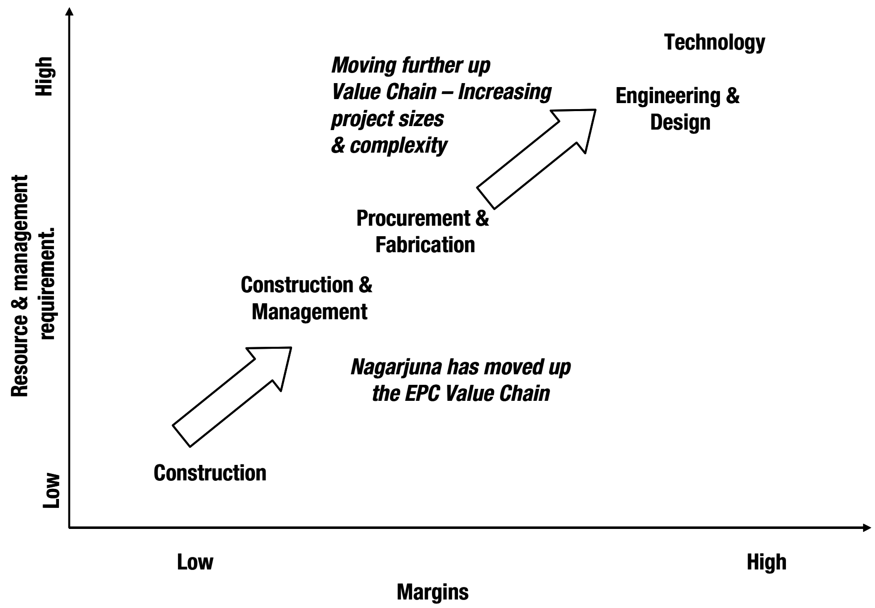
- Award from Forbes Asia: Only construction company in India to be One of the 200 "Best Under a Billion" listed companies in Asia Pacific in 2005
- Award for third “Fastest Growing Construction Companies in India” as per Construction World - NICMAR study and India's 4th “Most Admired Company” from Construction World, in 2005
- Award for Excellent Aesthetics Matching with Environment for project comprising a flyover, bridge, pedestrian subway and allied structures at Latur, Maharashtra in the year 2004
- Award for Outstanding Concrete Structure of Year in 2003 for Main Athletic Stadium, at Gachibowli, Hyderabad and 2002 for Shilpakalavedika, state of the art auditorium at Hyderabad respectively.

Nagarjuna has an experienced and skilled workforce. About 60% of the total of 2535 employees (as on 31 March 06) are qualified engineers.

Moving up the engineering value chain

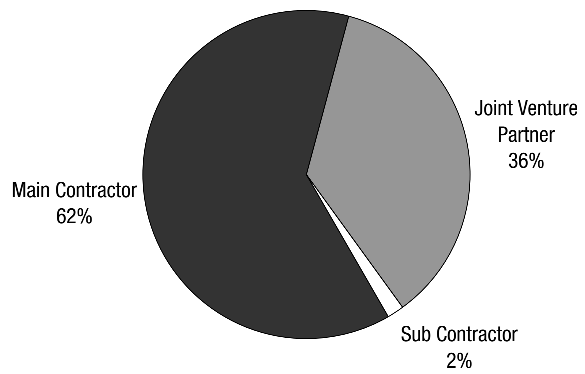
Nagarjuna construction has been gradually moving up the EPC value chain. It has expanded its role and now executes projects mostly as a primary contractor. The company executes projects on a joint venture or subcontracting basis to gain experience of executing different types of projects and help it to bid for these projects independently in the future.

Figure 13. NJCC – Moving up the EPC value chain



Source: Citigroup Investment Research

Figure 14. NJCC – Mode of execution of projects



Source: Company Reports *Break up of order backlog as on 30 September, 2005

Increasing order-inflows and revenue visibility

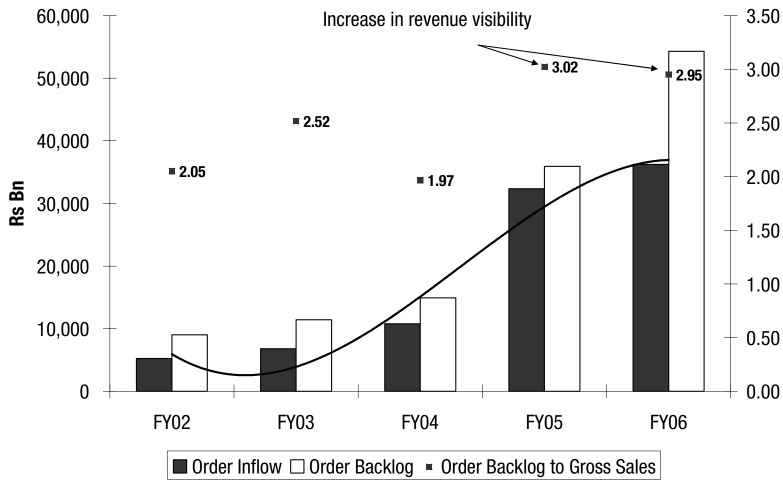
Nagarjuna has clocked a steady rate of order wins in the past and its current order book of ~ Rs62bn is 3.4 times FY06 revenues. Nagarjuna historically has had an order book /sales ratio of 2-2.5 times. Most of the projects undertaken by Nagarjuna have an execution cycle of about 18-24 months which means that the execution cycle of the order-book is about 2 years.

Figure 15. Indicative Project Execution Cycles

Project Type	Execution Period (Months)
Buildings	18-24
Roads	24-30
Water	18-24
Electrical	8-15
Irrigation	36

Source: Company Reports, Citigroup Investment Research estimates

Figure 16. NJCC – Increasing revenue visibility.



Source: Company, Citigroup Investment Research estimates

Figure 17. NJCC – Orders won in the past year.

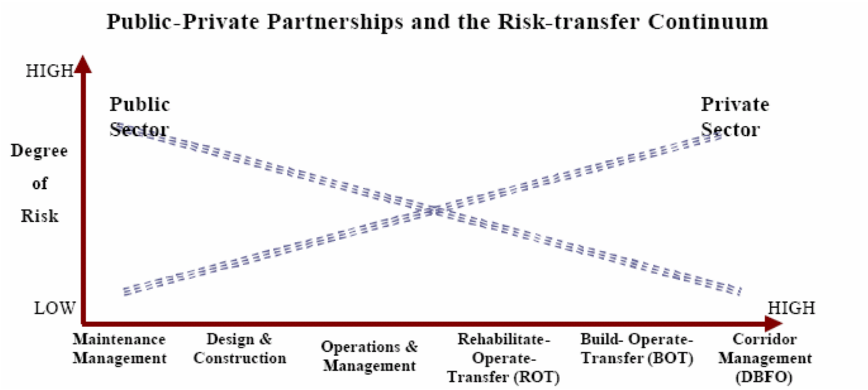
Date	Amount(RSbn)	Client	Details
22-Aug-05	2,660	NHAI	Construction of highway from Lucknow to Muzaffarpur
22-Aug-05	1,480	Rajiv Gandhi Gramin Vidyutikiran Yojana	Rural Electrification in Uttar Pradesh
31-Aug-05	890	IRCON International Ltd	Construction of Flyovers in Patna
31-Aug-05	190	Sandoz Pvt Ltd, Mumbai	Construction of manufacturing facilities
5-Sep-05	1,770	Hyderabad Metropolitan Water Supply & Sewerage Board (HMWSSB)	For Krishna Drinking Water Supply Project (Phase-II) under Joint Venture.
20-Sep-05	2,530	NHAI	Construction of Lucknow-Muzaffarpur National Highway Project
21-Nov-05	2,550	NHAI	Construction of Elevated Highway Project
5-Dec-05	2,760	Government of Jharkand	National Games Housing Complex Project
9-Jan-06	5,200	NHAI	Construction of Highways
23-Jan-06	543	SBI	Construction of Residential Complex, Navi Mumbai
30-Jan-06	1,404	NHAI	Rehabilitation & Up-gradation - Jhansi - Lakhnadon highway section on NH-26
30-Jan-06	242	NHAI	Road over bridge near Lalapet in Tamil Nadu
23-Feb-06	1,096	NTPC	Civil works package at the Barh Super Thermal Power Project in Bihar
23-Feb-06	886	Chennai Metropolitan Water Supply & Sewerage Board	supply, laying, joining, testing and commissioning of mild steel pipes
23-Feb-06	450	AD Hydro Power Ltd	Construct tunnel and undertake Duhangan upstream works
17-May-06	3,620	Muscat Municipality, Muscat, Sultanate of Oman	pipeline project in Oman
19-Jun-06	1,520	Government of Jharkhand	Construction of mega sports complex at Ranchi
19-Jun-06	2,700	Maharashtra State Electricity Distribution Company Ltd	Gaothan Feeder Separation Scheme
24-Jul-06	7,200	Sultanate of Oman	Construction of Road Project at Muscat
27-Jul-06	650	Govt of Chattisgarh	Rehabilitation and Upgradation of Road (ADB Project)
27-Jul-06	530	Govt of Madhya Pradesh	Sanjay Sagar Dam Project
29-Aug-06	1,140	Times of India Group	construction of new printing press complex at Airoli, Navi Mumbai
Total	**42,011**		

Source: Company reports

Increasing focus on BOT Projects – Profile getting riskier

As with other construction companies, Nagarjuna too is increasing its focus on BOT projects since new construction contracts are primarily awarded through the BOT route. However, BOT projects are riskier in profile than the pure cash contracting projects since the company is exposed to commercial and financial risks. Any significant difference between the actual traffic flow and the estimated traffic flow could impact the returns from the project. Rising interest rates would increase the cost of capital subsequently depressing the returns from the project.

