

Indian T&D Sector

Sustained high growth ahead; Initiation of coverage

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- Investments in power generation, industrial expansion, real estate development and overseas markets to drive growth
- Indian companies to feed demand; fall in metal prices and increased capacity utilisation to expand margins
- Initiate coverage on Kalpataru Power, Finolex Cables and Havells India with Overweight (V), Jyoti Structures with Neutral (V); upgrade KEC to Neutral (V)

Indian manufacturers of electrical equipment in the transmission and distribution (T&D) sector are poised for strong, sustainable revenue as cINR1,100bn opportunity lies ahead. The government is getting its act together to address the country's power shortage. It plans to add 66GW of capacity in the 11th Five-year Plan and a further 86.5GW in the 12th Plan (starting in 2013).

Attractive government initiatives and policies will improve private participation; other demand drivers are growth in domestic real estate and overseas markets such as Africa and the Middle East.

We believe that Indian companies have the capacity to feed growing demand. Decline in metal prices and improved capacity utilisations are likely to continue contributing to the margin expansion seen in 9M FY07 results. Transmission line companies like KEC International, Kalpataru Power and Jyoti Structures are cost leaders that should benefit from rapid execution of order backlog. Finolex Cables is our value case while Havells India qualifies as a cost leader among the cables and wires companies.

Coverage (INR)

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Company	Rating	Tgt price	Current price	Upside	FY08 PE(x)
KEC Intl	N (V)	680	559	22%	14.9
Kalpataru Power	OW (V)	1,575	1,179	34%	16.1
Jyoti Structures	N (V)	215	179	20%	15.6
Finolex Cables	OW (V)	158	98	62%	13.4
Havells India	OW (V)	635	501	27%	17.0

 $\mathsf{V}=\mathsf{volatile}$ (please see disclosure appendix); prices as at 21 February 2007 Source: HSBC



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Investment summary

- 25-35% CAGR in 2006-2012e for our picks versus 14% for sector; support from government investment and private participation
- Indian companies have the capacity to feed growing demand; decline in metal prices could improve margins
- We initiate coverage on Kalpataru Power, Jyoti Structures, Finolex Cables and Havells India, and re-rate KEC International

Power burst

The government has aggressive plans to combat India's huge power deficit by adding 66GW of capacity in the 11th Five-year Plan and a further 86.5GW in the 12th Plan.

The key structural change in the sector is the government's increasing push for private sector participation to share the huge investment required to achieve targets. The relatively smooth awarding of two ultra mega power projects (UMPPs) is a step in this direction.

The government also realises that transmission and distribution (T&D) is an integral part of the value chain for power development. India loses up to 30% of the power generated each year due to poor transmission and distribution and improving T&D will go a long way to reducing the power deficit.

We believe that Indian manufacturers of electrical equipment in the transmission and distribution (T&D) sector are poised for strong, sustainable revenue as an opportunity of cINR1, 100bn is ahead. We identify the following as key drivers for healthy T&D growth:

- Power Grid plans to spend INR705bn on strengthening inter-regional transmission grids to create power express highways, moving power from surplus regions to those suffering from deficits
- Two UMPPs have been awarded, throwing open opportunities for INR100bn of transmission line orders. More are on the way
- Private participation is being encouraged by the government to develop T&D lines worth INR260bn on a build own operate basis through special purpose vehicles
- Government scheme to improve rural electrification involves contracts worth INR55bn
- State Electricity Boards (SEB) will need to invest INR122bn under the Accelerated Power Distribution Reform Programme (APDRP) to contain T&D losses
- Opportunities in Africa and the Middle East: According to industry sources, USD20bn is expected to be invested in the T&D sector by these countries

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In our report, we look at the capacity requirements for the above and believe that the industry has sufficient capabilities to feed growing demand. The recent reduction of metal prices should lead to improved margins.

We have tried to quantify the growth prospects for companies within the industry. The present transmission line network of 330m circuit kilometres (Ckt Km) is likely to increase to 430m ckm by 2012. This translates into a CAGR of 14%.

