Deutsche Bank
Markets Research

Asia
India

Utilities

Industry

Indian infrastructure

Date
02 December 2011

Industry Update

Manish Saxena
Research Analyst
(+91) 22 6658 4034
manish.saxena@db.com

Anup Kulkarni
Research Associate
(+91) 22 6658 4265
anup.kulkarni@db.com

Chockalingam Narayanan
Research Analyst
(+91) 22 6658 4056
chockalingam.narayanan@db.com

Are banks forcing realignment of distressed assets?

Our top picks are companies with strong balance sheets: JSPL and L&T

We are increasingly enthused by the underlying efforts being made by private sector banks in realigning their stressed infra/industry assets. While we do not rule out near-term triggers through cash injection in highly leveraged companies such as Jaiprakash Associates, we recommend companies with relatively strong balance sheets, such as L&T and JSPL, as better positioned for a cyclical upturn. Additional triggers are recent fast-track project clearance and lowering of competitive intensity, notably visible in the roads and transmission & distribution (T&D) sectors, which offer the potential for sectoral outperformance in CY12.

Banks are no longer silent spectators …

Post inking the Andhra Cement sales to the promoters of JPA by Indian private sector banks, the assets on the block, as per various management communiqués and filings, are: (1) JPA south and west cement assets, (2) transmission assets being built by a Gujarat-IPP from west to north India, (3) the road assets of IVRCL and many others, which were unable to obtain financial closure. Our interactions with the project teams of various institutions suggest that, apart from publicly known potential asset sales as mentioned above, there could be far more if the existing promoters do not inject sufficient equity to cover any cost over-runs. Banks could be keenly evaluating the financials of each stressed asset before exercising any loan covenants.

… while a few groups in India are not averse to inorganic growth

Time and again, we have seen that unlocking value through asset sales can be a better method than debt restructuring/refinancing. A few of Lanco's assets and other private sector IPPs have already gone through two phases of refinancing so another time and cost over-run could result in significant provisioning by the banks. On the other hand, we are seeing few companies such as JPA and IVRCL placing assets on the block. A key question is: what is the interest from buyers in this environment, with cash-rich companies such as JSPL saying that sellers' expectations are quite high? Ultratech's medium-term capacity addition target is ~25mt of cement in the next four year (current expansion plans increase cement capacity by 10mt). This excludes the group's cement assets, suggesting that inorganic growth is not ruled out by the group.

Our preference is for companies with relatively high-hurdle return rates

An easy thing to do in this environment is to look at potential sellers for near-term stock triggers. However, we would rather be long on those companies that have time and that have already demonstrated their ability to complete projects with high hurdle rates (JSPL) or companies that have demonstrated an ability to churn assets in the infrastructure space with high value accretion to minority holders (Larsen and Toubro). Other top picks in the Infrastructure space with reasonable balance sheet strength are Thermax and IRB. ACC continues to be our top large cap cement pick. (See pages 6-8 for details.)

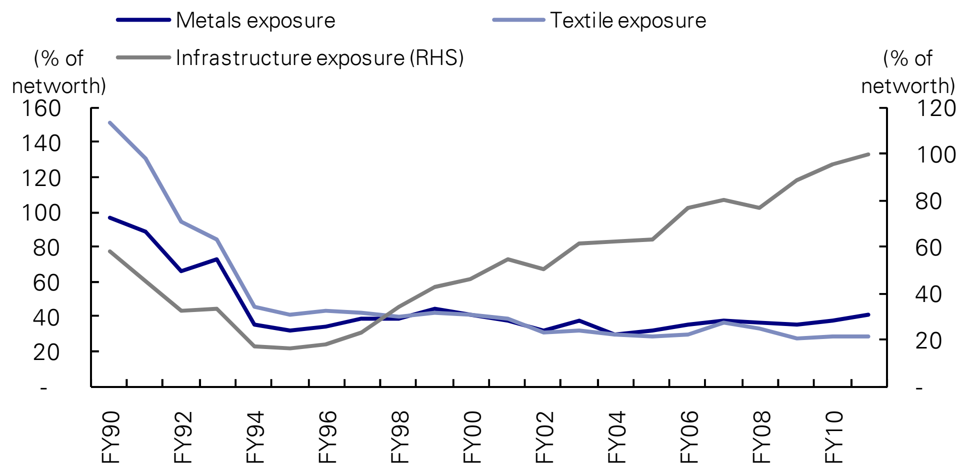
Top Picks				
(JNSP.BO),INR529.50				Buy
(LART.BO),INR1,314.40				Buy
Companies Featured				
(JNSP.BO),INR529.50				Buy
	2011A	2012E	2013E	
P/E (x)	16.9	11.9	8.9	
EV/EBITDA (x)	12.1	9.4	7.7	
Price/book (x)	4.6	2.8	2.2	
(JAIA.BO),INR68.95				Hold
	2011A	2012E	2013E	
P/E (x)	37.8	23.3	12.9	
EV/EBITDA (x)	11.5	8.6	6.6	
Price/book (x)	2.1	1.5	1.4	
(LART.BO),INR1,314.40				Buy
	2011A	2012E	2013E	
P/E (x)	25.7	17.7	15.8	
EV/EBITDA (x)	16.1	11.0	10.3	
Price/book (x)	4.0	2.6	2.3	
(ULTC.BO),INR1,186.10				Hold
	2011A	2012E	2013E	
P/E (x)	19.6	17.7	13.6	
EV/EBITDA (x)	10.9	9.3	7.2	
Price/book (x)	2.9	2.6	2.2	
ACC (ACC.BO),INR1,205.75				Buy
	2010A	2011E	2012E	
P/E (x)	15.6	19.8	15.8	
EV/EBITDA (x)	9.8	11.2	8.6	
Price/book (x)	3.1	3.2	2.9	
(ABUJ.BO),INR162.25				Hold
	2010A	2011E	2012E	
P/E (x)	15.2	19.8	16.4	
EV/EBITDA (x)	8.6	9.1	7.6	
Price/book (x)	3.0	3.1	2.7	