Figure 18. Risk Return Continuum in the Public Private Partnership



Source: World Bank

Nagarjuna now has four transportation, two power, and two housing BOT projects. Details are given below.

Figure 19. NJCC – BOT projects (Rs Mn)

Project	Type	Project Cost	Debt	Equity	NJCC Stake	NJCC Stake
Transportation						
Brindavan Infrastructure	Annuity Based	2,475	82%	18%	33%	149
Western UP Tollway	Toll-based	5,300	75%	25%	30%	398
Bangalore Elevated Tollway	Toll-based	7,640	75%	25%	34%	640
OB Infrastructure	Annuity Based	5,250	75%	25%	64%	840
Power						
Himachal Sarong		5,850	80%	20%	33%	386
Gautami Power		14,333	70%	30%	10%	430
Real Estate Projects						
Games village		2,760	75%	25%	100%	690
AP Housing Project		2,500	75%	25%	89%	556

Source: Company reports

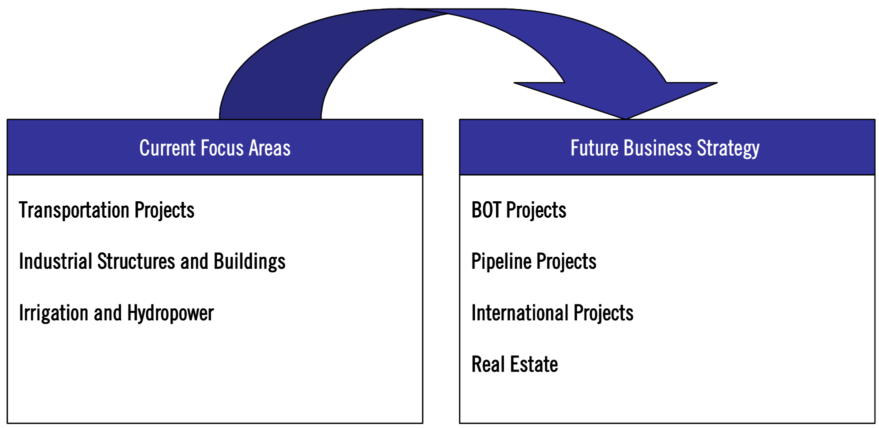
New business areas – Pipelines and real estate

NJCC is in the process of setting up a gas pipeline division to focus on pipeline projects in the country – particularly the immediate opportunities in the KG basin. It also intends to increase its focus on the real estate division of the company.

International forays – Middle East

Nagarjuna is focusing on infrastructure projects in the Middle East. It has formed a subsidiary company in Muscat and opened a regional office in Dubai to capitalize on opportunities in the United Arab Emirates and other Gulf areas. Their effort of spreading base to the Middle East has paid off with a couple of order wins in the recent past. The company won a Rs7.2bn road project order from Sultanate of Oman. It also won a pipeline project valued at Rs1.1bn from the Muscat Municipality.

Figure 20. NJCC – Current and future business strategy



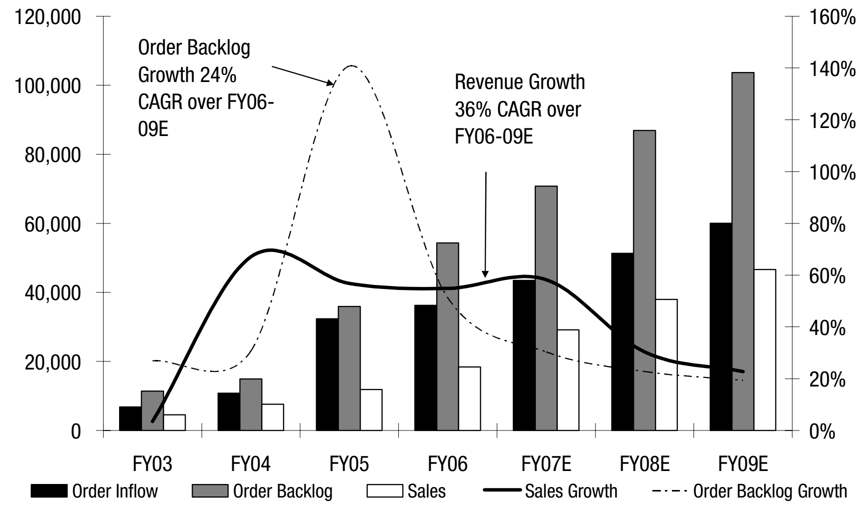
Source: Citigroup Investment Research, Company reports

Financial analysis and earnings outlook

Revenues forecast to grow at 36% CAGR over FY06-09E

We expect order flows to continue at a CAGR of 18% over the next three years since we anticipate the growth to be lower off a higher base. This should lead to an order-backlog growth of about 24%. Nagarjuna order book has an execution cycle of about two years – which translates into revenue growth of 36% over FY06-09E.

Figure 21. NJCC – Order backlog and revenue growth



Source: Company Reports, Citigroup Investment Research estimates

Figure 22. NJCC – Key assumptions

Year ended Mar 31 (Rs Mn)	FY03	FY04	FY05	FY06	FY07E	FY08E	FY09E
Order Backlog (eoy)	11,420	14,920	35,920	54,282	70,757	86,863	103,679
Order Inflows	6,790	10,790	32,350	36,227	43,473	51,298	60,018
Revenues	4,537	7,582	11,885	18,404	29,121	37,959	46,599
Order backlog/Revenues	2.52	1.97	3.02	2.95	2.43	2.29	2.22
EBITDA Margin	8.4%	7.7%	7.6%	8.9%	9.0%	8.9%	8.9%
EBIT Margin	6.7%	6.6%	6.7%	7.9%	8.1%	8.0%	8.0%
Tax Rate	20.9%	21.8%	18.2%	17.7%	18.0%	19.0%	20.0%
Recurring PAT	184	316	573	1,039	1,671	2,143	2,602

Source: Company Reports, Citigroup Investment Research estimates

EBITDA margins to remain stable in the 8.5%-9% range

We expect EBITDA margins to remain stable at ~8.9%. We believe that increasing margins beyond this level on a sustained basis may prove challenging for Nagarjuna Construction because:

Figure 23. Indicative Margins by Sector

Project Type	Margins%
Buildings	7%-8%
Roads	6%-8%
Water	10%
Electrical	11%-12%
Irrigation	10%

Source: Citigroup Investment Research estimates, Industry

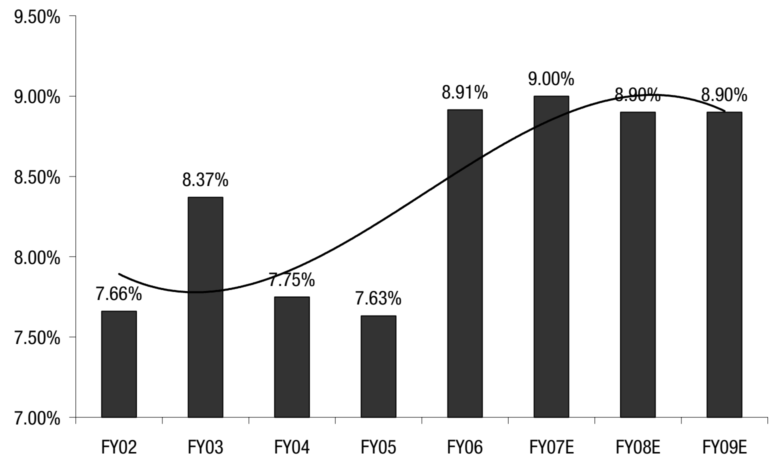
- Higher proportion of low margin Transportation orders in the current backlog – Transportation projects have a gestation period of about 2-3 years. They yield margins of about 6%-8%. Transportation orders now comprise ~50% of Nagarjuna's order backlog. We expect that transportation orders will continue to be a substantial portion of the order book and this will constrain margins in the 8.5%-9% range.

