Asia India Industrials

Indian infrastructure

Nice talk, but would they

walk?

Manish Saxena Research Analyst (+91) 22 6658 4034

Research Analyst (+91) 22 6658 4056

Chockalingam Narayanan Anup Kulkarni **Research Associate** (+91) 22 6658 4265

Abhishek Puri **Research Analyst** (+91) 22 6658 4214

manish.saxena@db.com chockalingam.narayanan@db.com anup.kulkarni@db.com abhishek.puri@db.com

JSPL and L&T are our top picks due to improving competitiveness

A recent spate of big ticket project approvals, coupled with government initiatives for follow-on approvals for others, have led to hope that the ongoing cyclical downturn may not become a structural slowdown. A lot depends on the timelines for the passage of the mining bill, the auctioning of coal mines, and the land reform bills for seamless development (akin to that witnessed in the road sector). Our latest promoter/CFO survey suggests business confidence is improving at the margin. At current valuations, we prefer industry leaders such as JSPL and L&T.

Business confidence improving at the margin

Over the last fortnight, the MoEF has given clearances for the Lavasa Project and ToR for the 2,400MW Tamnar project being built by JSPL so that construction can start. The government has a list of 12 projects for fast-track clearances. Our quick survey with business leaders in the infrastructure space, including Jindal Group, Coal India, L&T, Areva, and many others, suggests that with the exception of projects stuck due to local political factors, clearances have started coming through. It appears that project clearance may no longer be the biggest obstacle for companies.

Hopes pinned on government initiatives to drive structural reforms

Notwithstanding the clearances of projects that have been stuck for more than a year and doing away with the 'go/no-go' criteria for mine clearances, business leaders are hoping that the land acquisition bill is passed by parliament sooner rather than later. According to most, the provisions of the bill, if implemented, would raise project costs by 7-10%, but the process of land acquisition would be accelerated by more than one to two years. Allocation of coal mines through bidding is another event to watch out for. While there is still a lack of non-skilled workers, our survey suggests business leaders are investing in technology to reduce labor dependence.

Falling rupee value and easing of competition are themes for next six months

The recent sharp fall in the rupee caught almost all companies unawares and resulted in a scramble for forex cover, accentuating the currency movement. However, industry leaders have made remarks that competition is easing -Areva's CEO notably suggested that there are no longer "suicide bombers" in bids. Moreover, the data from recent road bids suggest that competition is easing and companies have raised the hurdle rates for new bids.

We find comfort in industry leaders with strong b/s and reasonable valuation

Given uncertain global headwinds and the current lack of clarity on timelines for some of the reforms, we find the valuations of JSPL and L&T reasonable vis-à-vis the position in the cycle. JSPL benefits from twin rising deficits in power and long steel products as competition in both segments has diminished due to the lack of cheap fuel and iron ore. Likewise, in the case of L&T, we find early signs of competition receding, especially in road bids and the transmission and distribution sector. Key risks: (1) ability of government to usher in the development program, the absence of which could hurt stock performances and (2) a depreciating rupee could hurt developers, especially on forex loan exposure.

Deutsche Bank AG/Hong Kong

All prices are those current at the end of the previous trading session unless otherwise indicated. Prices are sourced from local exchanges via Reuters, Bloomberg and other vendors. Data is sourced from Deutsche Bank and subject companies. Deutsche Bank does and seeks to do business with companies covered in its research reports. Thus, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. DISCLOSURES AND ANALYST CERTIFICATIONS ARE LOCATED IN APPENDIX 1. MICA(P) 146/04/2011.

Industry Update

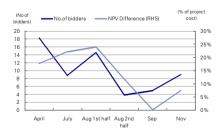
Top picks

Jindal Steel & Power (JNSP.BO), INR487.75 Buy Larsen & Toubro Ltd (LART.BO), INR1, 265.80 Buy Coal India Limited (COAL.BO), INR308.80 Buy Thermax Limited (THMX.BO),INR448.85 Buy IRB Infrastructure Dev. (IRBI.BO), INR145.45 Buy

Companies featured

Companies			
Larsen & Toub		RT.BO),INR1,265.80	Buy
	2011A	2012E	2013E
P/E (x)	25.7	17.0	15.2
EV/EBITDA (x)	16.1	10.7	10.0
Price/book (x)	4.0	2.5	2.2
Coal India Limi	ted (COAL	BO),INR308.80	Buy
	2011A	2012E	2013E
P/E (x)	18.6	13.6	12.5
EV/EBITDA (x)	10.2	6.8	5.7
Price/book (x)	6.6	4.5	3.6
Jindal Steel &		ISP.BO),INR487.75	Buy
	2011A	2012E	2013E
P/E (x)	16.9	11.0	8.2
EV/EBITDA (x)	12.1	8.8	7.3
Price/book (x)	4.6	2.6	2.0
Siemens India			Hold
	2010A	2011E	2012E
P/E (x)	29.7	27.1	20.4
EV/EBITDA (x)	15.6	15.1	10.4
Price/book (x)	8.4	5.8	4.7
	ure Dev. (I	RBI.BO),INR145.45	Buy
IRB Infrastruct	ure Dev. (I 2011A	RBI.BO),INR145.45 2012E	Buy 2013E
IRB Infrastructo	ure Dev. (I 2011A 18.1	RBI.BO),INR145.45 2012E 9.3	Buy 2013E 10.4
IRB Infrastructo P/E (x) EV/EBITDA (x)	ure Dev. (I 2011A 18.1 10.7	RBI.BO),INR145.45 2012E 9.3 8.1	Buy 2013E 10.4 8.0
IRB Infrastructo P/E (x) EV/EBITDA (x) Price/book (x)	ure Dev. (I 2011A 18.1 10.7 2.9	RBI.BO),INR145.45 2012E 9.3 8.1 1.7	Buy 2013E 10.4 8.0 1.5
IRB Infrastructo P/E (x) EV/EBITDA (x)	ure Dev. (I 2011A 18.1 10.7 2.9 (ABB.BO),I	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50	Buy 2013E 10.4 8.0 1.5 Sell
IRB Infrastructu P/E (x) EV/EBITDA (x) Price/book (x) ABB Ltd India (ure Dev. (I 2011A 18.1 10.7 2.9 ABB.BO),I 2010A	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50 2011E	Buy 2013E 10.4 8.0 1.5 Sell 2012E
IRB Infrastructu P/E (x) EV/EBITDA (x) Price/book (x) ABB Ltd India (P/E (x)	ure Dev. (I 2011A 18.1 10.7 2.9 (ABB.BO),I 2010A 276.8	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50 2011E 44.2	Buy 2013E 10.4 8.0 1.5 Sell 2012E 25.4
IRB Infrastructu P/E (x) EV/EBITDA (x) Price/book (x) ABB Ltd India (P/E (x) EV/EBITDA (x)	ure Dev. (I 2011A 18.1 10.7 2.9 ABB.BO),I 2010A 276.8 201.8	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50 2011E 44.2 26.4	Buy 2013E 10.4 8.0 1.5 Sell 2012E 25.4 15.6
IRB Infrastructu P/E (x) EV/EBITDA (x) Price/book (x) ABB Ltd India (P/E (x) EV/EBITDA (x) Price/book (x)	ure Dev. (I 2011A 18.1 10.7 2.9 ABB.BO),I 2010A 276.8 201.8 6.9	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50 2011E 44.2 26.4 4.9	Buy 2013E 10.4 8.0 1.5 Sell 2012E 25.4 15.6 4.1
IRB Infrastructu P/E (x) EV/EBITDA (x) Price/book (x) ABB Ltd India (P/E (x) EV/EBITDA (x)	ure Dev. (I 2011A 18.1 10.7 2.9 ABB.BO),I 2010A 276.8 201.8 6.9 EV.BO),IN	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50 2011E 44.2 26.4 4.9 R194.85	Buy 2013E 10.4 8.0 1.5 Sell 2012E 25.4 15.6 4.1 Hold
IRB Infrastructu P/E (x) EV/EBITDA (x) Price/book (x) ABB Ltd India (P/E (x) EV/EBITDA (x) Price/book (x) Areva T&D (AR	ure Dev. (I 2011A 18.1 10.7 2.9 ABB.BO),I 2010A 276.8 201.8 6.9 EV.BO),IN 2010A	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50 2011E 44.2 26.4 4.9 R194.85 2011E	Buy 2013E 10.4 8.0 1.5 Sell 2012E 25.4 15.6 4.1 Hold 2012E
IRB Infrastructu P/E (x) EV/EBITDA (x) Price/book (x) ABB Ltd India (P/E (x) EV/EBITDA (x) Price/book (x) Areva T&D (AR P/E (x)	ure Dev. (I 2011A 18.1 10.7 2.9 ABB.BO),I 2010A 276.8 201.8 6.9 EV.BO),IN 2010A 37.0	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50 2011E 44.2 26.4 4.9 R194.85 2011E 20.5	Buy 2013E 10.4 8.0 1.5 Sell 2012E 25.4 15.6 4.1 Hold 2012E 15.3
IRB Infrastructu P/E (x) EV/EBITDA (x) Price/book (x) ABB Ltd India (P/E (x) EV/EBITDA (x) Price/book (x) Areva T&D (AR P/E (x) EV/EBITDA (x)	ure Dev. (I 2011A 18.1 10.7 2.9 ABB.BO),I 2010A 276.8 201.8 6.9 EV.BO),IN 2010A 37.0 17.4	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50 2011E 44.2 26.4 4.9 R194.85 2011E 20.5 10.8	Buy 2013E 10.4 8.0 1.5 Sell 2012E 25.4 15.6 4.1 Hold 2012E 15.3 8.3
IRB Infrastructu P/E (x) EV/EBITDA (x) Price/book (x) ABB Ltd India (P/E (x) EV/EBITDA (x) Price/book (x) Areva T&D (AR P/E (x) EV/EBITDA (x) Price/book (x)	ure Dev. (I 2011A 18.1 10.7 2.9 ABB.BO),I 2010A 276.8 201.8 6.9 EV.BO),IN 2010A 37.0 37.0 17.4 7.7	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50 2011E 44.2 26.4 4.9 R194.85 2011E 20.5 10.8 4.0	Buy 2013E 10.4 8.0 1.5 Sell 2012E 25.4 15.6 4.1 Hold 2012E 15.3 8.3 3.3
IRB Infrastructu P/E (x) EV/EBITDA (x) Price/book (x) ABB Ltd India (P/E (x) EV/EBITDA (x) Price/book (x) Areva T&D (AR P/E (x) EV/EBITDA (x)	ure Dev. (I 2011A 18.1 10.7 2.9 ABB.BO),I 2010A 276.8 201.8 6.9 EV.BO),IN 2010A 37.0 17.4 7.7 ed (THMX.	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50 2011E 44.2 26.4 4.9 R194.85 2011E 20.5 10.8 4.0 BO),INR448.85	Buy 2013E 10.4 8.0 1.5 Sell 2012E 25.4 15.6 4.1 Hold 2012E 15.3 8.3 3.3 Buy
IRB Infrastructu P/E (x) EV/EBITDA (x) Price/book (x) ABB Ltd India (P/E (x) EV/EBITDA (x) Price/book (x) Areva T&D (AR P/E (x) EV/EBITDA (x) Price/book (x) Thermax Limite	ure Dev. (I 2011A 18.1 10.7 2.9 ABB.BO),I 2010A 276.8 2010A 276.8 2010A 37.0 IV.BO),IN 2010A 37.0 17.4 7.7 ed (THMX 2011A	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50 2011E 44.2 26.4 4.9 R194.85 2011E 20.5 10.8 4.0 BO),INR448.85 2012E	Buy 2013E 10.4 8.0 1.5 Sell 2012E 25.4 15.6 4.1 Hold 2012E 15.3 8.3 3.3 Buy 2013E
IRB Infrastructu P/E (x) EV/EBITDA (x) Price/book (x) ABB Ltd India (P/E (x) EV/EBITDA (x) Price/book (x) Areva T&D (AR P/E (x) EV/EBITDA (x) Price/book (x) Thermax Limite P/E (x)	ure Dev. (I 2011A 18.1 10.7 2.9 ABB.BO),I 2010A 276.8 201.8 6.9 EV.BO,IN 2010A 37.0 17.4 7.7 ed (THMX. 2011A 23.3	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50 2011E 44.2 26.4 4.9 R194.85 2011E 20.5 10.8 4.0 BO),INR448.85 2012E 12.9	Buy 2013E 10.4 8.0 1.5 Sell 2012E 25.4 15.6 4.1 Hold 2012E 15.3 8.3 3.3 8.3 3.3 Buy 2013E 13.4
IRB Infrastructu P/E (x) EV/EBITDA (x) Price/book (x) ABB Ltd India (P/E (x) EV/EBITDA (x) Price/book (x) Areva T&D (AR P/E (x) EV/EBITDA (x) Price/book (x) Thermax Limite	ure Dev. (I 2011A 18.1 10.7 2.9 ABB.BO),I 2010A 276.8 2010A 276.8 2010A 37.0 IV.BO),IN 2010A 37.0 17.4 7.7 ed (THMX 2011A	RBI.BO),INR145.45 2012E 9.3 8.1 1.7 NR612.50 2011E 44.2 26.4 4.9 R194.85 2011E 20.5 10.8 4.0 BO),INR448.85 2012E	Buy 2013E 10.4 8.0 1.5 Sell 2012E 25.4 15.6 4.1 Hold 2012E 15.3 8.3 3.3 Buy 2013E