Lenders' pressure in realignment of assets

Infrastructure loan book has become a big concern for banks

Our talks with project appraisers and project consultants suggest that infrastructure loans have become a major issue for all the banks, probably with concerns today echoing those on textiles or metals exposure in early nineties.

Figure 1: Infrastructure exposure of banking system has reached 100% of net worth



*Source: Reserve Bank of India, Deutsche Bank *Infrastructure includes Power, Telecom, Roads, Others, Construction, Mining and Petroleum*

According to members of the loan syndication, banks have hit the sectoral exposure limits especially in power sector

According to loan syndication members, many domestic public banks have reached bank exposure limits in the power sector. Also, a leading private sector bank has been asked to explain its exposure in a financing power project. In Figure 2, we present the exposure limits for group and sector. In our view, the biggest challenge faced by developers is to not breach these limits.

Figure 2: Norms for exposure for infrastructure projects

All figures as % of capital funds (Tier I + II)	Exposure limit	Additional exposure for infrastructure projects	Additional exposure with board approval on exceptional basis	Total exposure available
Single borrower	15	5	5	25
Group borrower	40	10	5	55

Source: Deutsche Bank, RBI Circular dated 2 July 2007, Note: (a) Exposure = fund based + non-fund based (b) infrastructure include road, port, water, telecommunication, power, pipelines, SEZ

Despite recent spate of clearances

While part of the reasons for the hue and cry over the infrastructure loan book has been due to delays in project approvals, a large part of the problem is the inability of developers to build in risk mechanisms to protect against commodity price fluctuations and adherence to time-bound implementation programs.

In Figure 3 below, we present a snapshot of projects that face headwinds.

Figure 3: Projects that face headwinds on the financial viability front

Company	Project	Sector	Reason
Lanco	Udupi	Power	Time/cost over-run; transmission infrastructure for power evacuation not provided yet
	Anapara	Power	Plant yet to be synchronized and commissioned; delay of eight to ten months
	Kondapalli Ph. 3	Power	No clarity on gas availability yet
	Chattisgarh	Power	Project likely to be rebidded with separate bidding for coal and power assets
Gujarat-based IPP	-	Power	Project based on imported coal, but unviable at the current contracted tariff range of INR3.7-3.9/kWh
Reliance Power	Samalkot	Power	No clarity on gas availability yet
Tata Power	Mundra UMPP	Power	Contracted leveled tariff of INR2.26/kWh makes the project loss-making at current coal prices
Vedanta Group	Niyamgiri mines	Metals	Matter sub judice in Supreme Court
Posco	Jagatsingpur Steel Plant	Metals	Environmental clearance on hold despite earlier green light
Jaiprakash Associates	Ganga Expressway	Roads	Allahabad High Court stops work on environmental clearance issue
JSW Energy	Ratnagiri	Power	Open access is denied for power supply to another group company Ispat Steel, as open access charges are currently zero
JSW Energy	Ratnagiri	Power	FGD unit not getting pass-through of costs
JSW Energy	Jalipa, Kapurdi mines	Power	No assignment of mine rights
Hindalco and Essar	Mahan Coal Block	Metals	Mine declared in no-go area. Company obtained a tapering linkage, but where is the coal?
Nagarjuna	-	Power project	Projects stuck for environmental reasons. Loans to be project have been refinanced

Source: Company data, Deutsche Bank

As mentioned in our last report entitled "Indian Infrastructure – Nice talk, but would they walk?", dated 25 November 2011, we listed 12 projects being taken up for fast-track clearance. Further, the managements involved stated that the government seems to have put the no-go/go policy for environmental clearances on the back-burner, which means that a lot of coal blocks should now be cleared.