- Increasing Subcontracting Costs – We expect Nagarjuna Construction to increase giving execution of projects to subcontractors to enable it to execute these orders on schedule. Its existing asset base may not be able to support the number of projects undertaken which will necessitate subcontracting. This can exert downward pressure on EBITDA margins, in our view.

- Hiring Assets could impact EBITDA Margins – Nagarjuna intends to hire assets as against incurring significant capex to increase the asset base.

  For this purpose, Nagarjuna has promoted a company named NAC Infrastructure Equipment Ltd together with the National Academy of Construction, Hyderabad, L & T Finance Ltd. and SREI Infrastructure Finance Ltd. This company will maintain a common pool of construction-related machinery, which it will lease to various contractors including its promoters. Nagarjuna intends to lease assets from this company for its activities which could cap Nagarjuna's EBITDA Margins.

Figure 24. NJCC – EBITDA margins



Source: Company Reports, Citigroup Investment Research estimates

FD earnings growth of 36% over FY06-09E

We forecast a CAGR of 36% for Nagarjuna's recurring earnings on the back of strong revenue growth (36% over FY06-09E) coupled with stable margins.

Return ratios to expand from current levels

We expect Nagarjuna's ROE and ROCE to bounce back from the FY06 levels, where they seemed depressed primarily because of equity issuance by the company.

Figure 25. NJCC – Return ratios

	FY03	FY04	FY05	FY06	FY07E	FY08E	FY09E
RoE	**18.3%**	**23.3%**	**23.6%**	**16.4%**	**16.5%**	**18.2%**	**18.8%**
PAT/EBIT	60.1%	63.6%	71.8%	71.2%	70.9%	70.5%	69.5%
EBIT/Sales	6.7%	6.6%	6.7%	7.9%	8.1%	8.0%	8.0%
Sales/Assets	230.5%	284.6%	259.9%	183.5%	193.0%	217.6%	223.4%
Assets/Net worth	195.7%	196.8%	188.7%	158.6%	148.7%	147.9%	150.5%
RoCE	**12.3%**	**14.6%**	**14.3%**	**12.0%**	**12.8%**	**14.1%**	**14.4%**

Source: Company Reports, Citigroup Investment Research estimates

Improved gearing – But working capital requirements to remain high

Nagarjuna's financial position has improved in 2006 due to the equity issued by the company. The debt equity ratio; which was close to 1.0 in the past – came down to just 0.5 in 2006, which puts the company in a comfortable position to raise funding if needed. We expect the company to continue to have high working capital requirements, which is endemic to the business it operates in.

Figure 26. NJCC – Financial position

Year ended Mar 31 (Rs Mn)	FY03	FY04	FY05	FY06	FY07E	FY08E	FY09E
Debt/Equity	0.93	0.95	0.82	0.49	0.47	0.47	0.52
Net Debt/Equity	0.65	0.54	0.40	0.19	0.35	0.42	0.47
Inventories(Days)	119	135	107	223	180	150	150
Receivables (Days)	52	41	59	60	55	55	55
Creditors (Days)	158	146	128	144	144	144	144

Source: Company Reports, Citigroup Investment Research estimates

Financial statements

Figure 27. NJCC – Key assumptions

Year ended Mar 31 (Rs Mn)	FY03	FY04	FY05	FY06	FY07E	FY08E	FY09E
Order Backlog (eoy)	11,420	14,920	35,920	54,282	70,757	86,863	103,679
Order Inflows	6,790	10,790	32,350	36,227	43,473	51,298	60,018
Revenues	**4,537**	**7,582**	**11,885**	**18,404**	**29,121**	**37,959**	**46,599**
Order backlog /Revenues	2.52	1.97	3.02	2.95	2.43	2.29	2.22
EBITDA Margin	**8.4%**	**7.7%**	**7.6%**	**8.9%**	**9.0%**	**8.9%**	**8.9%**
EBIT Margin	6.7%	6.6%	6.7%	7.9%	8.1%	8.0%	8.0%
Tax Rate	20.9%	21.8%	18.2%	17.7%	18.0%	19.0%	20.0%
Recurring PAT	**184**	**316**	**573**	**1,039**	**1,671**	**2,143**	**2,602**

Source: Company Reports, Citigroup Investment Research estimates

Figure 28. NJCC – Profit and loss statement

Year ended Mar 31 (Rs Mn)	FY03	FY04	FY05	FY06	FY07E	FY08E	FY09E
Net Sales	**4,537**	**7,582**	**11,885**	**18,404**	**29,121**	**37,959**	**46,599**
Growth %	3.4%	67.1%	56.8%	54.9%	58.2%	30.4%	22.8%
Cost of Materials	(1,210)	(2,763)	(5,217)	(6,381)	(10,192)	(13,475)	(16,589)
% of sales	26.7%	36.4%	43.9%	34.7%	35.0%	35.5%	35.6%
Construction Expenses	(2,277)	(3,042)	(3,905)	(7,253)	(11,648)	(15,184)	(18,873)
% of sales	50.2%	40.1%	32.9%	39.4%	40.0%	40.0%	40.5%
Labour Charges	(373)	(688)	(1,107)	(1,778)	(2,679)	(3,416)	(4,101)
% of sales	8.2%	9.1%	9.3%	9.7%	9.2%	9.0%	8.8%
Staff Costs	(120)	(200)	(309)	(473)	(757)	(949)	(1,165)
% of sales	2.6%	2.6%	2.6%	2.6%	2.6%	2.5%	2.5%
Other Expenses	(177)	(302)	(440)	(879)	(1,223)	(1,556)	(1,724)
% of sales	3.9%	4.0%	3.7%	4.8%	4.2%	4.1%	3.7%
EBITDA	**380**	**588**	**907**	**1,641**	**2,621**	**3,378**	**4,147**
EBITDA margin	**8.4%**	**7.7%**	**7.6%**	**8.9%**	**9.0%**	**8.9%**	**8.9%**
Depreciation	(74)	(91)	(109)	(182)	(263)	(338)	(403)
EBIT	306	497	798	1,459	2,358	3,040	3,745
EBIT Margin%	6.7%	6.6%	6.7%	7.9%	8.1%	8.0%	8.0%
Interest & Financial Charges	(112)	(134)	(147)	(217)	(342)	(418)	(520)
Other Income	39	41	49	20	22	25	27
PBT	233	404	700	1,262	2,038	2,646	3,252
Taxes	(49)	(88)	(127)	(223)	(367)	(503)	(650)
Recurring PAT	**184**	**316**	**573**	**1,039**	**1,671**	**2,143**	**2,602**
Recurring PAT margin	**4.1%**	**4.2%**	**4.8%**	**5.6%**	**5.7%**	**5.6%**	**5.6%**
Exceptional	0	0	0	0	0	0	0
Prior year	(0)	0	(3)	0	0	0	0
Reported PAT	**183**	**316**	**570**	**1,039**	**1,671**	**2,143**	**2,602**

Source: Company Reports, Citigroup Investment Research estimates

Figure 29. NJCC – Balance sheet

As on Mar 31 (Rs Mn)	FY03	FY04	FY05	FY06	FY07E	FY08E	FY09E
Net Worth	1,083	1,625	3,221	9,430	10,866	12,726	14,998
Loan Funds	1,007	1,540	2,648	4,629	5,129	6,029	7,829
DTL	30	43	66	66	66	66	66
Total liabilities	**2,120**	**3,209**	**5,936**	**14,124**	**16,060**	**18,821**	**22,893**
Net Fixed Assets	**834**	**920**	**1,098**	**1,916**	**2,653**	**3,065**	**3,412**
Investments	**5**	**5**	**462**	**877**	**1,877**	**2,877**	**3,877**
Current Assets	2,561	4,306	7,462	15,699	18,389	21,900	26,703
Interest accrued	9	17	21	39	39	39	39
Inventories	395	1,019	1,523	3,893	5,026	5,538	6,818
Sundry Debtors	650	843	1,916	3,017	4,388	5,720	7,022
Cash and Bank balances	299	657	1,372	2,809	1,364	735	709
Loans and Advances	1,207	1,770	2,629	5,942	7,571	9,869	12,116
Current Liabilties	1,205	1,830	2,781	3,910	6,226	8,204	10,087
Provisions	75	192	305	457	633	817	1,013
Net Current Assets	**1,280**	**2,284**	**4,375**	**11,331**	**11,530**	**12,879**	**15,604**
Total Assets	**2,120**	**3,209**	**5,936**	**14,124**	**16,060**	**18,821**	**22,893**