Competition in roads easing



Deutsche Bank

Good progress, albeit much delayed

Good to see government efforts to clear infrastructure projects

We were caught by surprise last weekend when the government of India reviewed the implementation of many projects across the country.

Project taken in meeting	What is required to be cleared	Ministries asked to follow up	Remarks	Additional Details
Hindalco Industries	EC	MoEF	MoEF has been entrusted to take decision as per merits of the project	na
GMR Chattisgarh Energy	Coal Linkage	MoC	Ministry of coal to inform promoters that coal linkage is not feasible	na
Visa Power (Chattisgarh)	EC	MoEF	MoEF will take up the matter with the Government of Chhattisgarh for expediting the pending forest clearance.	In September 2011, a court case was brought against the company for starting construction before getting clearance
Jindal Power	Coal Linkage	MoC	Ministry of coal to inform promoters that coal linkage not feasible	The project has got approvals recently to begin construction
JIndal Power (Phase 3)*	EC and Location of Project	MoEF & MoC	MoEF to chase up Chattisgarh state government to give consent. MoC to expedite decision on location of the project	The work on the site has started
Hinduja Power	FIPB	Department of economic affairs	DEA to expedite decision on proposals for FIPB	On 18 November 2011 the government gave regulatory clearances and FIPB has also approved the project.
Lanco Power	Coal Linkage and EC	MoC & MoEF	Ministry of coal will inform the concerned players that new coal linkage is not feasible and MoEF will take a quick final decision on four units.	This is in line with the current adverse coal demand-supply scenario in India
Lanco Babandh	EC and Rehabilitation Plan	MoEF & MoC	MoEF to pursue matter with govt of Orissa for expediting decision on forest clearance.	In June 2011, the divisional forest officer of Dhenkanal forest division, slapped a show cause notice on Lanco Babandh Power for violations.
Dheeru Power (being done by IDFC)	EC	MoEF	MoEF to take up matter with state government to expedite decision for clearances	na
Athena Power	EC	MoEF	Project had got approval but faced resistance. A team of experts is to visit site and report to the national wildlife board and MoEF to take decision soon.	National Board for Wildlife
Larsen and Toubro Metro Rail (Hyderabad)	Acquisition of Land	Ministry of Urban Development	As of 8 November 2011, a key parcel of land required for building a depot on the outskirts of Hyderabad is still in court. A special request has been made by the advocate-general of the state to bring forward the date of hearing for the acquisition of 104 acres of land.	On 18 November 2011 the government granted regulatory clearances. L&T has already begun some of the civil works, including soil testing, pending resolution of the issue.
Essar Power Gujarat	EC	MoEF	MoEF asked to expedite its decision on the project	

Source: Deutsche Bank, Company data, Ministry of Coal, Ministry of Environment and Forests

Road sector moves toward e-tendering, on auto-pilot route

Road awards have moved toward e-tendering – a first of its kind in India NHAI looks set to award 1800Kms of roads in Q3FY12 after awarding c3500Kms of road projects in H2FY12. Road awards have moved towards e-tendering – a first of its kind in India – ushering in transparency for awards, something that a lot of stakeholders in the sector have been calling for.

Figure 2: Road project awards targeted by NHAI							
Month	Length (km)	Number of projects	Total project cost (INR m)				
April 2011	481	4	55,270				
May 2011	570	5	46,560				
June 2011	756	5	82,750				
July 2011	1,269	7	109,830				
August 2011	1,356	12	49,470				
September 2011	928	8	66,170				
October 2011	1,373	8	31,120				
November 2011	905	7	90,950				
December 2011	135	3	14,170				
January 2012	220	1	23,100				
	7,993	60	569,390				

Source: National Highways Authority of India, Deutsche Bank

In terms of work completion, the activity level should pick up in FY13 as it requires anywhere between six and nine months for financial closure.

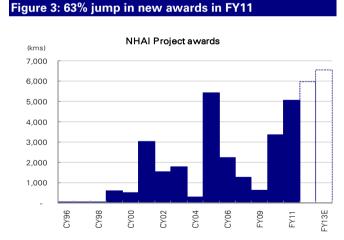
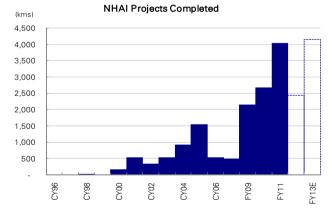


Figure 4: Construction activity to pick up in FY13

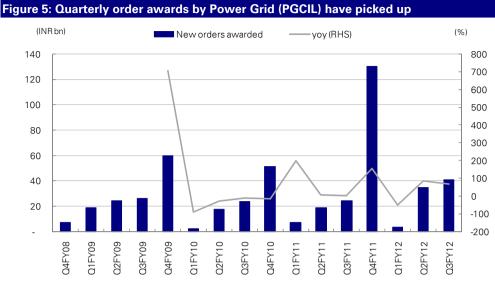


Source: National Highways Authority of India, Deutsche Bank

Source: National Highways Authority of India, Deutsche Bank

Power Grid has kick-started awards in T&D sector

Commentary from Power Grid suggests that ordering in 2HFY12 could be twice that of 1HFY12 Recent commentary from Power Grid suggests that ordering in 2HFY12 could be twice that of 1HFY12 (i.e., approximately INR 140bn v/s INR 70bn in the first half). Note that FY11 had one mega HVDC order of INR 55bn, which may not be repeated this year.



Source: Power Grid Corporation of India, Deutsche Bank

Watch out for debate on mining bill in various forums

Draft mining bill has left participants with many questions about the treatment of smaller miners and profit sharing Two months ago, the Cabinet approved a draft law that seeks to create a better legislative environment to attract investments in mining and ease land acquisition through higher compensation to people displaced by projects. But mining companies are not entirely convinced as they have to pay higher royalties and want changes to be made before the law is enacted. India's largest miner, NMDC, feels that the proposed legislation would not meet the needs of the industry and, in some cases, certain provisions could be counterproductive.

One of the most important problems is mining by the unorganised sector. Small-scale miners operate in small land holdings, with little application of technology, and bypass most standard operating procedures by violating environmental norms. The new Bill proposes to free the state governments from taking the Centre's approval to grant mining leases and, therefore, does not completely prohibit small lessees from mining ore. The highest bidder would be granted the lease and the party may not be the most capable of investing and arranging for scientific, eco-friendly and community support mining.

Secondly, in India, unlike many other countries, all minerals beneath the surface are property of the state. Ergo, when the state arranges for the mine's exploitation either itself or through an agency it nominates, the benefits should accrue to all parties: the miner, the state and the locals.

Again, the Bill requires more clarity on how all parties concerned will equally benefit. It calls for an equal amount of the royalty paid to the state to be deposited in a special district development fund meant for the region's advancement. For coal miners, the amount would be 26% of profits from the projects. If the state grants leases, a number of vested interests could gain leases. The issue of recovering money from mining companies for district development funds needs to be debated further. The ministry of corporate affairs is considering a proposal to make corporate social responsibility (CSR) a statutory obligation, which has just been approved by the Cabinet.

Draft Land Acquisition bill

Acquisition of fertile land a major issue in the draft Land Acquisition bill Media reports (CNBC) suggest that a few state governments are objecting to the proposals in the Land Acquisition bill. Based on the debate so far, the main issues in the land acquisition bill have been in regard to acquiring fertile land. Business leaders do not see any issues for projects built on marginal, un-irrigated land.

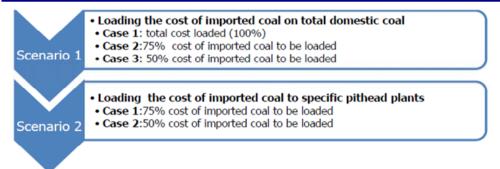
Big problem is solving energy availability...