We believe that the companies in our coverage will grow at 25-35% y-o-y, much faster than the industry, because:

- They should gain market share as the smaller, less organised manufacturers act as subcontractors
- We believe designing and technical expertise matter more than tower manufacturing
- The companies in our coverage are active in overseas markets

We believe the government's focus on power generation and the T&D sector will translate into huge opportunities for the power cables and wires industries. The additional demand drivers for power cables and wires industry are:

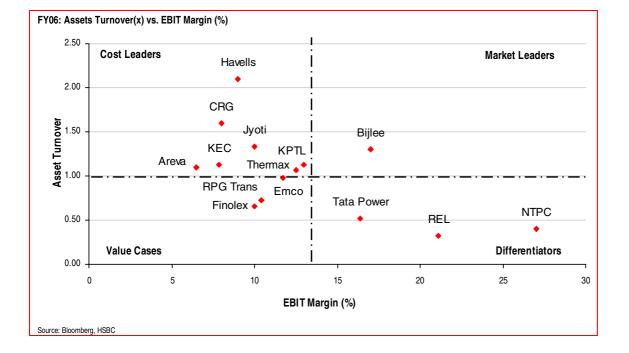
- Demand from industrial capacity expansion
- Booming real estate demand supported by higher disposable income

We believe that the branded power cables and wires companies will stand to benefit from the Value Added Tax (VAT) regime, standardisation of products and awareness of security and safety. The higher working capital requirements could push smaller players out of the business.

Finding cost leaders and value cases

We have plotted T&D companies on our matrix of Asset Turnover and EBIT margin. We observe the following:

 Transmission line companies KEC International, Kalpataru Power and Jyoti Structures qualify as cost leaders. This means that these companies benefit from higher utilisation of assets through rapid execution of





order backlog

- Finolex Cables, a branded distribution wires company, is our value case. The company has low asset turnover as its assets are tied up in the communications division. With the conversion of communication capacity into electrical cables, we believe that profitability will increase.
- Havells India, a diversified electrical equipment manufacturer, is a cost leader. The company is a dominant player in the switchgear and electrical cables sector and has utilised its assets well. We believe the company will continue to increase both its revenue and net profit.

Key risks

- Delay in tendering of orders by the government
- Execution of the order backlog
- Competition affecting profit margin

Coverage

We discuss key demand drivers for the T&D sector and the capabilities and capacities of the sector to meet growing demand.

Common theme – revenue and net profit growth

The companies we have initiated coverage on have one common theme – high revenue growth, with even higher net profit growth. The key reasons for this are:

- The sales of these companies should grow much faster than industry average because of their dominance in the market or technical capabilities
- We expect profits to be higher than revenues as margins expand due to improving capacity

utilisation and better working capital

management

CAGR for FY06-FY09e

Company	Sales	EPS
KEC International	22%	56%
Kalpataru Power	46%	49%
Jyoti Structures	34%	57%
Finolex Cables	35%	40%
Havells India	50%	50%

Source: HSBC

Some of these stocks have high y-t-d returns. We believe the companies in our coverage have the potential for higher returns from current levels because of strong macro factors and their ability to grow faster than industry.

Y-t-d performance								
Company	y-t-d return	Remarks						
KEC Intl	55%	Q3 results were the key trigger for 37% upside in three trading days						
Kalpataru Power	21%	Margins better than peers in core business and high margins in other businesses like power generation						
Jyoti Structures	34%	Consistent improvement in margins for the last 8 guarters						
Finolex Cables	-1%	Underperforming on little contribution from communication cables, but electrical cables division doing well						
Havells India	30%	Bonus announced and strong results						

Source: Bloomberg, HSBC

Re-rating KEC International [KECI IN, INR680, Neutral (V)]

KEC International is a transmission line company which is among our top picks in the report titled *Hidden Dragons 2007* dated 12 January 2007. The key trigger for the re-rating of the stock is improvement of EBITDA (c12%) and net margins (c5%) for 9MFY07.

These margins are in line with peers which has led to a reduction of the rolling one-year forward PE multiple discount of the stock to peers. The stock is also trading in line with the CNX Midcap Index.



Among the transmission companies we discuss in this report, KEC International has the highest order backlog of INR30bn which consists of c77% of overseas orders. We believe that:

- KEC's dominance in overseas markets like Africa and the Middle East will keep overseas order flow strong
- As overseas orders are fixed-rate contracts, KEC might report positive surprise on margins if metal prices remain low
- Among the transmission line companies under our coverage, KEC International trades at the cheapest FY08e PE multiple of 14.9x compared to peers like Kalpataru Power and Jyoti Structures, which trade at FY08e PE of 16.1x and 15.6x respectively

We upgrade KEC from Underweight (V) to a Neutral (V) and raise our target price from INR480 to INR680, 22% potential upside. At current levels it is trading at 20.4x FY07e and 14.9x FY08e earnings.