Source: Company Reports, Citigroup Investment Research estimates

Figure 30. NJCC – Cash flow statement

Year ended Mar 31 (Rs Mn)	FY03	FY04	FY05	FY06	FY07E	FY08E	FY09E
Recurring PAT	184	316	573	1,039	1,671	2,143	2,602
Change in DTL	9	13	24	(1)	0	0	0
Add: D&A	74	91	109	182	263	338	403
Chg in Interest Accrued	4	(8)	(5)	(17)	0	0	0
Chg in Inventories	106	(624)	(504)	(2,369)	(1,134)	(512)	(1,280)
Chg in Debtors	(98)	(193)	(1,073)	(1,101)	(1,371)	(1,332)	(1,302)
Chg in Loans & Advances	(76)	(563)	(859)	(3,313)	(1,629)	(2,298)	(2,246)
Chg in CL & Provisions	(61)	742	1,065	1,281	2,491	2,163	2,079
Change in Working Capital	(126)	(646)	(1,376)	(5,519)	(1,644)	(1,979)	(2,750)
Cash Flow from Operations	**140**	**(227)**	**(670)**	**(4,299)**	**291**	**503**	**255**
Capex	(223)	(176)	(287)	(999)	(1,000)	(750)	(750)
Change in Investments/Assets	0	0	(458)	(415)	(1,000)	(1,000)	(1,000)
Cash Flow from Investing Activities	**(222)**	**(176)**	**(745)**	**(1,414)**	**(2,000)**	**(1,750)**	**(1,750)**
Change in Debt	140	533	1,108	1,981	500	900	1,800
Change in Minority Interest	0	0	0	0	0	0	0
Change in Preference Shares	0	0	0	0	0	0	0
Change in Equity	0	20	45	48	207	0	0
Change in Reserves	1	259	1,089	5,310	(207)	0	0
Dividend and Dividend Tax	(32)	(52)	(108)	(188)	(236)	(283)	(330)
Cash Flow from Financing Activities	**110**	**760**	**2,133**	**7,150**	**264**	**617**	**1,470**
Extraordinary Items + Tax Adjustments	(0)	0	(3)	0	0	0	0
Increase/(Decrease) in Cash	**28**	**358**	**715**	**1,437**	**(1,445)**	**(630)**	**(25)**
Opening Cash and Bank Balance	272	299	657	1,372	2,809	1,364	735
Closing Cash and Bank Balance	**299**	**657**	**1,372**	**2,809**	**1,364**	**735**	**709**

Source: Company Reports; Citigroup Investment Research estimates

Figure 31. NJCC – Quarterly financials.

	Apr-Jun 04 Q105	Apr-Jun 05 Q106	Apr-Jun 06 Q107	Jul-Sept 04 Q205	Jul-Sept 05 Q206	Oct-Dec 04 Q305	Oct-Dec 05 Q306	Jan-Mar 05 Q405	Jan-Mar 06 Q406
Net Sales	**2,324**	**3,594**	**6,517**	**2,418**	**3,682**	**2,642**	**4,724**	**4,500**	**6,404**
Growth YoY%	**84%**	**55%**	**81%**	**63%**	**52%**	**38%**	**79%**	**54%**	**42%**
(Increase)/Decrease in Stock in Trade	(42)	142	544	38	385	204	334	(35)	344
Consumption of Raw materials	(885)	(1,502)	(2,939)	(921)	(1,507)	(1,263)	(2,058)	(2,312)	(2,517)
as a % of net sales	40%	38%	37%	37%	30%	40%	37%	52%	34%
Growth YoY%	132%	47%	76%	53%	27%	46%	63%	122%	-7%
Other Construction expenses	(897)	(1,477)	(2,618)	(999)	(1,533)	(795)	(1,949)	(1,214)	(2,686)
as a % of net sales	39%	41%	40%	41%	42%	30%	41%	27%	42%
Growth YoY%	50%	65%	77%	70%	53%	-3%	145%	17%	121%
Labour	(198)	(284)	(655)	(227)	(400)	(325)	(376)	(357)	(717)
as a % of net sales	9%	8%	10%	9%	11%	12%	8%	8%	11%
Growth YoY%	135%	44%	131%	132%	76%	170%	16%	-7%	101%
Staff Cost	(60)	(100)	(162)	(72)	(126)	(78)	(116)	(100)	(131)
as a % of net sales	3%	3%	2%	3%	3%	3%	2%	2%	2%
Growth YoY%	71%	67%	62%	75%	76%	75%	49%	26%	31%
Other Expenses	(70)	(94)	(137)	(43)	(122)	(167)	(101)	(161)	(165)
as a % of net sales	3%	3%	2%	2%	3%	6%	2%	4%	3%
Growth YoY%	67%	35%	46%	-40%	187%	185%	-40%	23%	3%
Total Expenditure	(2,152)	(3,316)	(5,968)	(2,224)	(3,303)	(2,424)	(4,267)	(4,178)	(5,873)
EBITDA	**172**	**278**	**550**	**194**	**379**	**219**	**457**	**322**	**531**
EBITDA margin%	**7.42%**	**7.74%**	**8.44%**	**8.03%**	**10.30%**	**8.28%**	**9.67%**	**7.15%**	**8.30%**
Change YoY (bps)	(90)	32	70	78	227	29	139	(45)	115
Depreciation	(24)	(34)	(58)	(26)	(41)	(31)	(53)	(28)	(54)
Growth YoY%	24%	44%	71%	38%	56%	38%	72%	-7%	90%
EBIT	149	244	492	168	338	188	404	293	478
EBIT margin%	6%	7%	8%	7%	9%	7.1%	8.6%	6.5%	7.5%
Interest	(34)	(43)	(57)	(27)	(89)	(38)	(97)	(48)	(44)
Growth YoY%	27%	28%	32%	2%	225%	17%	156%	-1%	-10%
Other Income	5	13	8	9	15	12	17	23	5
Growth YoY%	-32%	146%	-40%	-38%	56%	-4%	40%	253%	-76%
PBT	120	214	443	150	264	162	324	268	439
PBT margin%	5%	6%	7%	6%	7%	6.1%	6.9%	5.9%	6.9%
Tax	(19)	(22)	(59)	(36)	(55)	(41)	(56)	(31)	(90)
Effective Tax Rate%	16%	10%	13%	24%	21%	25%	17%	12%	21%
Recurring PAT	**102**	**192**	**384**	**114**	**209**	**121**	**268**	**236**	**349**
Recurring PAT margin%	**4%**	**5%**	**5.9%**	**5%**	**6%**	**5%**	**6%**	**5%**	**5%**
Growth YoY%	94%	89%	100%	79%	83%	40%	122%	109%	48%
Exceptional									
Reported PAT	**102**	**192**	**384**	**114**	**209**	**121**	**268**	**236**	**349**
Reported PAT margin%	**4%**	**5%**	**6%**	**5%**	**6%**	**5%**	**6%**	**5%**	**5%**

Source: Company Reports

Industry

Roads & highways – to provide the growth fillip

Quick Facts

India has second largest road network (3.3mn km) in the world

Roads now carry 85% of passenger traffic and 70% of freight traffic.

Highways make up just 2% of the overall road network by length, but account for around 40% of traffic.

To modernize India's national highways and the network of trunk roads linking major economic centers, the National Highways Authority of India (NHAI) devised the National Highways Development Project (NHDP) in FY99 to undertake the NHDP Phase I and NHDP Phase II projects. Rs540bn of road spending was funded through a mix of taxes on petrol, multilateral assistance, as well as through market and private participation.

Figure 32. NHDP & other NHAI projects (Status : 31 July 2006)

	GQ	NSEW - Ph I & II	NHDP Phase IIIA	NHDP Total	Port connectivity	Others	Total by NHAI
Total Length (km)	5846	7300	4015	17161	380	945*	18486
Already 4 laned (km)	5415	836	30	6281	111	287	6679
% completion	**93%**	**11%**	**1%**	**37%**	**29%**	**30%**	**36%**
Under Implementation(km)	431	5057	1090	6578	248	638	7464
Contracts Under Implementation(No)	36	137	17	190	8	16	214
Balance Length for award (Km)	**0**	**1306***	**2889***	**4195**	**21**	**20**	**4236**

Note:* The difference in length is because of change in length after award of works.