The coal sector faces the problem of insufficient supply of cheap domestic coal required to fulfill the demand of sectors such as power, cement and steel. As per Deutsche Bank's demand-supply model for coal in India, domestic coal supply is unlikely to support the growth in power capacity additions, and the use of imported coal would lead to high tariffs of INR4.0-4.5/kWh for plants, a level at which buyers may refuse to buy the expensive power.

Hence, the two pooling approaches suggested by the Planning Commission are:

- Pooling imported coal with the total domestic coal (50%, 75%, or 100%), and
- Pooling imported coal with specific pithead plants.

Figure 6: Scenarios of pooling price of domestic and imported coal



Source: Planning Commission of India, Infraline, Deutsche Bank

Most Indian capacity cannot blend more than 10%

The CEA recently issued a notification to generation equipment manufacturers to design equipment in such a way that power plants would be able to handle 35% imported coal. We believe this is an important development because the ash content of domestic coal is different from that of imported coal, and the equipment designed for Indian coal cannot handle more than 10% of blending with imported coal. Hence, most of the plants in the current installed thermal capacity in India could face serious challenges if they are asked to blend more than 10% imported coal due to the shortage of domestic coal.

... and means to allocate captive coal blocks

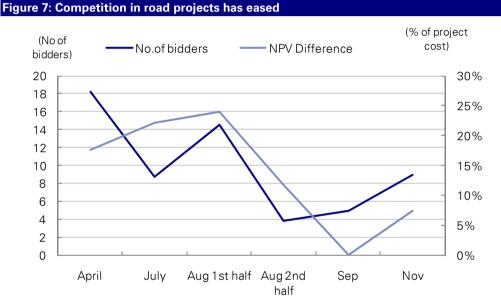
So far the progress in allocating captive coal blocks has been slow as issues surrounding the impact of the mining bill are being debated. But as per the last update that we published on the feedback from companies—details of which are presented again in Appendix A—the corporate world has already given its feedback on the process to be adopted for captive coal blocks.

Competition and currency are key near-term themes

The difference between the top two bids is now in the range of 2-7%, and the number of bidders has also dropped from 25 to less than 10.

Deutsche Bank survey suggests competitive pressures may ease

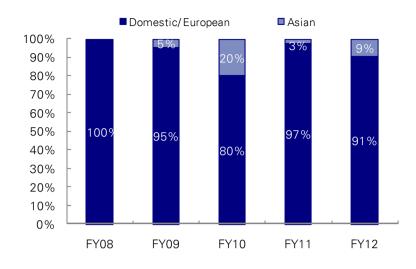
Our interaction with industry leaders suggests that a lot of them see profitability in the road sector improving due to an easing of competition. The difference between the top two bids is now in the range of 2-7%, and the number of bidders has also dropped from 25 to less than 10.



Source: National Highway Authority of India, Company data, Industry, Deutsche Bank

In the Power T&D segment too, we are starting to see competitive pressures easing gradually. Participation by Chinese and Korean competitors is far lower than in FY10 and their market share has dropped to single-digits from the FY10 level of 20%.





Source: Power Grid Corporation of India, Deutsche Bank

A quick recap of what the industry leaders think

The Indian CEO of Areva T&D made a very interesting remark on competition: "there are less suicide bombers who are trying to win a jackpot project, as evident from the latest couple of bids."

According to management, the players who bid aggressively to win orders over the last two years have faced a number of difficulties in execution and hence may have realized that they quoted prices that were too low. As a result, there are fewer 'adventurous' people left in the market.

Management also clarified that intensive competition from Chinese and Korean players is limited mostly to the 765kV segment, while lower segments have been relatively immune. On the pricing trend, it commented that the rate of decline in pricing seems to have slowed significantly compared to the steep fall witnessed over the last two years, and we may see prices flat-lining in the near future.

The management of Ashoka Buildcon also felt that competitive intensity is receding.

It felt fairly confident that cINR 350-400bn of work orders are coming up for awards in the road sector by March 2012. The recent delays in opening bids submitted in late September were only due to minor procedural issues and these have already been sorted out. Six of these bids were opened and the competitive intensity in this round too has visibly eased from that seen in 1QFY12. The average number of bids is in single digits and the difference between the top two players is also well within 10%, with IRRs moving back up to 16%+ in most cases. The differences between bids are primarily due to varied assumptions on traffic growth, inflation and interest rates, and the source of capital-raising.

Senior management of L&T felt that project award activity seems to be showing a nascent pick-up. According to the company:

 Road projects of c4,000km have already been awarded and another 1,300km are likely to be awarded by December. While we may not see the targeted c7,000km being reached in FY12E, we may see c6,000-6,500km being awarded.

The rate of decline in pricing seems to have slowed significantly compared to the steep fall witnessed over the last two years and we may see prices flat-lining in the near future.

cINR 350-400bn of work orders are coming up for awards in the road sector by March 2012 and competition is much more benign than seen in 1QFY12 Approval process seems to have finally kicked off and our interactions suggest that the main hurdle for awards now is the ability to get funds or tie-up fuel

Already seeing large MDO tenders coming up for bids;

Some SEBs, like Maharashtra, are working proactively and are clearing coal import tenders faster to cut fuel sourcing costs.

Lanco management thought that things may not show any improvement in the next one to two years

Deutsche Bank

- In the railway segment, the packages from the extension projects of the Kolkata and Delhi metros are coming up for award. Metro/mono rail projects in tier 2 cities are also showing some traction, with Ludhiana, Ahmedabad, Jaipur, Chandigarh and Chennai coming up for award in the coming six months.
- Dedicated freight corridor packages in FY12E may only be a trickle, but in FY13E a larger number of packages are coming up for award.
- ONGC has outlined an award pipeline of INR 70-80bn. However, the order package sizes are smaller than historical levels.
- The iron ore mining ban in Karnataka has forced steel players to take up more captive mining projects.
- Captive coal block bids are expected to come through in the next 3-6 months, as there
 has been significant progress in the approvals process.

In summary, the approval process seems to have finally kicked off and our interactions suggest that the main hurdle for awards now is the ability to get funds or tie-up fuel.

Senior management of Gupta Coal felt that mine development opportunities are coming in a big way.

While the mining sector continues to face headwinds in terms of clearances to develop new mines, trends like larger MDO opportunities in the sector could be an option to speed up the development of mines. We are already seeing large MDO tenders coming up for bids and the dearth of credible local players in this space is leading to the entry of a larger number of international players as well. Players like EMTA, Glencore, Sancheti and CSIP are large in this space and looking at participating actively.

Also, a fresh look at the large cross-country movement of resources could result in material being available faster for the end-user. For example, users in Maharashtra are sourcing coal from SECL (West Bengal and Jharkhand) instead of sourcing from the Western Coalfields. Similarly, end-users in Jharkhand are sourcing from MCL or CCL instead of SECL, leading to longer lead distances and times and infrastructure bottlenecks.

Thirdly, the clearance process from the mining companies needs to be sped up as even the pre-announced washery expansion plans from CIL (one of which at Madhuban is being executed by Gupta Coal) are still awaiting transfer of land and financial closure. Some SEBs like Maharashtra, in contrast, are working proactively and are clearing coal import tenders faster to cut fuel sourcing costs. The situation of the SEBs may not be exactly as the media makes it out to be.

Management of Lanco does not seem to be very hopeful of major changes.

Lanco management thought that things may not show any improvement in the next one to two years. The current approvals that have come through are for a few projects where it was long overdue, and one should not read too much into the restart of these projects. Meanwhile, new impediments, such as the constraint in evacuating coal, are on the rise. For instance, to evacuate coal from the Vizag port to the plants in the Western region, one can use only Central railway wagons, not those of the South Central railway. With seven states (including two major ones) going for elections in FY12, it remains to be seen whether the government gives priority to social expenditure or infrastructure investments.

JSPL management stated that projects that were stuck have slowly started getting clearance.

Clearly management was a bit more positive on clearances after getting approvals for starting its work.

Valuations and stock performance

Deutsche Bank infra/industrial universe continues to underperform markets

A look at stock performance shows that by and large, barring cement and of-late JSPL, most of the infrastructure/industrial stocks have significantly under-performed the broader markets. Near-term earnings or restructuring newsflow are important triggers.

Figure 9: Stock performance of coverage universe -Absolute performance (%) -Relative performance (%) ------Remark Price 1Yr Y-t-D Y-t-D 3m 6m 3m 6m 1Yr Capital Goods ABB India 593 -27.2 -31.1 -24.5 -25.5 -25.4 -19.9 -6.5 -2.7 Margin disappointments continue Areva T&D India 204 -3.7 -14.0 -30.5 -37.3 -1.8 -2.7 -12.5 -14.5 Results were better than expected BHEL 274 -21.8 -28.7 -36.3 -41.1 -19.9 -17.4 -18.3 -18.4 Cross-holding news flow hurting performance Larsen & Toubro 1,269 -18.0 -20.9 -34.4 -35.9 -16.1 -9.7 -16.4 -13.1 Weak guidance/subsidiary result hurt perf. Siemens India 678 -22.2 -21.1 -9.7 -17.3 -20.3 -9.9 8.3 5.4 Forex losses in sales hurt Suzlon Energy 23 -34.7 -53.4 -49.8 -57.2 -32.9 -42.2 -31.9 -34.5 Rising competitive pressures Thermax 446 -8.9 -23.5 -50.4 -48.8 -7.0 -12.3 -32.4 -26.0 Cement ACC 1,123 10.7 12.3 11.9 5.2 12.5 23.5 29.9 27.9 Poor results but better pricing environment Ambuja Cements 148 8.7 8.2 6.8 3.5 10.5 19.4 24.8 26.2 Poor results but better pricing environment 2,310 6.8 -1.4 14.1 Grasim Industries 29 6.7 8.7 24.7 21.3 Improved VSF and cement outlook India Cements 71 9.3 -15.9 -33.1 -34.5 11.1 -4.7 -15.1 -11.8 Good results but concerns on diversification Shree Cement 2,035 25.0 23.1 92 02 07 20.4 18 2 23.5 Good results and better pricing environment Ultratech Cement 1,130 5.7 10.4 -0.5 4.2 7.6 21.6 17.4 26.9 Poor results but better pricing environment Infra. / Conglomerates Essar Ports 71 -44 0 0.1 -35.9 -40 7 20 -24.7 -22.7 -21.3 Good interim results GVK Power & Infra. 11 -74 8 -73 7 -35.5 -50 5 -33.6 -39.2 -56.8 -51.0 B/s concerns emerging IRB Infra. Dev. 146 -0.7 -4.2 -28.4 -35.3 1.1 7.0 -10.4 -12.5 Inline results-but sector outlook improving -21.3 -10.1 -27.9 Jaiprakash Asso 62 46 -45.9 -41 4 64 -18.7 Poor results but triggers from restructuring Utilities Adani Power 74 -19.1 -33.8 -47.0 -43 6 -17.2 -22.6 -29.0 -20.9 Coal availability a rising concern Jindal Steel & Power 486 34 -23 4 -22 4 -317 53 -12 2 -44 -9.0 Good interims and improved outlook JSW Energy 41 -23.0 -39.9 -61.4 -58.6 -21.1 -28.6 -50.2 -35.9 Coal availability a continued drag Lanco Infratech 12 -23.2 -63 1 -80.8 -80.9 -21.3 -51 9 -62.9 -58.2 Concerns on b/s drag performance NHPC 23 -7.4 -6.3 -20.9 -20.2 -4.4 3.8 -2.9 2.5 NTPC 159 -6.8 -5.2 -10.4 -4.9 -21 0 60 76 1.7 Physical performance lags the sector Tata Power 92 -12.0 -22.6 -27.7 -32.6 -10.2 -11.3 -9.7 -9.9 -Mundra UMPP project concerns Power Grid Corp. 96 -4.2 -1.5 -1.0 -2.8 -23 9.7 17.0 20.0 - A steady performer Coal India 308 -17.9 -18.4 -1.7 -2.2 -16.0 -7.2 16.3 20.6 -Emerging risk from surplus cash deployment Market **BSE Sensex** 15,844 -1.9 -11.2 -18.0 -22.7 0.0 0.0 0.0 0.0