However, a few projects have already been put on the block

Post the inking of the Andhra Cement sales to the promoters of JPA by Indian private sector banks, the assets on block, as per various management communiqués and filings, are

Figure 4: Management communiqués as well as regulatory filings suggest that the following assets are on block

Companies	Sectors	Assets on block	Remarks
Jaiprakash Associates	Cement	c.10mtpa cement assets in the southern and western India	Cement assets have been put in separate company
IVRCL	Road	Three projects in TN	Have communicated in Analyst calls
Gujarat IPP	Power	Transmission line from western to northern India	Notices in regulatory websites
Coastal	Power	Project based on imported coal	
DB Power	Power	P. E. investors have recently invested money in the form of equity	
Tata Power	Power	Stake sale in SPV holding coal assets	Have communicated in analyst calls

Source: Deutsche Bank, company data

Our interactions with the project teams of various institutions suggest that, apart from publicly known potential asset sales as mentioned above, there could be far more if the existing promoters do not inject sufficient equity to cover any cost-over-runs. Banks should be keenly evaluating the financials of each stressed asset before exercising any loan covenants.

Opening up options for minorities from benefits of realignment

While it is next to impossible to construe which assets could get sold and at what value, we have used the following screens to figure out companies where we believe there is a greater probability of any potential sale of assets.

- First, we have used a filter for the percentage of shares pledged with banks as a proportion of total shares outstanding. The higher the ratio, the higher could be the bank pressure provided the business cycle remains weak and there are delays in commissioning new projects
- Companies with higher leverage and low interest cover ratios
- Companies that have announced their intention to sell stakes in assets either fully or partially.

Figure 5: Players with high leverage and high proportion of promoter holding which is pledged

Company	Rating	Promoters' holdings (%)	Shares pledged % of promoters shares	Shares pledged % of total shares outstanding	Net debt/equity FY11	Net debt/equity FY12	Remark
Adani Power	Buy	73.5	53.6	39.4	3.4	3.4	A high level of promoter pledge
GMR	Unrated	71.4	28.6	20.4	2.7	na	Low interest cover
GVK	Buy	54.3	0.0	0.0	1.1	1.2	Low interest cover at consol. levels
IRB Infra	Buy	74.9	24.5	18.4	1.3	1.7	A high level of promoter pledge
IVRCL	Unrated	11.0	0.0	0.0	1.3	na	Low interest cover at cons levels
Jaiprakash Associates	Hold	46.9	0.3	0.1	2.0	2.1	As per Management's communiqué
Jaypee Infratech	Unrated	83.3	54.1	45.0	0.9	na	A high level of promoter pledge
JP Power	Hold	76.5	63.6	48.7	2.1	na	A high level of promoter pledge
JSW Energy	Hold	76.7	20.5	15.7	1.5	1.8	A high level of promoter pledge
Lanco Infra	Buy	69.2	54.2	37.5	2.6	2.6	A high level of promoter pledge
Sadbhav	Unrated	47.59	0.0	0.0	1.7	na	
Suzlon Energy	Hold	54.8	69.4	38.1	1.6	2.0	A high level of promoter pledge
Tata Power	Hold	31.8	6.9	2.3	1.7	2.0	As per management communiqués

*Source: Bloomberg Finance LP, BSE, Deutsche Bank *Data for unrated stocks sourced from Bloomberg*

We prefer companies with relatively high-hurdle return rates

We would rather be long on those companies that have, time and time again, demonstrated their ability to complete projects with high hurdle rates (JSPL) or companies that have demonstrated their ability to churn assets in the infrastructure space with high value accretion to minority holders (Larsen and Toubro). ACC continues to be our large cap cement pick.