Kalpataru Power - transmission lines

[KPP IN, INR1575, Overweight (V)]

Kalpataru Power is a transmission line company with diversified businesses which include power generation and infrastructure. The company now has plans to invest in logistics businesses. We believe that:

- The company will continue to generate higher margins than peers and we expect investments in JMC Projects to add value to its shareholders
- Based on the order backlog of INR20bn we forecast sales CAGR of 46% during FY06-09e
- Diversified businesses portfolio will help improve margins and grow EPS at a CAGR of 49% for the period FY06-FY09e.

We initiate coverage with an Overweight (V) rating and target price of INR1,575, potential upside of 34%, which includes INR95 derived from investment in JMC projects. At current levels it is trading at 22.8x FY07e and 16.1x FY08e earnings.

Jyoti Structures – transmission line [JYS IN, INR215, Neutral (V)]

Jyoti Structures is a transmission line company. Its current order backlog is INR18bn which mostly consists of domestic orders. We believe that:

- The order flow from the domestic market will be strong and it would tap overseas markets through a JV called Gulf Jyoti
- Its relationship with Reliance Energy should allow it to bid for large transmission orders, a win-win situation for both partners – Jyoti Structures provides the technical expertise and Reliance Energy, the financial muscle
- We forecast sales and EPS CAGR of 34% and 57% respectively for the period FY06-FY09e

We initiate coverage with a Neutral (V) rating and target price of INR215, 20% potential upside. At current levels it is trading at 25.8x FY07e and 15.6x FY08e earnings.

Finolex Cables – branded distribution wires

[FNXC IN, INR158, Overweight (V)]

Finolex Cables is a branded distribution electrical wires manufacturer. This stock is our top pick with potential return of 62%. The key reasons are:

 Half of the bleeding assets of Jelly Filled Telephone Cables (JFTC), a part of the communication cables division, has been converted into electrical cables. The conversion should provide greater volume to be sold as high margin electrical cables

- The company is investing INR2bn in a new facility that can produce both low and high tension cables; this will be on stream in FY08
- Finolex brand has a dominant market share in the distribution wires market and strong distribution channels
- The company has launched electrical consumer durables like switches and compact fluorescent lamps to diversify its business
- ➤ We forecast sales and EPS CAGR of 34% and 40% respectively for FY06-FY09e

We initiate coverage with an Overweight (V) rating and target price of INR158, potential upside of 62%, which includes INR22 derived from investment in Finolex Industries. At current levels, the shares are trading at 18.3x FY07e and 13.5x FY08e earnings.

Havells India – diversified electrical equipment

[HAVL IN, INR635, Overweight (V)]

Havells India is a diversified electrical equipment manufacturer with dominant market share in the high margin switch gear business and the power cable business. We believe that:

- The company will continue to have strong sales momentum CAGR of 50% for the period of FY06-FY09e supported by capacity addition in existing businesses of switchgear and cables and new businesses like electrical motors
- Havells India is looking for an acquisition in Europe which will provide access to vast overseas markets
- We expect pressure on EBITDA margins as the company's volumes of low margin electrical consumer durables increases
- Net margin will be maintained due to decline in finance costs and tax incentives. We expect

EPS CAGR of 50% for the period of FY06-FY09e.

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We initiate coverage with an Overweight (V) rating and target price of INR635, potential upside of 27%. At current levels it is trading at 26.6x FY07e and 17x FY08e earnings.

To summarise

Top pick

Finolex Cables, with potential upside of 62% and currently trading at FY08e PE 13.5x, is our top pick. We expect profitability to improve due to conversion of loss making JFTC business and strong brand; distribution network of Finolex Cables capable of selling increased volume.

Don't miss them

We expect strong, sustainable growth for our transmission line coverage:

KEC International should find huge opportunities in overseas markets and might surprise with higher than estimated margins.

Jyoti Structures to be focused on domestic market but tap opportunities through JV. The Reliance Energy partnership should be fruitful.

Kalpataru Power should continue to earn higher margin than peers and investment in JMC projects should add value to the shareholders.