Source: Deutsche Bank Bloomberg Finance LP, Prices as of 25-Nov-1

Consensus estimates have moved down across companies

Figure 10: Larsen and Toubro consensus EPS

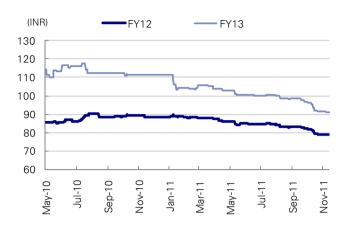




Figure 11: Jindal and Steel Power consensus EPS

Source: Bloomberg Finance LP, Deutsche Bank

Source: Bloomberg Finance LP, Deutsche Bank

Figure 12: Thermax consensus EPS

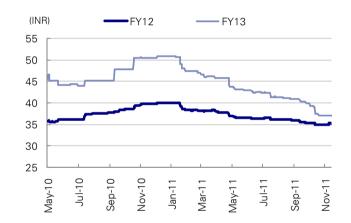


Figure 13: IRB consensus EPS



Source: Bloomberg Finance LP, Deutsche Bank

Source: Bloomberg Finance LP, Deutsche Bank

Sensitivity of earnings to forex loans

The Indian Rupee (INR) depreciated by ~9% in Q2FY12 from Jun-11 level, and a further ~5% from Sep-11 level. Assuming INR remains at current levels, the impact on companies' P&L is presented in Figure 14.

Company	Details	Amount (INR m)	Maturity	Interest rate	Conversion price	Redemption premium	Loss in Q2FY12	Probable loss Remarks in Q3FY12 at current FX rate
L&T	3.5% Foreign Currency Convertible Bonds	8,919	2014	3.50%	NA	NA		As per management about 75% of standalone debt (INF 71.61bn) is forex- denominated
	Others	41,081	NA	NA				
	Total	50,000					1,080	652
Suzlon	FCCB - June 2012 - Old	10,459	Jun-12	0.0%	97.26	145.23%		
	FCCB - October 2012 - Old	6,009	Oct-12	0.0%	97.26	144.88%		
	FCCB - June 2012 - Exchange	1,762	Jun-12	7.5%	76.68	150.24%		
	FCCB - October 2012 –Exchange	1,030	Oct-12	7.5%	76.68	157.72%		
	FCCB - July 2014 – New Issuance	4,455	Jul-14	0.0%	90.38	134.20%		
	FCCB - April 2016 - New Issuance	8,663	Apr-16	5.0%	54.01	108.70%		
	Total	32,378					5,000	3,019
Adani Power	Foreign Currency	26,522	NA	NA			630	1,768
	Loan from Banks							,
JSPL	External Commercial Borrowing from Banks	20,878	NA	NA			1,000	604
NTPC	Within 1 year	9,253	NA	NA				
	2-3 years	19,496	NA	NA				
	4-5 years	25,098	NA	NA				
	6-10 years	35,331	NA	NA				
	Beyond 10 years	17,732	NA	NA				
	Total	106,910	NA	NA				
Tata Davisa		F 000						L Statistic Inc.
Tata Power	Buyers' Credit (in foreign currency)	5,030						Likely to be capitalized with fixed assets
	8.50% Euro Notes (2017)	2,661	2017	8.50%				
	1.75% Foreign Currency Convertible Bonds (2014)	13,404	2014	1.75%	145.61	109.47%		
	Total	21,095					6,390	3,857

Source: Company data, Deutsche Bank

Company	Details	Amount (INR m)	Maturity	Interest rate	Conversion price	Redemption premium	Loss in Q2FY12	Probable loss Remarks in Q3FY12 at current FX rate
Lanco Infratech	Foreign Currency Loans - From Financial Institutions	388	NA	NA				
	Foreign Currency Loans - From Banks	35,836	NA	NA				
	Total	36,224	NA	NA			2,878	1,738
GVK	Foreign Currency Loans - From Banks	4,291	NA	NA	NA	NA		
Jaiprakash Associates	FCCB-II	15	Mar-13	0.50%	74.50	NA		
	FCCB-III	17,547	Sep-12	0.0%	165.17	NA		
	ECB from Banks [USD]	10,536	NA	NA				
	ECB from Banks [GBP]	2,235	NA	NA				
	ECB from Banks [CAD]	2,309	NA	NA				
		32,641						

Source: Company data, Deutsche Bank

Worst hit could be highly leveraged companies such as Suzlon, JPA and Lanco. The impact on L&T could be to the extent of INR 650m and that in JSPL could be INR 600m.

Top picks

In this environment of large pending project awards and reducing competitive intensity, we believe companies with balance sheet strength and execution capabilities are poised to benefit disproportionately. Among the companies under coverage, L&T and IRB seem to be better placed to receive a disproportionate share of the upcoming project awards.

Larsen and Toubro

- After a 36% stock correction year-to-date following rising global risk perceptions, L&T's core E&C business is trading at 13x FY13 (less than during the Lehman crisis) on our estimates, which are 16% below consensus.
- Rising industry utilisation closer to peaks, even with sluggish near-term demand, could drive up corporate capex sooner rather than later. With its strong balance sheet, cash flow generation and diverse exposure to sectors such as metals, fertilizers, hydrocarbon and exports, L&T could be one of the biggest beneficiaries of the revival in the capex cycle, when smaller competitors grapple with issues such as stressed cash flow, high leverage and limited net worth and technological capabilities.
- We maintain our 12-month target price of INR 1,850. (see Figure 15)
- Key risks stem from poor order inflows, margin pressure resulting in quarterly earnings disappointment.

Segments	Estimates of PAT (INRbn) (II	BV Valuation measure NRbn)	Market cap (INRbn)	Value of Share (INR)	Remarks
Long cycle engineering business	34.2	16x exit P/E 1yr forward	548	904	In line with peers such as BHEL
Short cycle non E&C business	12.0	20x exit P/E 1yr forward	240	388	In line with peers such as BHEL
Software company	4.2	15x exit P/E 1yr forward	62	115	In line with mid-cap peers
Finance Company	6.2	30 2.5x P/B for FY11	62	102	Adjusted for L&T's stake of 82.64%
L&T IDPL	0.0	44 1.75x P/B for FY11	77	127	L&T's effective share of NPV
Add: Investment in Infrastructure and other subsidiaries		92 Price/Book of 1x	92	152	Valued at Book Value
Cash		36 FY11	36	60	
Equity Value			1,118	1,845	
Less Conglomerate Discount		0%	-	-	
Target price of L&T		Rounded off	1,118	1,850	.Rounded-off

Source: Deutsche Bank

Jindal Steel and Power

We rate Jindal Steel & Power a Buy with for the following reasons:

- Cheap fuel is increasingly scarce in India and we are seeing inflationary pressures from imported fuel. JSPL is well placed to capitalize on these trends given its ~1.2bn tonnes of low-cost captive coal assets.
- We also find JSPL among the best-placed to capitalize on the reforms carried out by six large power-consuming states. Note that all-India power demand growth has risen by 7-8% over the last three quarters. Spot tariffs are on the rise. With most of its peers facing rising fuel costs, we see JSPL's integrated energy model as a significant direct beneficiary of these trends.
- Our estimates forecast RoE to rise from 26% in FY12E to 28.6% in FY14E, with net debt to equity below 100%, much lower than its Indian peers.
- We also estimate that the company's power generation costs are in the bottom quartile
 of cost curves in India, and this should come down further as the company is writing off
 fixed costs at a much faster rate than its peers. This reduces the cyclicality of earnings.

Company-specific risks include a slowdown in project implementation, thereby missing the capacity addition targets, a reduction in utilization levels, a delay in the development of captive mines and obtaining fuel linkages, and regulatory intervention in the form of capping merchant tariffs.

Thermax

We rate the stock as Buy with a target price of INR550, largely based on valuations:

- With a sharp 49% fall in the stock price year to date and 26% underperformance relative to the Sensex during the same period, the stock fully factors in a slowdown in the investment cycle, especially in power capex, and the risk of a significant drop in order inflows, order cancellations and rising working capital, in our view.
- A recent increase in manufacturing capex is driving up Thermax's product business (c.50% sales).
- While the projects business (remaining 50% of sales) should recover with the upturn in the power capex cycle over the next 12-18 months, strong risk management has ensured that the company has maintained a strong balance sheet, a high RoE and low net working capital and sales, making it one of those best positioned for an upturn, in our view.

- A likely fall in commodity prices due to global macroeconomic headwinds could be a positive for the stock.
- We forecast a CAGR of 8% in sales (FY11-FY14), driving a net earnings CAGR of 7% (FY11-14E). Our estimates are 3%, 18% and 13% below consensus for FY12, FY13 and FY14, respectively. We believe our estimates factor in the stress in the projects business, and the stock has an attractive P/E of 14x FY13E.