Source: NHAI

New plans announced to drive growth

The government has ambitious plans drawn up for NHDP Phases III to VII, with most of the projects likely to be undertaken through BOT model, where the central government would extend up to 40% of the project cost as a grant. In addition, there have been discussions about extending taxes on petrol and diesel beyond 2018 to meet the financing requirements.

- NHDP Phase III (Investment – Rs652bn) - will provide connectivity to important places not covered under NHDP Phase-I&II. This includes connectivity of numbers of State Capitals with NHDP Phase-I&II, high-density corridors, places of tourist and economic importance etc. The Phase III will be implemented on a Build-Operate-Transfer (BOT) basis and, depending on the project; the central government can extend up to 40% of the project cost as a grant.

Figure 33. NHDP Phase III

NHDP Phase-III	Length (In Km)	Target date of Completion
NHDP Phase-III A	4000	Dec. 2009
NHDP Phase-III B	6000	Dec. 2012

Source: Department of Road Transport and Highways

As can be seen from Figure 24 about 17 projects are under implementation in this phase.

- NHDP Phase IV (Investment – Rs278bn): The largest highway project to be undertaken by NHAI, covering 20,000km, includes constructing and converting existing highways into two-lane highways with paved shoulders. This project would require an estimated investment of Rs278bn. The project would be executed from 2005-06 for completion by 2014-15.

- NHDP Phase V (Investment – Rs412bn) : Under NHDP-V, the Committee on Infrastructure has approved the six-laning of the four-lane highways comprising the Golden Quadrilateral and certain other high density stretches, through PPP's on BOT basis. These corridors have been four-laned under the first phase of NHDP, and the programme for their six-laning will commence in 2006, to be completed by 2012. Of the 6,500 km proposed under NHDP-V, about 5,700 km shall be taken up in the GQ and the balance 800 km would be selected on the basis of approved eligibility criteria. The proposed investment is estimated at Rs412bn.

- NHDP Phase VI (Investment – Rs167bn) : Constructing 1,000km of expressways that would require Rs167bn in investment.

- NHDP Phase VII (Investment – Rs167bn) : Undertaking the task of building ring roads, bypasses, over-bridges, flyovers, etc, on certain stretches of highway. The estimated investment is Rs167bn.

Figure 34. NHDP phases

NHDP Phase	Particulars	Length	Estimated Cost(Rs bn)
NHDP Phase I&II	GQ, NSEW corridors, others	13,146	540
NHDP Phase III	4- Laning	10,000	652
NHDP Phase IV	2-Laning	20,000	278
NHDP Phase V	6- laning of selected stretches	5,000	412
NHDP Phase VI	Development of expressways	1,000	167
NHDP Phase VII	Ring roads, bypass, grade separators, Service roads etc	NA	167
Total			**2,216**

Source: "Financing of NHDP ", Report of Core group – Committee on Infrastructure , Citigroup Investment Research estimates

Great opportunity – but with some caveats

- Delays in project execution – There are frequent delays in the execution of the road projects by NHAI. For instance, the Golden Quadrilateral was originally supposed to be completed by Dec 2003 but this date was later revised to Dec 2004. It has achieved completion of about 93% only now, and is now scheduled to be completed by Dec 2007. The primary reason for this delay is land acquisition. Also, issues like law and order problems in Bihar and Jharkhand areas, shifting of existing services (e.g. telephone lines, sewers) also took more time than expected. So while we expect these projects to come up eventually we believe it is prudent to expect delays of at least a couple of years in the execution period for these projects

- **Cost escalation** – A spin-off of time overruns of projects are cost overruns. This would stress the available resources and would force the government to complete projects within the available resources. Some projects could get marginalized in a bid to optimally allocate resources to more urgent projects.

- **New Projects through BOT route** – Most of the new projects to be awarded under the NHDP are going to be through the Public-Private Partnership (PPP) route as highlighted below. While this has positive implications for the government in terms of reducing the burden on its finances, it significantly increases the risk profile of the projects as construction companies will now have to invest equity in the projects and assume commercial & financial risk.

Figure 35. Future NHDP phases and mode of implementation

NHDP Phase	Particulars	Cash Contracting	BOT (Toll)	BOT (Annuity)	Length	Estimated Cost
NHDP Phase III	4- Laning		10,000		10,000	652
NHDP Phase IV	2-Laning		5,000	15,000**	20,000	278
NHDP Phase V	6- laning of selected stretches		6,500		6,500	412
NHDP Phase VI	Development of expressways		1,000		1,000	167
NHDP Phase VII	Ring roads, bypass, grade separators, Service roads etc				To be determined	167
Total		**-**	**22,500**	**15,000**	**37,500**	**1,676**

Source: Report of Core Group, Committee on Infrastructure, Citigroup Investment Research estimates. Note :** To be determined based on budgetary resources and the tolling policy for two lane highways

Figure 36. Summary of BOT projects till date

BOT Toll based	**Under Implementation**				**Completed**	
Category	No of contracts	Length (km)	Total Project Cost	Grant	No of contracts	Length (km)
NHDP Phase I	9	464	3,443	719	6	287
NHDP Phase II	16	813	5,371	(103)		
NHDP Phase III	17	1,090	5,752	492	1	30
Total	**42**	**2,367**	**14,566**	**1,108**	**7**	**317**
BOT Annuity based	**Awarded**				**Completed**	
	No of contracts	Length (km)	Total Project Cost	Annuity	No of contracts	Length (km)
NHDP Phase I	8	476	2354	288.8	8	476
NHDP Phase II	4	299	2121	199		
Total	**12**	**775**	**4475**	**488**	**8**	**476**

Source: PPP in National Highways – Secretary, Dept of Road Transport & Highways, Govt of India (20 May 2006)

Figure 37. The BOT Model – From a concessionaire's point of view

BOT (Toll Based)	BOT (Annuity)
Responsibilities – DBFO (Design, Engineering, Financing, Procurement, Construction, Operation & Maintenance)	**Responsibilities** – DBFO (Design, Engineering, Financing, Procurement, Construction, Operation & Maintenance)
Rights - Demand, collect and appropriate the users fees (toll fees)	**Rights** – Annuity Payment over a fixed period
Risk - Financing, Construction, Traffic Risk, Operation & Maintenance.	**Risk -** Financing, Construction, Maintenance (No Traffic Risk)

Source: Citigroup Investment Research

The new MCA - For better or for worse?

The government is working on finalizing the new Model Concession Agreement. Below are salient provisions of the new MCA.

Negative – Will affect returns from project.

- Toll Price increase capped at 40% of WPI – The new MCA suggests indexing the toll price increase to 40% of wholesale price index (WPI) instead of the current level of 100%. The rationale behind this cap is that a higher level of indexation would require the users to pay more for a declining (more congested) level of service when they should be receiving the benefit of a depreciated fee. We believe that this provision would impact returns from the project and would render many projects unviable for the concessionaire. However, this suggestion is subject to further examination and will be firmed up during the proposed review of the toll policy.

Negative – Will make projects unviable

- Maximum capital grant of 20% – It is proposed the NHAI should provide a capital grant of up to a maximum of 20% of the project cost. Where this grant is inadequate for making a project commercially viable, an additional grant not exceeding 20% of the project costs may be given for O&M support during the period following the commissioning of the project.

Negative – Will affect returns from the project

- Revenue sharing from the 9th year – Concession Fee will be a fixed sum of Re. 1 p.a. for the first nine years of the Concession Period. During the tenth year, the Concession Fee will be equal to 1% of the project revenues and for each subsequent year, it will increase by an additional 1%.

Positive – Alleviates Traffic risk to some extent

- Linking Concession period to actual traffic growth – By way of risk mitigation, the MCA provides for extension of the concession period in the event of a lower than expected growth in traffic. Conversely, the concession period is proposed to be reduced if the traffic growth exceeds the expected level. The MCA provides for a target traffic growth and stipulates an increase of up to 20% in the Concession Period if the growth rate is lower than projected.

Neutral – Same as before

- Financial close within 180 days – the MCA stipulates a time limit for achieving financial closure of 180 days (extendable up to another 120 days on payment of a penalty), failing which the bid security shall be forfeited. By prevalent standards, this is a tight schedule, which is achievable only if all the parameters are well defined and the requisite preparatory work has been undertaken.

Mixed – Well intentioned – but could delay awarding of contracts.

- Construction – MCA stipulates that the NHAI should acquire 80% of the required land and obtain environmental clearances before financial close. While this provision is well intentioned, this could delay awarding the contracts since land acquisition is a tedious process. NHAI chairman Santosh Nautiyal recently told media that he would approach COI to amend the MCA and seek some flexibility on this aspect and instead of fixing a uniform percentage for land acquisition, would suggest a varying figure on a case to case basis.