Fast and Furious

Historically, Havells India is the fastest growing company in our universe with revenue CAGR of 50% from FY02-FY06. The company is a play both on high margins in switchgear and high volume electrical business. We expect the CAGR of 50% to continue for the next few years.

Indian	T&D	Sector	Coverage
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	Price	MCap		_ EPS	(INR)			PE	(x)			EV/EBI	TDA (x)			EBITDA	Margin_			Rol	Ξ (%)			Rol	C (%)	
Co.	(INR)	USDm	FY06	FY07e	FY08e	FY09e	FY06	FY07e	FY08e	FY09e	FY06	FY07e	FY08e	FY09e	FY06	FY07e	FY08e	FY09e	FY06	FY07e	FY08e	FY09e	FY06	FY07e	FY08e	FY09e
KEC Int'l.	559	460	13.4	27.4	37.6	51.8	41.9	20.4	14.9	10.8	14.1	8.9	6.4	4.2	9.4%	11.6%	12.0%	12.3%	19.6%	43.7%	40.3%	38.3%	18.3%	28.7%	38.2%	53.3%
Kalpataru Pow.	1179	710	30.6	51.7	73.3	102.3	38.5	22.8	16.1	11.5	27.7	12.7	9.0	6.3	14.1%	15.5%	15.8%	15.9%	47.2%	34.3%	27.2%	29.7%	25.3%	34.8%	38.6%	44.9%
Jyoti Struct.	179	310	3.8	6.9	11.4	15.7	46.5	25.8	15.6	11.3	19.7	11.1	7.5	5.4	10.4%	12.3%	13.0%	13.5%	25.6%	29.4%	30.5%	31.9%	18.2%	24.7%	31.7%	37.8%
Finolex Cables	98	340	3.3	5.3	7.2	9.0	29.7	18.3	13.5	10.8	13.2	9.1	6.6	5.2	13.6%	14.8%	15.2%	15.3%	9.7%	14.4%	17.3%	18.7%	9.1%	12.0%	14.5%	16.1%
Havells India	501	610	12.1	18.8	29.4	40.0	41.3	26.6	17.0	12.5	27.1	18.3	11.4	8.0	10.2%	9.6%	9.4%	9.5%	48.1%	45.4%	45.9%	41.1%	27.0%	35.7%	48.8%	56.4%

Priced as at 21 February 2007 Source: Companies, HSBC

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Focus on T&D

- Power Grid to spend INR705bn on inter-regional grids; INR437bn opportunity for private players, rural electrification and SEBs
- Power Grid and Rural Electrification Corporation to raise money to fund the transmission line projects
- African and Middle East countries likely to spend USD20bn on T&D, which opens doors for huge overseas opportunities

Transmission and distribution of power

As India increases its power generation capacity, it needs to be transmitted across the country and distributed to consumers. Transmission and distribution (T&D) is a segment that produces everything from transmission lines and transformers to companies that make power cables.

In this chapter we will attempt to estimate how demand for these products will increase. We look at how the plan to increase power generation is accompanied by increases in an interregional transmission grid in India. To improve the distribution of power from this large grid, various investment schemes such as the Accelerated Power Distribution Reform Programme (APDRP) and a rural electrification scheme have been established.

The key structural change the industry is witnessing is the government's focus on increasing private sector participation in the construction and ownership of power T&D infrastructure. By establishing how growth in the power sector affects growth in the T&D segment we will be able to identify the impact on the various listed companies in T&D, which is something we will turn to in later chapters.

We believe T&D is set for healthy growth, with the following as key drivers:

- Increase in power generation will require additions to T&D infrastructure and upgrades to existing infrastructure
- Power Grid Corporation of India's plans to spend INR705bn to improve its inter-regional transmission grid and create power express highways to move power from regions with a surplus to those in deficit
- Private participation is being encouraged by the government to develop T&D lines worth INR260bn on a build own operate basis through special purpose vehicles (SPVs)
- Strengthening of rural electrification will require contracts worth INR55bn to be executed under the *Rajiv Gandhi Grameen Vidyutikaran Yojana* (RGGVY) scheme

- Containing T&D losses of State Electricity Boards (SEBs) will require investment of INR122bn under the APDRP scheme
- Opportunities in overseas markets like Africa and Middle East. According to industry sources, USD20bn is likely to be invested in the T&D sector by these countries

Power generation

In order to achieve the target growth of 9.3% per year for its 11th Five-year Plan, the government has speeded up the process of awarding ultra mega power projects (UMPPs).