IRB

We rate IRB Infra a Buy:

- After a 35% stock correction year-to-date, we find that valuations are factoring in virtually zero value for the E&C business (26% of SoTP) and no attributable value for the latest road wins.
- With NHAI likely to make 63% more road awards in FY12E and competition withering due to poor operating cash flows or net worth constraints, IRB seems to be one of the few players (five out of 30-odd construction companies) that appears well positioned to benefit from this upturn in our view.
- Our SOTP-based 12-month target price is INR 192, which values the toll business on an NPV basis (cost of equity of 12.5%) and the EPC business at 6x FY12E exit EV/EBITDA.
- Slower execution and any further aggressive bids to win projects remain key risks

Coal India

Our Buy on Coal India (CIL) is based on the following:

- After a c18% stock correction over the last three months on account of various negative news flow about production constraints, wage negotiation and use of surplus cash balance, the stock is now trading at P/E of 13x FY12E and 12x FY13E.
- CIL has so far demonstrated a sustained high return on net operating assets (RNOA) relative to global and regional peers, as high advances from customers have kept net operating assets negative since FY08.
- With indications from the Environment Ministry that it may relax, to some extent, its tough stance on clearances for coal mining projects, there is a chance of a production ramp-up at some of the existing mines.
- Our target price of INR 430/sh is based on an average of the values derived using life-ofmine DCF and P/E of 18x FY12E.
- Key downside risks are lower-than-expected production growth due to delays in environmental clearance, higher-than-expected operating costs and the profit-sharing provisions in the proposed new 'Mining Bill' leading to earnings dips (depending on when and how the act is implemented).

Appendix A – Captive coal block auction

The Ministry of Coal (MoC) and the government of India, in consultation with the Central Mine Planning and Design Institute Ltd. (CMPDIL) have released Notice Inviting Offers (NIO) for four options on draft guidelines pertaining to inviting offers for captive mining of coal for permitted end uses (i.e., steel, power, and cement sectors). The bid(s) are invited for the development, operation, and post-operation activities of notified captive coal mining block(s). Figure 16 presents the highlights of the four options.

Options	Details
1.	Upfront payment is the sole criterion for bid evaluation
2.	Extractable Reserve Linked Payment is the sole criterion for bid evaluation
3.	Capacity(ies) & Status of the end use plant(s) and upfront payment shall be given weightage in the ratio of 20:80 and overall score shall be basis of final ratings of the bids
4.	Capacity (ies) & Status of the end use plant(s) and Extractable Reserve Linked Payment (ERLP) shall be given weightage in the ratio of 20:80 and overall score shall be basis of final ratings of the bids.

Source: Deutsche Bank

This has enthused the private sector, which before the appointed date had submitted recommendations such as the following.

- Reduce the upfront payment and link the payment to production
- Allocate those mines where at least in principle environment clearances are available

The entire process has to be watched. Inputs from various state governments have yet to be obtained (coal comes under the purview of the state government). Figure 17 provides some of the feedback from industry players