While we await the finalization of the policy, we believe that if the provisions are passed, they would affect returns from BOT projects which may bring down the private sector participation if projects become unviable. Since the Government of India cannot execute these projects without private sector participation – we believe that some modifications in these clauses can be expected.

Irrigation and water projects

Quick Facts

India accounts for 16% of the world's population but has just 4% of the world's fresh water resources.

The monsoon rain is its main source of fresh water, with 76% of the rainfall occurring between June and September during the southwest monsoon.

India's water requirements continue to increase because of the growing population, rising living standards and rapid industrialization. No major Indian city has 24-hour supply of water; the norm is 4 to 5 hours of supply per day. This compares to the Asian-Pacific average of 19 hours supply per day, with both Bangkok and Beijing having 24-hour coverage[1]

Figure 38. India's water resources

	Quantity (Cu.Km)
Annual Precipitation Volume (Including snowfall)	4000
Average Annual Potential flow in Rivers	1869
Per Capita Water availablity	1967
Estimates Utilizable water resources	1122
Surface Water	690
Ground Water	432

Source: Ministry of Water Resources

Irrigation constitutes the main use of water and is thus the focal issue in water resources development. As of now, irrigation accounts for 84% of total water usage. We expect the share of water used for agriculture to fall from 84% currently to 73% by 2025E.

Figure 39. India water demand (bcm)

Water Demand	1985	2000	2025
Agriculture Demand	**470**	**630**	**770**
% of total	*87%*	*84%*	*73%*
Non- Agriculture Demand	**70**	**120**	**280**
% of total	*13%*	*16%*	*27%*
Total	**540**	**750**	**1050**

Source: Ministry of Water Resources

[1] ET Knowledge Series

Agricultural sector demand for water is projected to increase to 770bcm, while non-agricultural sector demand is expected to increase to 280bcm by 2025. Furthermore, due to a growing population, per capita availability of water in India has been declining steadily from 6,008cm/year as of 1947 to an expected 760cm/year by 2025E, according to the Ministry of Water Resources. This, coupled with urbanization and industrialization, has raised concerns about the deteriorating quantity and quality of surface and ground water.

Inadequate urban water supply and sewerage infrastructure

The financial position of urban water supply and the sewerage sector is very poor. Only a few providers in large urban areas generate sufficient revenue to make any contribution to investment. In medium and small towns, these entities typically do not collect sufficient revenue to cover operating expenses. There is no matching of revenues against expenditures, and collection efficiency is very low. A major cause of the sector's poor financial health has been low tariffs, which has resulted in direct subsidies. There have been attempts to cross subsidize among commercial, industrial and domestic consumers. According to one study, 76% of towns that responded could not raise sufficient revenues from water supply to cover revenue expenditure on the service. The result has been a vicious circle of poor service leading to low tariffs, a low willingness to pay, poor resource positioning, poor maintenance and back to poor service.

Investment needs of the urban water supply sector

CPHEEO estimates Rs537bn of investments would have to be made in the Xth Plan period for the urban water supply sector.

The Central Public Health and Environmental Engineering Organisation (CPHEEO) estimated that by the end of the year 2007, the country's urban population is likely to be around 363m. For achieving 100% coverage by the end of the Tenth Five Year Plan and taking into account the urban population already covered, the requirement of funds has been assessed. In regard to sewerage and sanitation facilities, it is assessed that 57% of the urban population is likely to be covered by the end of the Ninth Plan. The estimates are based on the proposed coverage of 75% of urban population. Moreover, 35% of the population already covered by the end of the Eighth Plan would need augmentation/rehabilitation and is included in calculation of fund requirements. Based on these assumptions of requirements to be met, the CPHEEO has estimated that Rs537bn of investments would have to be made in the Xth Plan period.

AP at the forefront of state-led irrigation projects

Despite limited visibility on major nationwide irrigation projects, some state governments have taken the lead in improving irrigation infrastructure in their respective states, as these projects are very good poll planks. Currently, Andhra Pradesh (AP), Gujarat and Maharashtra lead in this respect, while activity in Rajasthan, Madhya Pradesh (MP) and Karnataka is also increasing.

Andhra Pradesh Govt has embarked on a Rs450bn Jal Yagna project to irrigate 6.5m acres and stabilize irrigation on 2.5m acres

The AP government has embarked on the Rs450bn Jal Yagna project with assistance from the World Bank and other external financing agencies to irrigate 6.5m acres and stabilize irrigation on 2.5m acres. The AP government has made a budgetary provision of Rs13.5bn (FY04), Rs34bn (FY05P) and Rs64bn (FY06E) for this.

Figure 40. AP Government budget allocation on irrigation (Rs bn)

	2004-2005 A	2005-2006P	2006-2007E
Irrigation	34	65	100
Total	115	135	196
% of total	**30%**	**48%**	**51%**

Source: AP Government Budget 2006-2007. Note A: Actual, P: Provisional, E: Estimate

Industrial capex still strong

The capex cycle in India is still going strong with many companies in an expansion mode. Many metals and mining companies have announced investment plans for greenfield / brownfield expansions and this bodes well for Nagarjuna as it has executed several orders for civil structures of these facilities

Figure 41. Industrial infrastructure (Rs Bn)

	Total Investments		Construction Investments	
	FY02-06	FY07-11E	FY02-06	FY07-11E
Industrial*	**2,111**	**6,406**	**317**	**961**
Key drivers**				
Metals (steel and aluminium)	161	2,132	24	320
Oil and Gas	998	2,407	100	241

Note:* assuming 15% civil construction component

Note:* assuming 10% civil construction component

Source: CRIS INFAC

Power transmission and distribution

PGCIL instrumental in setting up the national grid

Rs394bn investments in the National Grid to made in XI Plan.

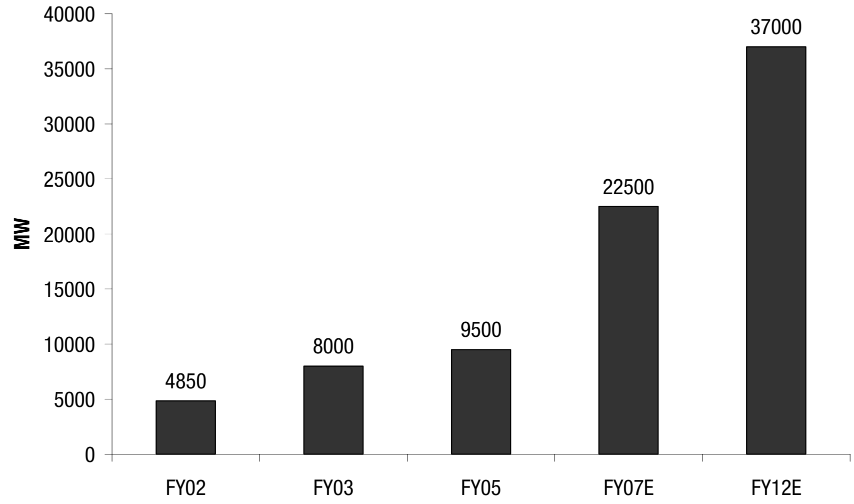
India inter-regional grid capacity was just 4,850MW vis-à-vis its generation capacity of 105GW as of FY02, resulting in improper capacity utilization. The problem has been compounded by the fact that East India (77% of India's coal reserves) is the generation epicenter, while most of the consumption is in western, southern and northern India, thus necessitating development of a National Grid. To correct this natural imbalance and support generating capacity growth in the Xth and XIth Plans, Power Grid Corporation of India Ltd (PGCIL), the nodal agency for an inter-regional grid with an asset base of Rs215bn, is executing a plan to increase transmission capacity to 23GW by FY07 and 37GW by FY12. To this end, PGCIL plans to raise its capex 152% during the X plan (FY02-07) to Rs214bn versus Rs85bn in the IX plan period. We estimate Rs705bn will be invested in ramping up National Grid capacity to 30GW.

Figure 42. Investments in setting up the national grid (Rs bn)

Investment by Powergrid	X plan(02-07E)	XI plan(02-07E)
Powergrid's Outlay	214	283
Private Sector participation	97	112
Total Outlay	**311**	**394**

Source: Ministry of Power

Figure 43. Inter-regional transmission capacity growth



Source: Ministry of Power, PGCIL

Pipelines

India has about 15,000km of pipelines transporting crude oil, refined products and gas in the country. Domestic investment in pipeline infrastructure has been quite low, particularly in gas pipelines, due to lack of gas supply. However, following recent gas finds such as the Reliance gas find in the Krishna Godavari Basin, India will likely require increased investments in pipelines, as gas will need to be transported to areas of consumption. We also believe increased availability of natural gas in northern and western India will spur improved infrastructure for gas transportation. All these expected developments entail significant investments in transportation of gas. In view of these developments, players such as Gas Authority of India Ltd (GAIL), Gujarat State Petroleum Corporation (GSPC), ONGC, and Reliance have proposed investing in 20,300km of additional pipeline infrastructure over the next five years, implying about an 18% CAGR over the next five years. We believe that given the regulatory hurdles in the clearances for the National Gas Grid, this entire investment might not occur over the next five years. Rather, we think 10% growth in oil & gas pipeline infrastructure is more realistic.