Figure 6: Many players have cash

Company	Market cap	Net debt/equity (FY12E)	Cash generation (FY12E)	Earnings yield (FY12E)	Remark
JSPL	498,701	1.0	53,930	8.5	Has high hurdle rates for both organic and inorganic growth
L&T	801,700	1.2	59,396	5.7	Has balance sheet strength and ability to churn assets
Monnet Ispat	23,863	1.1	3,557	14.5	
Power Grid	478,714	2.1	55,109	6.6	
Ultratech	322,484	0.3	27,800	5.8	Has largely grown through inorganic route
ACC	225,088	(0.1)	16,037	5.0	Cash yield/share is quite high
Ambuja Cement	248,502	(0.3)	16,937	5.1	Cash yield/share is quite high
Shree Cement	75,074	0.5	8,717	3.0	Cash yield/share is quite high

*Source: Company data, Bloomberg Finance LP Deutsche Bank *Data for Monnet Ispat is based on Bloomberg Finance LP; Cash generation = PAT + Depreciation*

Valuation and stock performance

Deutsche Bank infra/industrial universe continues to underperform markets

A look at stock performance would show that, by and large, except for cement and, of late, JSPL, most of the infrastructure/industrial stocks have significantly underperformed the broader markets. Near-term earnings and/or restructuring news-flow are important triggers.

Figure 7: Stock performance of coverage universe

		Absolute performance (%)				Relative performance (%)				Remark
	Price	3m	6m	1Yr	Y-t-D	3m	6m	1Yr	Y-t-D	
Capital Goods										
ABB India	619	-27.9	-27.5	-23.2	-22.3	-28.7	-19.2	-7.6	-4.4	Margin disappointments continue
Areva T&D	209	-5.7	-19.2	-33.1	-35.7	-6.5	-10.9	-17.5	-17.8	Results were better than expected
BHEL	283	-17.4	-26.1	-36.1	-39.2	-18.2	-17.8	-20.5	-21.3	Cross-holding news flow hurting performance
Larsen & Toubro	1,310	-19.4	-23.5	-35.2	-33.8	-20.2	-15.2	-19.6	-15.9	Weak guidance/subsidiary result hurt perf.
Siemens India	723	-16.7	-18.8	-5.5	-11.8	-17.5	-10.4	10.2	6.0	Forex losses in sales hurt
Suzlon Energy	24	-40.4	-53.4	-54.0	-56.5	-41.1	-45.1	-38.3	-38.6	Rising competitive pressures
Thermax	470	-4.0	-22.2	-45.9	-46.1	-4.8	-13.8	-30.3	-28.2	
Cement stocks										
ACC	1,214	21.1	18.0	24.6	13.7	20.3	26.3	40.2	31.6	Poor results but better pricing environment
Ambuja Cements	161	21.1	12.2	16.3	12.2	20.3	20.6	31.9	30.0	Poor results but better pricing environment
Grasim Industries	2,451	11.6	7.6	4.0	4.6	10.8	15.9	19.6	22.5	Improved VSF and cement outlook
India Cements	76	13.5	-10.1	-30.9	-30.0	12.7	-1.8	-15.3	-12.2	Good results but concerns on diversification
Shree Cement	2,132	29.1	18.7	5.8	5.5	28.3	27.0	21.5	23.3	Good results and better pricing environment
Ultratech Cement	1,177	6.6	14.2	6.0	8.5	5.8	22.6	21.6	26.4	Poor results but better pricing environment
Infrastructure										
Essar Ports	69	-1.0	-40.2	-40.7	-45.2	-1.8	-31.9	-25.1	-27.4	Good interim results
GVK Power & Infra.	11	-37.3	-51.8	-73.4	-73.2	-38.1	-43.5	-57.8	-55.4	Balance sheet concerns emerging
IRB Infra. Dev.	152	-4.4	-2.1	-33.1	-32.4	-5.2	6.2	-17.4	-14.5	In-line results; but sector outlook improving
Jaiprakash Associates	67	4.2	-20.5	-37.3	-36.4	3.4	-12.2	-21.7	-18.6	Poor results, but triggers from restructuring
Utility stocks										
Adani Power	73	-17.8	-35.4	-44.5	-43.7	-18.6	-27.1	-28.9	-25.8	Coal availability a rising concern
Jindal Steel & Power	534	-0.1	-16.5	-21.5	-25.1	-0.9	-8.2	-5.9	-7.2	Good interims and improved outlook
JSW Energy	45	-18.1	-37.9	-55.4	-54.9	-18.9	-29.6	-47.0	-37.1	Coal availability a continued drag
Lanco Infratech	13	-25.3	-61.2	-79.8	-80.2	-26.1	-52.9	-64.2	-62.4	Concerns on balance sheet drag performance
NHPC	23	-5.0	-7.3	-18.1	-19.0	-5.8	1.0	-2.5	-1.1	
NTPC	173	5.6	-0.7	-6.6	-13.9	4.8	7.6	9.0	4.0	Physical performance lags the sector
Tata Power	98	-3.5	-21.9	-24.4	-28.5	-4.3	-13.6	-8.7	-10.7	Mundra UMPP project concerns
Power Grid	103	6.4	2.4	3.6	5.2	5.6	10.7	19.2	23.0	A steady performer
Coal India Ltd	335	-12.2	-14.6	3.9	6.3	-13.0	-6.2	19.6	24.2	Emerging risk from surplus cash deployment
Market										
BSE Sensex	16,847	0.8	-8.3	-15.6	-17.9	0.0	0.0	0.0	0.0	