privided Joy Energy - Space on the base of final strange with weightages of Disk for Revenue starting, 15% for Extractable Reserve Linked Payment (ENUP, 20% for the status of the End use glant (EUP) and 10% for copany of the EUP. Stree Content - Condition of upforts payment in proton see and fixed price aging in option two and four is not investor friendl as the vould result in heavy financial burden on the successful block, even belows the out and subject to the agreement option the term miss. Biology and 10% for copany of the EUP. Unified vs. Tate Power- Bioles should heave an option of blocking for coal blocks on the basis of the total capacity of their and use plent (EUP). Does not predice only upforts payment. Unified vs. Event approach proposes a common blocking process only after the coal blocks have been earning and for coals esclor. Adam Power - Searcet book for all end use sectors, namely power, steel and dement, sa the economic value of coal is different for each sector. Level of reach sector. The interd carry on whether the coal blocks being offered have gone through either regional (promotional exploration or serri detailed exploration and read) Geoclocic Report Level of reach sector. Extre of law on whether the coal blocks abeing offered have gone through either regional (promotional exploration or serri detailed exploration and read) Geoclocic Report Little clamy on whether the coal blocks being offered have gone through either regional (promotional exploration or serri detailed exploration and read) Geoclocic Report Little clamy on whether the coal blocks abeing offered have gone through either regional (promotional explorat			on proposal of coal block auctions
 privided JCVE EngrgScore on the basis of that rankes with weightage of SEV, for Res-use sharing, 15%, for Estructuble Reserve Linked Payment (ERR), 20%, for the solute of the data optime transport of the ranke optime transport of the payment of reading of the ranke optime transport of the terms and these and field prices tag in option two and four is not investor friendling the invest. Bidders should be altived to make payment none the mee shift is commonated operations at the invest. Bidders should be altived to make payment none the mee shift is commonated operations. Urrified w. Urrified w. Carrent approach proposes a common bidding process of all permitted end-use sectors (Power, Cement and Stells). Indebul Brower - The ministry buddu duretista the trading process only after the coal biodick the coal resources should be deviced to the prover sector. Level of readiness of	Sr. No.	Issue	Observations and suggestions of developers
 Device interger - Source on the basis of heat anging with weaking all on the intermediate standing. The intermediate intermediate intermediate intermediate standing in the intermediate in	Ι.		
 as the would result in heavy finincial burdler on the successful block, even before the commencement of comminical operations at the minice. Blocks should be allowed to make payment conce the minice starts its commencement and steaul. United vs. Segment even - Blockers should be apyment. United vs. Segment even - Blockers should be apyment. United vs. Segment even - Blockers should be apyment. United vs. Segment even - Blockers should have an option of blocking process for all parmitted and use sectors. (Prover, Camera and Steau). Indibulab Power. The ministry should indeptoes should payment and the holes in blocks have been earnaried for each sector. Level of an exonor of camera. The neinstry should meeting and steau and the prove steau and exolution and ready Geological Report. Level of an exonor of cameral, the camerating and flags in the socie should be the prove steau and the socie should be allowed to be prove steau and exolution and ready Geological Report. Level payment. Le		provided	•
Unified vs. Deem not prefer only updront payment. Segmented Competitive Didging Current approach progoses are common bidding process for all parmitted end-use sectors (Power, Cement and Skeel). Indiabulis Power - The ministry should undertake the bidding process only after the coal blocks have been earmarked for each sector. Indiabulis Power - Separate bids for all end use actors, namely power, steel and osment, as the economic value of coal is different for each sector. Level of readiness of each sector. The ministry should undertake the bidding process only after the coal blocks have been earmarked for each sector. Level of readiness of each sector. The diarity on whether the coal blocks being offered have gone through either regional /promotional exploration or semi detailed exploration or datafied exploration and ready Gao/ogical Report. Level of readiness of each sector. Little clarity on whether the coal blocks being offered have gone through either regional /promotional exploration or semi detailed exploration or datafied exploration and ready Gao/ogical Report. Line darity on metaning safeguards for a level playing field among the and users. An objective proceed block sector the seeffeld EUP on a cost plusts basis because sector to quice the provention. Bride discovery process Suggests biddless meet to have either an operating or under-construction end-use project. Siguestion on ward of block to a single Power - The bidding conducted through the elucition process will bring in more transparency and take away the possibilitie of orouptin.			
Segmented Competitive Didding Indiabate Power. The ministry should undertake the bidding process only after the coal blocks have been earmarked for each sector. Adam Power - Separate bids for all and use sectors, namely power, steel and cerrent, as the economic value of coal is different for each sector. Adam Power - Separate bids for all and use sectors, namely power, steel and cerrent, as the economic value of coal is different for each sector. Level of readiness of readiness of coal blocks Lifte claim on whether the coal blocks being offered have gone through either regional /promotional exploration or semi detailed exploration or detailed exploration and ready Geological Report. Level playing Linted claity on ensuing safeguards for a level playing field among the end users. An objective price discovery mechanism also service to be missing. Adam Power - The company is also of the view that the bidden should not be allowed to bid faale of power from the specified EUP on a cost plus basis because such bidders are likely to quote a high premium, notwithstanding its impact on the tariff pad by the consumers. End use platit Suggests bidders need to have either an operating or under construction end-use project. Jayk Demry - The company has asserted that allocating a higher weightage to status than capacity will ensure not only a level playin field but also that existing plants without captive ceal blocks get preference over proposed projects. Process Note basis are allowed for multiple coal blocks, award seems to be restricted to m/y one block price blocks have existent on on manipublicto. Note distore			
 Competitive India as an explored - the ministry should undertake the biolong process only after the Code blocks have been earmanced for each sector. The ministry should, therefore, undertake the bidding process only after the code isocurses should be devoted to the power - Separate bidds for all end use sectors, namely power, steel and cement, as the economic value of coal is different for each sector. The ministry should, therefore, undertake the bidding process only after the coal blocks have been earmanked for each sector. The ministry should, therefore, undertake the bidding process only after the coal blocks have been earmanked for each sector. The ministry should, therefore, undertake the bidding process only after the coal blocks have been earmanked for each sector. The ministry should, therefore, undertake the bidding process only after the coal blocks have been earmanked for each sector. The ministry should applicate the bidder should not be allowed to bid if sale of power from the spacified EUP on a cost plus basis because such bidders are lavel playing field among the end users. An objective price discovery mechanism also areas to be missing. Adari Power - The company has asserted that allocating a higher weightage to status than capacity will ensure not only a level playing field among the end users. An objective price discovery mechanism also statuses bidders are allowed for multiple coal blocks are to allowed the universe. Price discovery IN explicit mention of the price discovery process to be adopted. Price discovery IN explicit mention of the price discovery process to be adopted. Price discovery - The company has asserted that allocating a higher weightage to status than capacity will ensure not only a level playing field and prove adopted. Price discovery - The bidding conducted through the eduction process will bring in more transparency and take away the possibilitie of corruption and manipulation. Re	2.		Current approach proposes a common bidding process for all permitted end-use sectors (Power, Cement and Steel).
 exch sector. The ministry should, therefore, undertake the bidding process only after the coal blocks have been earmarked for each sector. Level of reachiness of coal blocks Level playing Limited clarity on ensuring safeguards for a level playing field among the end users. An objective price discovery mechanism also seems to be missing. Adapti Power - The company is also of the view that the bidders should not be allowed to bid if sale of power from the specified EUP on a cost plus basis because such bidders are likely to quote a high premium, notwithstanding its limpact on the tariff plaid by the consumers. End use plant Suggests bidders need to have either an operating or under construction end-use project. JSW Energy - The company has asserted that allocating a higher weightage to status than capacity will ensure not only a level playing field among the end users. Price discovery in the specified EUP in a sector status of the view of the eleven process will bring in more transparency and take away the possibilitie of comption and manipulation. Price discovery in the bidder should be allowed to lid with epidet bidder should be allowed to bid is eleven bidder. Adrai power - Nutlipie load should be allowed to lid with requirement for all coal blocks being bid for exceeds the total to a single antity is promoter. Adrai power - Nutlipie load should be allowed thill write requirement for all coal blocks being bid for exceeds the total bidder should be allowed to with requirement for all coal blocks being bid for exceeds the total bidder should be allowed to withing no more than three blocks. Price discovery is a sole of the bidder and the sprometers. Tate Power - The company has also recommended that an H1 bidder should be allowed to participate in the biddiar into an oble fore within the bidder should be allowed to enving the bidder f		Competitive	Indiabulls Power - The ministry should undertake the bidding process only after the coal blocks have been earmarked for each sector. India is a net exporter of cement, the cement sector is unlikely to face any shortages, and, therefore, 90% of the coal resources should be devoted to the power sector.
 readines of exploration or detailed exploration and read/ Geological Report exploration or detailed exploration and read/ Geological Report Level playing field Level playing field Adain Power - The company is also of the view that the bidders should not be allowed to bid if sale of power from the specified EUP on a cost plus basis because such bidders are likely to quote a high premium, notwithstanding its impact on the tariff paid by the consumers. End-use plant Suggests bidders need to have either an operating or under-construction end-use project. SW Energy - The company has asserted that allocating a higher weightage to status than capacity will ensure not only a level playing field at the statisting plants without captive coal blocks get preference over proposed projects. Price discovery no explicit mention of the price discovery process to be adopted. Indiabulis Power - The bidding conducted through the e-auction process will bring in more transparency and take away the possibilitie of corruption and manipulation. Restriction on with of the bidder and its promoters. The Power - The company has also recommended that an H1 bidder should be allocated more than the allowable number of coal blocks is a single and to firm ore than one block, inclaining its priority on allock. This is with regard to the existing clause, according to which an eligible bidder for two or more block shall be allocated for two or more block shall be allocated that the bidder should be allocated more than the bidder for woor or more block shall be allocated. Restriction on sale/transfer of coal, but silent on sale or transfer of stake. Suplates conditions on sale/transfer of coal, but silent on sale or transfer of stake. Restriction on sale/transfer should be provided with complete ownership of the coal produced from the allocated block and fo			each sector. The ministry should, therefore, undertake the bidding process only after the coal blocks have been earmarked for each
field Admi Power – The company is also of the view that the bidders should not be allowed to bid if sale of power from the specified EUP on a cost plus basis because such bidders are likely to quote a high premium, notwithstanding its impact on the tariff paid by the consumers. End-use plant Suggests bidders aread to have either an operating or under-construction end-use project. JSW Energy – The company has asserted that allocating a higher weightage to status than capacity will ensure not only a level playin field, but also that existing plants without captive coal blocks get preference over proposed projects. Price discovery process No explicit mention of the price discovery process to be adopted. Indiabults Power – The bidding conducted through the e-auction process will bring in more transparency and take away the possibilitie of corruption and manipulation. Restriction on award of block to for moltpile coal blocks, award seems to be restricted to only one block per bidder. Adami power – The company has also recommended that an H1 bidder should be allocated more than the allowable number of coal blocks, in case there are no takers for the extra block. This is with regard to the existing clause, according to which thas indicated the highest priority. The company, in addition, mentioned that the bidder should be restricted to winning no more than three blocks. Restriction on sale of the process of the case of the credentials of its promoters. Net worth call end with the block for which it has indicated the highest priority. The company, in addition, mentioned that the bidder should be allowed to participate in the bidding process on the basis of the credentials of it	3.	readiness of	
 on a cost plus basis because such bidders are likely to quote a high premium, notwithstanding its impact on the tariff paid by the consumers. End-use plant stipulation End-use plant stipulation JSW Energy – The company has asserted that allocating a higher weightage to status than capacity will ensure not only a level playin field, but also that existing plants without captive coal blocks get preferece over proposed projects. No explicit mention of the price discovery process to be adopted. Indiabula Power – The bidding conducted through the e-auction process will bring in more transparency and take away the possibilitie of corruption and mainpulation. Restriction on award of block per bidder. Adani power – Multiple bids should be allowed to ill cumulative net worth requirement for all coal blocks being bid for exceeds the total net worth of the bidder and its promoters. Tata Power – The company has also recommended that an H1 bidder should be allocated more than the allowable number of coal blocks, indicating its priority for allotment. However, the successful H1 bidder for two or more blocks shall be eligible bidder can bid for more than one block, indicating its priority. The company, in addition, mentioned that the bidder should be allowed to participate in the bidding process on the basis of the credentials of its promoters. Net worth calculation Net worth calculation and prover – Successful bidder should be allowed to participate in the bidding process on the basis of the credentials of its promoters. Met worth calculation base of the credentials of its promoters. Met worth calculation and prover – Successful bidder should be allowed to participate in the bidding not be allowed to use coal for purposes of the than specific plant for which thas induceded than specific plant for which thas ishoth preguta specify in its guidelines. However, the bidder sho	1.	, , ,	
 stipulation JSW Energy – The company has asserted that allocating a higher weightage to status than capacity will ensure not only a level playin field, but also that existing plants without captive coal blocks get preference over proposed projects. Price discovery process No explicit mention of the price discovery process to be adopted. Indiabulls Power – The bidding conducted through the e-auction process will bring in more transparency and take away the possibilitie of corruption and manipulation. Restriction on award of block daria and an inputation. While bids are allowed for multiple coal blocks, award seems to be restricted to only one block per bidder. Adain power – Multiple bids should be allowed till cumulative net worth requirement for all coal blocks being bid for exceeds the total net worth of the bidder and its promoters. Tata Power – The company has also recommended that an H1 bidder should be allocated more than the allowable number of coal blocks, in case there are no takers for the extra block. This is with regard to the existing clause, according to which an tais indicated the highest priority. The company, in addition, mentioned that the bidder should be restricted to winning no more than three blocks. Restriction on Stipulates conditions on sale/transfer of coal, but silent on sale or transfer of stake. Step and the equilibric transfer of coal to the tais bidding process on the basis of the credentials of its promoters. Met worth calculation Use or allower to see to participate in the field bidding process on the basis of the credentials of its promoters. Met worth calculation Use or allower to use coal for purposes of the art block or process of the allowed to participate in the bidding process on the basis of the credentials of its promoters. Met worth calculation Use or allower - Tata			