Figure 44. India – Current and proposed pipeline infrastructure

	Existing (kms)	Proposed Additions (kms)	Citigroup Investment Research estimates (kms)	Total	% growth
Crude Oil	5,000	2,000	2,000	7,000	40
Refined Products	6,000	9,300	5,000	11,300	88
Gas	4,500	9,000	4,500	9,000	100
Total	**15,500**	**20,300**	**11,500**	**27,000**	**74**

Source: Industry, Citigroup Investment Research estimates

Nagarjuna Construction (NGCN.BO, 1M)

Company Description

Nagarjuna Construction Company (NJCC), with a promoter stake of 26%, was established more than 27 years ago. It is one of the fastest growing construction companies in India. NJCC is a diversified player, having executed projects across sectors and is well-positioned to capitalize on capex opportunities in areas such as transportation, power, and irrigation.

Investment Thesis

We rate Nagarjuna Construction a Buy/Medium risk (1M) with a target price of Rs191. We forecast a FD EPS CAGR of 36% for FY06-09E and ROE of ~18%, and expect order backlog growth of 24% during this period. Current order book is about 3.4x FY06 revenues, providing good visibility for the next three years. Nagarjuna's exposure to high growth sectors such as transportation and irrigation should bolster order-inflows. Better cost management; nimble operations, operating leverage and improving revenue mix should enable it to maintain margins in the 8.5-9% level. The company intends to increase its focus on the high-growth road and irrigation sectors. We expect these initiatives to provide the growth impetus to the company.

Valuation

Our sum-of-the-parts-based target price for NJCC of Rs191 per share is based on its four distinct parts: cash contract business, BOT projects, real estate projects, and landbank. We value the core construction business at a P/E of 16x FY08E FD EPS to derive a value of Rs164 per share. We value its BOT projects at Rs15 per share, using the P/BV method to value its share in these projects. We then value its real estate projects at Rs6 per share based on book value. Finally, we value its 130-acre landbank at Rs6 per share, using management's estimates of its current market value. At our target price, adjusted for BOT projects and real estate investments, Nagarjuna would trade at an adjusted EV/EBITDA of 11.6x, in line with its peers.

Risks

We rate NJCC's as Medium Risk. This differs from the High Risk rating assigned by our quantitative risk rating system, which tracks 260-day historical share price volatility. This is primarily because NJCC's current order book of Rs62bn implies sales coverage of 3.4x FY06E sales and provides good earnings visibility over the medium term. Risks to reaching our target price include: changes associated with the new Model Concession Agreement, taxation issues related to Section 80 IA benefits, rising material prices, project risks, commercial risks associated with BOT projects, equity dilution and a shortage of skilled manpower. It also faces risk from exposure to government-funded projects.

Larsen and Toubro (LART.BO, 1L)

Company Description

L&T is a diversified conglomerate with market leadership in the engineering and construction, cement and electrical-equipment businesses in India. L&T Information Technology is its 100% subsidiary engaged in software services. L&T has demerged its cement business into a separate company.

Investment Thesis

We rate L&T Buy (1L) with a target price of Rs3,159. L&T's current order backlog of Rs250bn-plus and our forecast of improving margins provides good earnings visibility. That most process industries are operating at near peak capacity utilization, together with the thrust on hydrocarbon and infrastructure spending, should augur well for the order pipeline. We are positive on management's efforts at improving the company's product mix by increasing the share of high-technology products for process industries, defense, nuclear, and aerospace applications; and of engineering and embedded services. These segments have better growth potential and margins than the projects business. The initial response to the new initiative has been encouraging. Management also appears to be on course to de-risk the business from the local cycle by increasing international sales as a proportion of total revenues (from 18% in FY05 to 26% by FY08E).

Valuation

Using a P/E multiple of 23x FY08E we get a core business value of Rs2685 for L&T's core business. This is well supported by our secondary valuation technique using a Discounted Cash Flow (DCF) methodology. Using a WACC of 9.06% and a terminal growth rate of 5% we get a value of Rs2761 for the parent business of L&T. We also believe that the parent numbers do not capture the value inherent in the subsidiaries of L&T. We use a sum of the parts (SOTP) valuation resulting in a target price of Rs3159. At our target price of Rs3159 L&T would trade at an adjusted EV/EBITDA of 16.4x FY08E, in line with that of BHEL and an adjusted EV/OB of 0.98x FY08E.

Risks

We rate L&T as Low risk, as opposed to the High risk suggested by our quantitative risk rating system, because L&T's current order backlog of Rs283bn represents two years worth of sales and good earnings visibility. Downside risks to our target price are: Attracting and retaining talent is the single biggest concern; The E&C and electrical equipment businesses are sensitive to economic variables; Competitive pressures; and L&T needs to keep abreast of technology trends to sustain valuations and earnings. If any of these risk factors have a greater impact than we anticipate, L&T's share price will likely have difficulty attaining our target price.

Hindustan Construction (HCNS.BO, 3L)

Company Description

HCC is an 80-year-old construction company where the major shareholders own a 47% stake. It has cash contracting skills across power (thermal, hydel, nuclear), roads, bridges, dams, barrages, industrial, buildings, water supply, sanitation, ports, harbors and other marine works.

Investment Thesis

We rate HCC Sell/Low Risk (3L), with a target price of Rs105 as we feel the margin contraction bugbear looms large due to: rising commodity prices, rising staff costs to retain employees, increasing competition across subsectors, and greater subcontracting as the company grows. We also believe that the sales growth CAGR would slow given the long gestation hydel projects won in FY06. We are also wary of the value the markets are imputing for the Lavasa real estate investments at such an early stage. We believe these investments can justify higher valuations only on successful completion and sale of a certain percentage of the property.

Valuation

Based on sum-of-the-parts we set a target price of Rs105/share for HCC. We look at HCC as two distinct parts: the cash contract business and real estate investments. We use a P/E of 17x FY08E FD EPS to value the core cash contracting business. The value/share of the cash contracting business works out to Rs94/share. Our P/E 17x FY08E multiple is supported by forecasted earnings CAGR of 34% over FY06-09E.

We use Rs1mn/acre market value of raw land to calculate the enterprise value and knock off the debt of Rs5bn to get the equity value of the project. HCC equity stake of 60% and a 20% holding discount gives a value of Rs9/share for the Lavasa Project. We use Rs2000/sqft to value the 9 acres of land that HCC owns in Vikhroli (West). A 20% holding company discount provides a value of Rs3/share.

Alternatively on adjusting for the real estate investment, HCC would trade on an EV/EBITDA of 11.3x FY08E at our target price of Rs105, in line with other second tier construction peers.

Risks

We rate HCC as Low risk, which differs from the Medium risk rating assigned by our quantitative risk-rating system because HCC has a beta of less than 1 and its order backlog of greater than Rs90bn implies sales coverage of 4.8x FY06 sales. This provides good earnings visibility in the medium term.

The key risk factors on the downside are as follows: 1) The construction business is subject to project risks; 2) The judiciary may not allow 80I (A) benefits to non-BOT projects; 3) Equity dilution as the company raises capital to expand and fund BOT projects; and 4) The construction business is sensitive to economic variables such as growth, interest rates and the investment cycle.

Key upside risks include: 1) Private equity investors taking a stake in Lavasa project at a value higher than what we have imputed; 2) Completion and sale of phase I of Lavasa Corporation before schedule; 3) Markets imputing a higher valuation for the real estate investment on the sale of smaller tracts of land; 4) Faster-than-expected order execution; and 5) Stronger-than expected order inflow.

Gammon India (GAMM.BO, 3L)

Company Description

Gammon India has construction and build-operate-transfer (BOT) skill-sets in sectors as varied as bridges, flyovers, roads, energy (hydroelectric, nuclear and thermal), tunnels, ports, pipelines (oil, gas and water), water supply and sewage, utilities, ports, harbors, and other marine structures. A presence across sub-sectors provides Gammon with an advantage, as it is in a position to bid, win and implement a wide range of projects in a sector that is seeing considerable activity.