*Source: Bloomberg Finance LP, Deutsche Bank *Prices as of 2 December-2011*

Jindal Steel and Power

We rate Jindal Steel & Power a Buy (with a target price of INR755) for the following reasons:

- Given its ~1.2bn tonnes of low-cost captive coal assets, JSPL is well placed to capitalize on an environment of increasing scarcity of cheap fuel in India and inflationary pressures from imported fuel.
- 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 has risen by 7-8% over the past three quarters. Spot tariffs are on the increase. With most of its peers facing rising fuel costs, we see JSPL's integrated energy model as a significant direct beneficiary of these trends.
- We forecast RoE to rise from 26% in FY12 to 28.6% in FY14 – 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 capacity addition targets, a reduction in utilization levels, any 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 a Buy with a target price of INR550, largely based on valuations:

- After a sharp 49% fall in the stock price year to date and 26% underperformance relative to the Sensex during the same period, the stock is fully factoring in a slowdown in the investment cycle, especially in power capex 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 power capex cycle over the next 12-18 months, strong risk management has enabled the company to maintain a strong balance sheet, a high RoE and low net working capital and sales, making the company among 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.

A key risk for Thermax would be any delay in pick-up in the investment cycle leading to delays in execution and revenue recognition. Higher-than-expected raw material prices are also a risk.

IRB

We rate IRB Infra as a Buy (with a target price of INR192) for the following reasons:

- 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) with no attributable value for the latest road wins.
- With NHAI likely to award 63% more road projects in FY12 and with 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 appear well positioned to benefit from this upturn, in our view.
- Our SOTP-based 12-month target price is INR192, 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 past three months on account of various negative news items about production constraints, wage negotiation and use of surplus cash balance, the stock is now trading at P/Es of 13x FY12E and 12x FY13E.
- CIL has so far demonstrated a sustained high rate of 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 to some extent relax its tough stance on clearances for coal mining projects, there is the potential for a production ramp-up at some of the existing mines.
- Our target price of INR430 is based on an average of the values derived using life-of-mine 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).

ACC

We have a Buy on ACC for the following reasons:

- It has a diversified presence and is the least expensive large-cap pure cement player in India on a replacement cost basis, at EV/ton of USD125.
- The company has net cash of INR120/share, which is likely to rise to INR180/share as FCF yield improves to an estimated c10%.
- Volume growth is starting to come through as the recent 2.6m tonne clinker expansion each at Wadi and Chanda are ramping up.
- We use a target EV/t of USD140 for ACC to arrive at our target price of INR1,180 (rounded), in line with other its large cap peer Ultratech. Our target

price implies an exit P/E multiple of 19.3x CY11E and exit EV/EBITDA of 10x CY11E, which look reasonable as the industry's profitability is stabilizing at these levels.

- The key downside risks are: (1) any government probe into price rises; (2) an ongoing quest for market share in the market irrespective of profitability levels; (3) lower-than-expected demand growth

Appendix 1

Important Disclosures

Additional information available upon request

For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, 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.eqsr

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

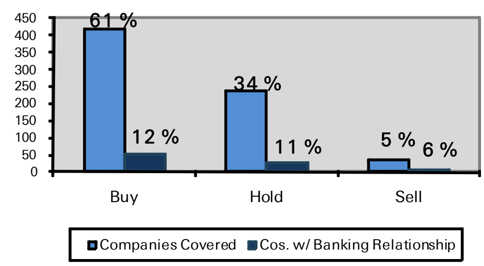
Equity rating key

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

Equity rating dispersion and banking relationships



Asia-Pacific Universe

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 http://www.globalmarkets.db.com/riskdisclosures.
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 AG
Filiale Hongkong
International Commerce Centre,
1 Austin Road West,Kowloon,
Hong Kong
tel: (852) 2203 8888

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

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

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

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

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

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

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

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

International locations

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

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

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

Deutsche Bank AG
Große Gallusstraße 10-14
60272 Frankfurt am Main
Germany
Tel: (49) 69 910 00

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

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

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

Global Disclaimer