 Swe there is the source of the extent and called the source over proposed projects. Price discovery process No explicit mention of the price discovery process to be adopted. Indiabulis Power – The bidding conducted through the e-auction process will bring in more transparency and take away the possibilitie of corruption and manipulation. Restriction on ward of block and prover – Multiple coal blocks, award seems to be restricted to only one block per bidder. Adain power – Multiple coal blocks, award seems to be restricted to only one block being bid for exceeds the total net worth of the bidder and its promoters. Tata Power – The company has also recommended that an H1 bidder should be allocated more than the allowable number of coal blocks, in case there are no takers for the extra block. This is with regard to the existing clause, according to which an eligible bidder should be allocated the highest priority. The company, in addition, mentioned that the bidder should be restricted to winning on more than three blocks. Restriction on sele of caulty in the block for which it has indicated the highest priority. The company, in addition, mentioned that the bidder should be restricted to winning on more than three blocks. Restriction on sele of rate Power – Tata Power has requested that the ministry specify in its guidelines that a JV company will be allowed to participate in the bidding process on the basis of the credentials of its promoters. Net worth calculation Use of coal for plant other than for the specific plant for which the block would be allocated for whe allowed to use coal other than specified in the guidelines. However, the bidder should be permitted to store any excess production to meet unexpected coal shortages. Net worth calculation Use of coal for plant other than for purposes other than specified in the guidelines. However, the	5.		Suggests bidders need to have either an operating or under-construction end-use project.
 process Indiabulls Power – The bidding conducted through the e-auction process will bring in more transparency and take away the possibilitie of corruption and manipulation. Restriction on award of block to a single bidder Adain power – Multiple bids should be allowed till cumulative net worth requirement for all coal blocks being bid for exceeds the total net worth of the bidder and its promoters. Tata Power – The company has also recommended that an H1 bidder should be allocated more than the allowable number of coal blocks, in case there are no takers for the extra block. This is with regard to the existing clause, according to which an eligible bidder can bid for more than one block, indicating its priority for allotment. However, the successful H1 bidder for two or more blocks shall be eligible for the block for which it has indicated the highest priority. The company, in addition, mentioned that the bidder should be restricted to winning no more than three blocks. Restriction on sale/transfer of coal, but silent on sale or transfer of stake. Stipulates conditions on sale/transfer of coal, but silent on sale or transfer of stake. Mentions net worth equal to "Reserve Price Tag" + 15% of the cost of its end use plant the block would be allocated block and should be removing of the coal produced from the allocated block and should not be allowed to use coal for purposes other than specified in the guidelines. However, the bidder should be allocated block and should not be allocated block and should be provided with complete ownership of the coal produced from the allocated block and should not be allocated block and should be removed. The company emphasized that most of the coal blocks available Vet worth the bidder will be given preference in award at the price quoted by the H1 bidder. Net worth de allocated to use coal for purposes other than specified in the guidelines. However,		stipulation	JSW Energy – The company has asserted that allocating a higher weightage to status than capacity will ensure not only a level playing field, but also that existing plants without captive coal blocks get preference over proposed projects.
 Indiabuls Power – The bidding conducted through the e-auction process will bring in more transparency and take away the possibility of corruption and manipulation. Restriction on award of block are allowed for multiple coal blocks, award seems to be restricted to only one block per bidder. Adani power – Multiple bids should be allowed till cumulative net worth requirement for all coal blocks being bid for exceeds the total net worth of the bidder and its promoters. Tate Power – The company has also recommended that an H1 bidder should be allocated more than the allowable number of coal blocks, in case there are no takers for the extra block. This is with regard to the existing clause, according to which an eligible bidder can bid for more than one block, indicating its priority for allotment. However, the successful H1 bidder for two or more blocks shall be eligible for the block for which thas indicated the highest priority. The company, in addition, mentioned that the bidder should be restricted to winning no more than three blocks. Restriction on sale of equity in the legal entity which holds the mining lease Tate Power – Tata Power has requested that the ministry specify in its guidelines that a JV company will be allowed to participate in the bidding process on the basis of the credentials of its promoters. Net worth calculation Use of coal for Does not seem to permit the use of coal other than for the specific plant for which the block would be allocated block and for which block is allotter than for which block would not allowed to permitted to store any excess production to meet unexpected coal shorages. Preference in Allotter than for which block is alloted end for uncose other than specific plant for which the block would be permitted to store any excess production to meet unexpected coal shorages. Preference in Allotter than for which block is an end-use proje	б.	,	No explicit mention of the price discovery process to be adopted.
award of block to a single bidder Adani power – Multiple bids should be allowed till cumulative net worth requirement for all coal blocks being bid for exceeds the total net worth of the bidder and its promoters. Tate Power – The company has also recommended that an H1 bidder should be allocated more than the allowable number of coal bidder Stocks, in case there are no takers for the extra block. This is with regard to the existing clause, according to which an eligible bidder can bid for more than one block, indicating its priority for allotment. However, the successful H1 bidder for two or more blocks shall b eligible for the block for which it has indicated the highest priority. The company, in addition, mentioned that the bidder should be restricted to winning no more than three blocks. Stipulates conditions on sale/transfer of coal, but silent on sale or transfer of stake. Stipulates conditions on sale/transfer of coal, but silent on sale or transfer of stake. Whet holds the mining lease Tata Power – Tata Power has requested that the ministry specify in its guidelines that a JV company will be allowed to participate in the bidding process on the basis of the credentials of its promoters. Net worth calculation Does not seem to permit the use of coal other than for which block is allotted Use of coal for plant other than for which block is allotted Does not seem to permit the use of coal other than specified in the guidelines. However, the bidder should be permitted to store any excess production to meet unexpected coal shortages. 1. Preference in Allotment of Coal Blocks If a bidder has an end-use proje		process	Indiabulls Power – The bidding conducted through the e-auction process will bring in more transparency and take away the possibilities of corruption and manipulation.
to a single Addit power – Nutripie bids should be allowed til cumulative net worth requirement for all coal blocks being bid for exceeds the total net worth of the bidder and its promoters. Tata Power – The company has also recommended that an H1 bidder should be allocated more than the allowable number of coal blocks, in case there are no takers for the extra block. This is with regard to the existing clause, according to which an eligible bidder can bid for more than one block, indicating its priority for allotment. However, the successful H1 bidder for two or more blocks shall be eligible for the block for which it has indicated the highest priority. The company, in addition, mentioned that the bidder should be restricted to winning no more than three blocks. Restriction on sale of equity in the legal entity which holds the mining lease Stipulates conditions on sale/transfer of coal, but silent on sale or transfer of stake. Net worth calculation Mentions net worth equal to "Reserve Price Tag" + 15% of the cost of its end use plant O. Use of coal for plant other than for the use of coal other than specific plant for which the block would be allocated block and for which block is allowed to use coal for purposes other than specified in the guidelines. However, the bidder should be permitted to store any excess production to meet unexpected coal shortages. 1. Preference in Allotment of Coal Blocks If a bidder has an end-use project which is in the same state as the mine and his bid is within 5% of the H1 ranked bidder, the concerned bidder will be given preference in award at the price quoted by the H1 bidder. Adail power – This criterion is unreasonable and should be removed. The company emp	7.		While bids are allowed for multiple coal blocks, award seems to be restricted to only one block per bidder.
Tate Power – The company has also recommended that an H1 bidder should be allocated more than the allowable number of coal blocks, in case there are no takers for the extra block. This is with regard to the existing clause, according to which an eligible bidder can bid for more than one block, indicating its priority for allotment. However, the successful H1 bidder for two or more blocks shall be eligible for the block for which it has indicated the highest priority. The company, in addition, mentioned that the bidder should be restricted to winning no more than three blocks. Stipulates conditions on sale/transfer of coal, but silent on sale or transfer of stake. Stipulates conditions on sale/transfer of coal, but silent on sale or transfer of stake. Stipulates conditions on sale/transfer of coal but silent on sale or transfer of stake. Tate Power – Tata Power has requested that the ministry specify in its guidelines that a JV company will be allowed to participate in the bidding process on the basis of the credentials of its promoters. Net worth Mentions net worth equal to "Reserve Price Tag" + 15% of the cost of its end use plant Ou Use of coal for plant other than for the specific plant for which the block would be allocated Shree Cement - Successful bidder should be provided with complete ownership of the coal produced from the allocated block and should not be allowed to use coal for purposes other than specified in the guidelines. However, the bidder should be permitted to should not be allowed to use coal for purposes other than specified in the guidelines. However, the bidder should be permitted to should not be allowed to use coal for purposes other than specified in the guidelines. However, the bidder should be permitted to should not be allowed to use coal fo		to a single	Adani power – Multiple bids should be allowed till cumulative net worth requirement for all coal blocks being bid for exceeds the total net worth of the bidder and its promoters.
 sale of equity in the legal entity which holds the mining lease Tate Power – Tata Power has requested that the ministry specify in its guidelines that a JV company will be allowed to participate in the bidding process on the basis of the credentials of its promoters. Net worth calculation Use of coal for plant other than for which block is allotted Does not seem to permit the use of coal other than for the specific plant for which block is allotted Preference in Allotment of Coal Blocks If a bidder has an end-use project which is in the same state as the mine and his bid is within 5% of the H1 ranked bidder, the concerned bidder will be given preference in award at the price quoted by the H1 bidder. Adam Power – This criterion is unreasonable and should be removed. The company emphasized that most of the coal blocks available for competitive bidding will be located in Chhattisgarh and Orissa and EUPs in these states are already facing issues related to land acquisition, water availability, environmental pollution and forest diversion. 			blocks, in case there are no takers for the extra block. This is with regard to the existing clause, according to which an eligible bidder can bid for more than one block, indicating its priority for allotment. However, the successful H1 bidder for two or more blocks shall be eligible for the block for which it has indicated the highest priority. The company, in addition, mentioned that the bidder should be
 the bidding process on the basis of the credentials of its promoters. Net worth calculation Use of coal for plant other than for which block is allotted Does not seem to permit the use of coal other than for the specific plant for which the block would be allocated block and should not be allowed to use coal for purposes other than specified in the guidelines. However, the bidder should be permitted to store any excess production to meet unexpected coal shortages. Preference in Allotment of Coal Blocks If a bidder has an end-use project which is in the same state as the mine and his bid is within 5% of the H1 ranked bidder, the concerned bidder will be given preference in award at the price quoted by the H1 bidder. Adani Power – This criterion is unreasonable and should be removed. The company emphasized that most of the coal blocks available for competitive bidding will be located in Chhattisgarh and Orissa and EUPs in these states are already facing issues related to land acquisition, water availability, environmental pollution and forest diversion. 	3.	sale of equity in the legal entity which holds the	Stipulates conditions on sale/transfer of coal, but silent on sale or transfer of stake.
 calculation Use of coal for plant other than for which block is allotted Does not seem to permit the use of coal other than for the specific plant for which the block would be allocated Shree Cement - Successful bidder should be provided with complete ownership of the coal produced from the allocated block and should not be allowed to use coal for purposes other than specified in the guidelines. However, the bidder should be permitted to store any excess production to meet unexpected coal shortages. Preference in Allotment of Coal Blocks If a bidder has an end-use project which is in the same state as the mine and his bid is within 5% of the H1 ranked bidder, the concerned bidder will be given preference in award at the price quoted by the H1 bidder. Adani Power – This criterion is unreasonable and should be removed. The company emphasized that most of the coal blocks available for competitive bidding will be located in Chhattisgarh and Orissa and EUPs in these states are already facing issues related to land acquisition, water availability, environmental pollution and forest diversion. Shree cement – The company stated that no preferential treatment should be given to bidders whose end use plants are located in the 			
 plant other than for which block is allotted Shree Cement - Successful bidder should be provided with complete ownership of the coal produced from the allocated block and should not be allowed to use coal for purposes other than specified in the guidelines. However, the bidder should be permitted to store any excess production to meet unexpected coal shortages. Preference in Allotment of Coal Blocks If a bidder has an end-use project which is in the same state as the mine and his bid is within 5% of the H1 ranked bidder, the concerned bidder will be given preference in award at the price quoted by the H1 bidder. Adani Power – This criterion is unreasonable and should be removed. The company emphasized that most of the coal blocks available for competitive bidding will be located in Chhattisgarh and Orissa and EUPs in these states are already facing issues related to land acquisition, water availability, environmental pollution and forest diversion. Shree cement – The company stated that no preferential treatment should be given to bidders whose end use plants are located in the 	Э.		Mentions net worth equal to "Reserve Price Tag" + 15% of the cost of its end use plant
 Shree Cement - Successful bldee should be provided with complete ownership of the coal produced from the allocated block and should not be allowed to use coal for purposes other than specified in the guidelines. However, the bidder should be permitted to store any excess production to meet unexpected coal shortages. Preference in Allotment of Coal Blocks If a bidder has an end-use project which is in the same state as the mine and his bid is within 5% of the H1 ranked bidder, the concerned bidder will be given preference in award at the price quoted by the H1 bidder. Adani Power – This criterion is unreasonable and should be removed. The company emphasized that most of the coal blocks available for competitive bidding will be located in Chhattisgarh and Orissa and EUPs in these states are already facing issues related to land acquisition, water availability, environmental pollution and forest diversion. 	10.		Does not seem to permit the use of coal other than for the specific plant for which the block would be allocated
Allotment of Coal Blocks concerned bidder will be given preference in award at the price quoted by the H1 bidder. Adani Power – This criterion is unreasonable and should be removed. The company emphasized that most of the coal blocks available for competitive bidding will be located in Chhattisgarh and Orissa and EUPs in these states are already facing issues related to land acquisition, water availability, environmental pollution and forest diversion. Shree cement – The company stated that no preferential treatment should be given to bidders whose end use plants are located in th		for which block	should not be allowed to use coal for purposes other than specified in the guidelines. However, the bidder should be permitted to
for competitive bidding will be located in Chhattisgarh and Orissa and EUPs in these states are already facing issues related to land acquisition, water availability, environmental pollution and forest diversion. Shree cement – The company stated that no preferential treatment should be given to bidders whose end use plants are located in the	11.	Allotment of Coal Blocks	
			Shree cement - The company stated that no preferential treatment should be given to hidders whose and use plants are located in the