Investment Thesis

We rate Gammon Sell (3L), with a target price of Rs426. Despite solid cash contracting fundamentals with an order backlog at Rs52bn, strong EPS growth of 42% CAGR over CY04-07E and seven BOT projects across many sectors such as roads, bridges, ports, hydroelectric power and waterways, we believe the stock has appreciated to rich valuations.

Valuation

Gammon has two distinct businesses: cash contract and build-own-transfer (BOT). We value peer L&T's cash contract business using a P/E of 20x FY08E with an EPS CAGR of 34% over FY05-08E and RoE in the range of 25-30%. For Gammon, we use a lower P/E of 17x 2007E EPS to value its core cash contracting business despite a higher EPS CAGR of 42% in 2005-07E, as L&T is significantly larger and has a stronger order book and reputation. Based on a 2007E P/E of 17x the value/share of the contracting business is Rs351. In the absence of profit and loss statements, balance sheets and cash flow statements for these projects, we cannot use DCF to calculate NPV. The consolidated numbers of Gammon do not do justice to the BOT projects, as in the pre-stabilization (investment) phase these projects would be making losses. According to management, the overall project equity IRRs would be 20–28%. We have assumed an overall equity IRR of 24% for the BOT projects and Cost of Equity (CoE) of 12% (Based on Rf = 7%, Rm-Rf = 7% and Beta = 0.7) giving us a P/BV multiple of 2.0x for the BOT projects. Based on 2.0x P/BV multiple we value existing projects at Rs23/share and new projects at Rs53/share, giving us a total BOT project value/share of Rs76. This gives a target price of Rs426 based on a sum of the parts. Alternatively, adjusting for the BOT projects Gammon would trade on a 2007E EV/EBITDA of 10.5x at its target price of Rs426, which we find reasonable.

Risks

We rate Gammon as Low risk. The rating differs from the Medium risk rating assigned by our quantitative risk-rating primarily because Gammon's beta is less than one and the current order book of Rs52bn implies sales coverage of 4.4x 2005 sales, providing good earnings visibility over the medium term. The key risk factors on the downside are as follows: (1) the construction business is subject to project risks; (2) the judiciary not allowing Section 80I(A) benefits to non-BOT projects; and (3) equity dilutions as the company raises capital to expand and fund BOT projects. The key risk factors on the upside are as follows: (1) faster-than-expected order execution; (2) a stronger-than-expected order inflow; and (3) Gammon making higher-than-expected returns in BOT projects. These risks could impede the stock from reaching our target price.

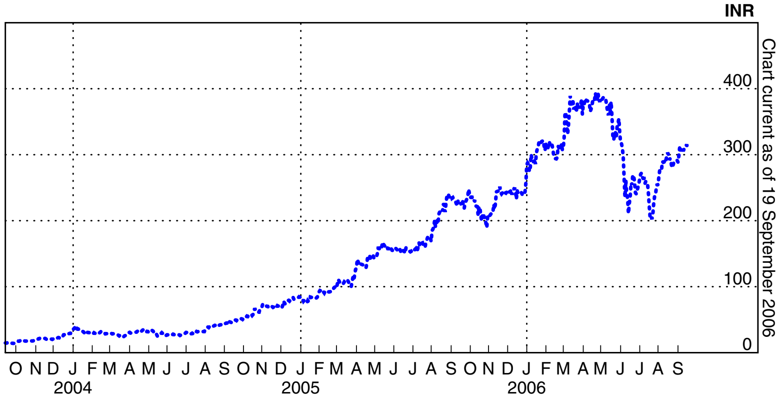
Analyst Certification Appendix A-1

We, Deepal Delivala and Venkatesh Balasubramaniam, research analysts and the authors of this report, hereby certify that all of the views expressed in this research report accurately reflect our personal views about any and all of the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

IMPORTANT DISCLOSURES

Nagarjuna Construction Co Ltd (NGCN.BO)

Ratings and Target Price History - Fundamental Research



Covered
Not covered

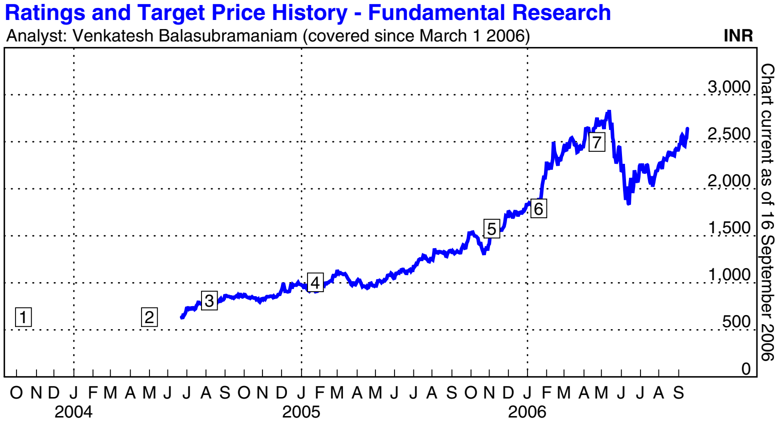
#	Date	Rating	Target Price	Closing Price

*Indicates change.

Larsen & Toubro (LART.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Venkatesh Balasubramaniam (covered since March 1 2006)



Covered
Not covered

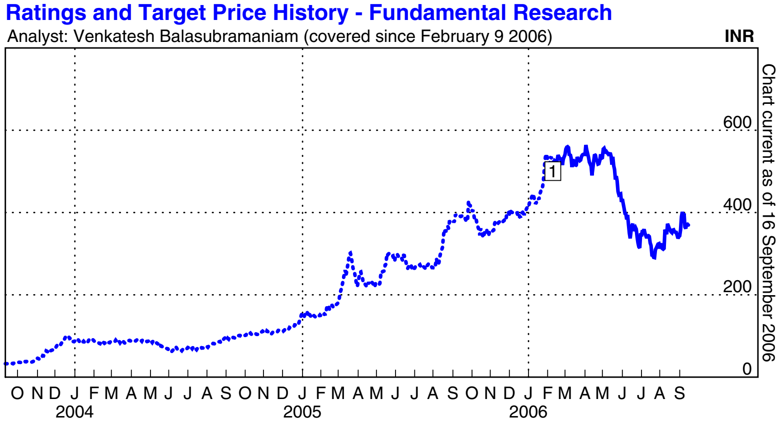
#	Date	Rating	Target Price	Closing Price
1:	13 Oct 03	*2L	*536.10	NA
2:	3 May 04	2L	*806.15	NA
3:	6 Aug 04	*1L	*939.00	808.50
4:	25 Jan 05	1L	*1,157.00	906.10
5:	4 Nov 05	1L	*1,680.00	NA
6:	19 Jan 06	1L	*2,338.00	1,900.30
7:	24 Apr 06	1L	*3,159.00	2,756.35

*Indicates change.

Gammon India Ltd (GAMM.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Venkatesh Balasubramaniam (covered since February 9 2006)



Covered
Not covered

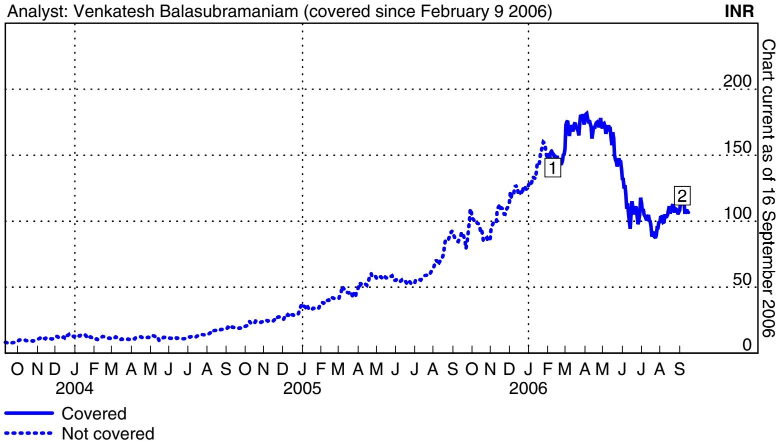
#	Date	Rating	Target Price	Closing Price
1:	9 Feb 06	3L	426.00	NA

*Indicates change.

Hindustan Construction Co Ltd (HCNS.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Venkatesh Balasubramaniam (covered since February 9 2006)



#	Date	Rating	Target Price	Closing Price
1:	9 Feb 06	3L	130.00	NA
2:	6 Sep 06	3L	*105.00	117.60

*Indicates change.

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India -- Asia Pacific (107)	52%	20%	28%
% of companies in each rating category that are investment banking clients	52%	57%	53%

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