Source: Ministry of Coal, Deutsche Bank

The government of India has allocated 208 captive coal blocks. But only 25 blocks have started production with c30m tonnes of annual production. This seems to be well short of the 80m tonnes target set by the ministry to be achieved by FY12E.

During a review of the progress on the implementation of the captive mines, the ministry deallocated 11 blocks until June 2010 (due to the lack of progress made on the development of mines). The ministry has also issued notices to owners of 93 coal blocks and may de-allocate more blocks if requisite development has not happened. In May 2011, it also announced its decision to de-allocate a further 14 coal blocks and one lignite block allocated to public sector companies such as NTPC, DVC, etc.

Appendix 1

Important Disclosures

Additional information available upon request

For disclosures pertaining to recommendations or estimates made on a security mentioned in this report, please see the most recently published company report or visit our global disclosure look-up page on our website at http://gm.db.com/ger/disclosure/DisclosureDirectory.egsr.

Analyst Certification

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst about the subject issuers and the securities of those issuers. In addition, the undersigned lead analyst has not and will not receive any compensation for providing a specific recommendation or view in this report. Manish Saxena

Equity rating key

Equity rating dispersion and banking relationships

Buy: Based on a current 12- month view of total share-holder return (TSR = percentage change in share price from current price to projected target price plus pro-jected dividend yield), we recommend that investors buy the stock.

Sell: Based on a current 12-month view of total share-holder return, we recommend that investors sell the stock

Hold: We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.

Notes:

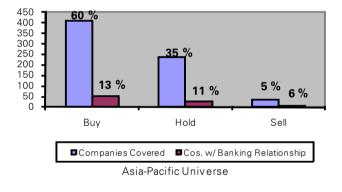
1. Newly issued research recommendations and target prices always supersede previously published research.

2. Ratings definitions prior to 27 January, 2007 were:

Buy: Expected total return (including dividends) of 10% or more over a 12-month period

Hold: Expected total return (including dividends) between - 10% and 10% over a 12-month period

Sell: Expected total return (including dividends) of -10% or worse over a 12-month period



Regulatory Disclosures

1. Important Additional Conflict Disclosures

Aside from within this report, important conflict disclosures can also be found at https://gm.db.com/equities under the "Disclosures Lookup" and "Legal" tabs. Investors are strongly encouraged to review this information before investing.

2. Short-Term Trade Ideas

Deutsche Bank equity research analysts sometimes have shorter-term trade ideas (known as SOLAR ideas) that are consistent or inconsistent with Deutsche Bank's existing longer term ratings. These trade ideas can be found at the SOLAR link at http://gm.db.com.

3. Country-Specific Disclosures

Australia and New Zealand: This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act and New Zealand Financial Advisors Act respectively.

Brazil: The views expressed above accurately reflect personal views of the authors about the subject company(ies) and its(their) securities, including in relation to Deutsche Bank. The compensation of the equity research analyst(s) is indirectly affected by revenues deriving from the business and financial transactions of Deutsche Bank.

EU countries: Disclosures relating to our obligations under MiFiD can be found at <u>http://www.globalmarkets.db.com/riskdisclosures</u>.

Japan: Disclosures under the Financial Instruments and Exchange Law: Company name - Deutsche Securities Inc. Registration number - Registered as a financial instruments dealer by the Head of the Kanto Local Finance Bureau (Kinsho) No. 117. Member of associations: JSDA, Type II Financial Instruments Firms Association, The Financial Futures Association of Japan, Japan Securities Investment Advisers Association. Commissions and risks involved in stock transactions - for stock transactions, we charge stock commissions and consumption tax by multiplying the transaction amount by the commission rate agreed with each customer. Stock transactions can lead to losses as a result of share price fluctuations and other factors. Transactions in foreign stocks can lead to additional losses stemming from foreign exchange fluctuations. "Moody's", "Standard & Poor's", and "Fitch" mentioned in this report are not registered credit rating agencies in Japan unless "Japan" is specifically designated in the name of the entity.

Russia: This information, interpretation and opinions submitted herein are not in the context of, and do not constitute, any appraisal or evaluation activity requiring a license in the Russian Federation.

Deutsche Bank AG/Hong Kong

Asia-Pacific locations

Deutsche Bank AG

Deutsche Bank Place Level 16 Corner of Hunter & Phillip Streets Sydney, NSW 2000 Australia Tel: (61) 2 8258 1234

Deutsche Bank (Malaysia)

Berhad Level 18-20 Menara IMC 8 Jalan Sultan Ismail Kuala Lumpur 50250 Malaysia Tel: (60) 3 2053 6760

Deutsche Securities Asia Ltd

Taiwan Branch Level 6 296 Jen-Ai Road, Sec 4 Taipei 106 Taiwan Tel: (886) 2 2192 2888

International locations

Deutsche Bank Securities Inc.

60 Wall Street New York, NY 10005 United States of America Tel: (1) 212 250 2500

Deutsche Bank AG

Filiale Hongkong International Commerce Centre, 1 Austin Road West,Kowloon, Hong Kong Tel: (852) 2203 8888 Deutsche Bank AG Filiale Hongkong International Commerce Centre, 1 Austin Road West,Kowloon, Hong Kong tel: (852) 2203 8888

In association with **Deutsche Regis Partners, Inc.** Level 23, Tower One Ayala Triangle, Ayala Avenue Makati City, Philippines Tel: (63) 2 894 6600

In association with **TISCO Securities Co., Ltd** TISCO Tower 48/8 North Sathorn Road Bangkok 10500 Thailand Tel: (66) 2 633 6470

Deutsche Bank AG London

1 Great Winchester Street London EC2N 2EQ United Kingdom Tel: (44) 20 7545 8000

Deutsche Securities Inc.

2-11-1 Nagatacho Sanno Park Tower Chiyoda-ku, Tokyo 100-6171 Japan Tel: (81) 3 5156 6770

Deutsche Equities India Pte Ltd

3rd Floor, Kodak House 222, Dr D.N. Road Fort, Mumbai 400 001 SEBI Nos: INB231196834 INB011196830, INF231196834 Tel: (91) 22 6658 4600

Deutsche Securities Korea Co.

17th Floor, YoungPoong Bldg., 33 SeoRin-Dong, Chongro-Ku, Seoul (110-752) Republic of Korea Tel: (82) 2 316 8888

In association with PT Deutsche Verdhana Indonesia

Deutsche Bank Building, 6th Floor, Jl. Imam Bonjol No.80, Central Jakarta, Indonesia Tel: (62 21) 318 9541

Deutsche Bank AG

Tel: (49) 69 910 00

Germany

Große Gallusstraße 10-14

60272 Frankfurt am Main

Deutsche Bank AG

Deutsche Bank Place Level 16 Corner of Hunter & Phillip Streets Sydney, NSW 2000 Australia Tel: (61) 2 8258 1234

Global Disclaimer

The information and opinions in this report were prepared by Deutsche Bank AG or one of its affiliates (collectively "Deutsche Bank"). The information herein is believed to be reliable and has been obtained from public sources believed to be reliable. Deutsche Bank makes no representation as to the accuracy or completeness of such information.

Deutsche Bank may engage in securities transactions, on a proprietary basis or otherwise, in a manner inconsistent with the view taken in this research report. In addition, others within Deutsche Bank, including strategists and sales staff, may take a view that is inconsistent with that taken in this research report.

Opinions, estimates and projections in this report constitute the current judgement of the author as of the date of this report. They do not necessarily reflect the opinions of Deutsche Bank and are subject to change without notice. Deutsche Bank has no obligation to update, modify or amend this report or to otherwise notify a recipient thereof in the event that any opinion, forecast or estimate set forth herein, changes or subsequently becomes inaccurate. Prices and availability of financial instruments are subject to change without notice. This report is provided for informational purposes only. It is not an offer or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy. Target prices are inherently imprecise and a product of the analyst judgement.

As a result of Deutsche Bank's March 2010 acquisition of BHF-Bank AG, a security may be covered by more than one analyst within the Deutsche Bank group. Each of these analysts may use differing methodologies to value the security; as a result, the recommendations may differ and the price targets and estimates of each may vary widely.

In August 2009, Deutsche Bank instituted a new policy whereby analysts may choose not to set or maintain a target price of certain issuers under coverage with a Hold rating. In particular, this will typically occur for "Hold" rated stocks having a market cap smaller than most other companies in its sector or region. We believe that such policy will allow us to make best use of our resources. Please visit our website at http://gm.db.com to determine the target price of any stock.

The financial instruments discussed in this report may not be suitable for all investors and investors must make their own informed investment decisions. Stock transactions can lead to losses as a result of price fluctuations and other factors. If a financial instrument is denominated in a currency other than an investor's currency, a change in exchange rates may adversely affect the investment. Past performance is not necessarily indicative of future results. Deutsche Bank may with respect to securities covered by this report, sell to or buy from customers on a principal basis, and consider this report in deciding to trade on a proprietary basis.

Unless governing law provides otherwise, all transactions should be executed through the Deutsche Bank entity in the investor's home jurisdiction. In the U.S. this report is approved and/or distributed by Deutsche Bank Securities Inc., a member of the NYSE, the NASD, NFA and SIPC. In Germany this report is approved and/or communicated by Deutsche Bank AG Frankfurt authorized by the BaFin. In the United Kingdom this report is approved and/or communicated by Deutsche Bank AG Frankfurt authorized by the BaFin. In the United Kingdom this report is approved and/or communicated by the inancial Services Authority for the conduct of investment business in the UK and authorized by the BaFin. This report is distributed in Singapore by Deutsche Bank AG, Singapore Branch, in Korea by Deutsche Securities Korea Co. This report is distributed in Singapore by Deutsche Bank AG, Singapore Branch, and recipients in Singapore of this report are to contact Deutsche Bank AG, Singapore Branch in respect of any matters arising from, or in connection with, this report. Where this report is sisted or promulgated in Singapore to a person who is of this report. In Japan this report is approved and/or distributed by Deutsche Securities Inc. The information contained in this report does not constitute the provision of investment advice. In Australia, retail clients should obtain a copy of a Product Disclosure Statement (PDS) relating to any financial product referred to in this report and consider the PDS before making any decision about whether to acquire the product. Deutsche Bank AG Johnensburg (S003284/10). Additional information regulations of this report. Neader al Republic of Germany (Branch Register Number in South Africa: 1998/003284/10). Additional information regulations about whether to acquire the product. Deutsche Bank AG Frankfurt autorized in the Federal Republic of Germany (Branch Register Number in South Africa: 1998/003284/10). Additional information contailed in this report as our south whether to acquire the product. D

Copyright © 2011 Deutsche Bank AG

Deutsche Securities Inc. 2-11-1 Nagatacho Sanno Park Tower Chiyoda-ku, Tokyo 100-6171

Japan Tel: (81) 3 5156 6770

Deutsche Bank AG

Singapore One Raffles Quay South Tower Singapore 048583 Tel: (65) 6423 8001