In addition, capacity addition plans for the 12th Five-year Plan are taking shape with planned addition of 86.5GW (a 30% increase over the 11th Five-year Plan).

The government has planned 8 UMPPs of 4,000 MW each to help achieve the target of adding 66GW by 2012.

Of these, 2 have already been awarded and the rest are in the process of being awarded.

INR100bn opportunity

And this is just from 2 UMPPs

The right to construct transmission lines for the Sasan and Mundra projects went to Power Grid Corporation of India (PGCIL) with estimated construction cost of INR100bn. This is a large project and involves the construction of 22 lines at a cost of INR80bn in western India and 9 more lines, at INR20bn, in northern India.

These costs will be borne by SEBs in proportion to the amount of power they will use.

States' commitment for purchasing power (MW)					
States	Sasan project	Mundra project			
Madhya Pradesh	1200	-			
Gujarat	-	1600			
Maharashtra	-	800			
Punjab	600	500			
Uttar Pradesh	500	300			
Delhi	500	-			
Haryana	450	400			
Rajasthan	400	400			
Chhattisgarh	250	-			
Uttaranchal	100	-			
Total	4000	4000			

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Source: Power Line

The government is likely to award 6 more UMPPs which we believe could translate into an opportunity of cINR250bn-300bn for engineering procurement and construction (EPC) transmission lines companies.

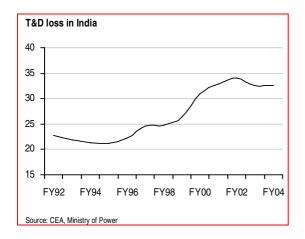
Inter-regional transmission grid: INR705bn opportunity

Aside from power projects, investments are required in power transmission in India. A key project is the establishment of an inter-regional transmission grid.

Moderate investments in T&D network in the last few years resulted in just 3.56% CAGR in transmission line length (3,30,874 Ckt Km in FY05 vs. 240,707 Ckt Km in FY95) and a 1.21% CAGR in total transmission transformer capacity during the same period.

India also suffers from one of the highest transmission and distribution losses in the world – an estimated 30% annually, according to the Ministry of Power.



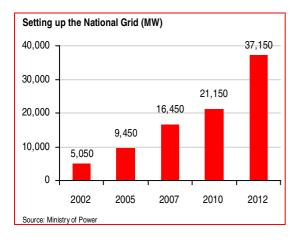


To improve transmission of power, the government plans to set up the INR705bn National Transmission Grid. PGCIL is slated to invest INR496bn while the private sector will contribute the rest (INR209bn). To attract private players, the Electricity Act 2003 allowed open access to transmission lines.

Proposed investment in the National Grid							
INRbn	10 th Plan	11 th Plan	Total				
PowerGrid's outlay	213.70	282.58	496.28				
Private sector participation	97.10	111.85	208.95				
Total	310.80	394.43	705.23				
	310.80	394.43	705				

Source: Ministry of Power

The Ministry of Power wants inter-regional grid capacity to quadruple by FY12 to 37.15GW (earlier estimate: 30GW) vs. 9.45GW in FY05.



INR260bn investment through private players

Private participation in transmission and distribution of power is vital and the total investment required is estimated at INR260bn.

The first private-public JV in the transmission sector was between Tata Power and PGCIL in Tala Transmission Project, with an estimated cost of INR12bn in 2001.

However, after this initial project private participation stalled due to various procedural issues and delays.

In order to achieve the targets set by the 11th Fiveyear Plan, the government has recognised the necessity for renewed private participation. With its success in awarding of 2 UMPPs, the government now intends to repeat the process in the T&D sector.

Size and feature of the project

To speed matters up, the government has identified 14 transmission line projects each worth INR2bn to INR40bn entailing a total investment of INR260bn. These projects are to be awarded to private companies.

The transmission line projects will be awarded through tariff based competitive bidding. These projects will be awarded on a build own operate basis by Power Finance Corporation (PFC) and the Rural Electrification Corporation (REC).

As for UMPPs, these agencies will float SPVs for the each of these projects and will take care of the initial groundwork. The SPV will then be transferred to the successful bidder.

Some of the companies which have shown interest in these projects are Tata Power, Reliance Energy Transmission, KEC International, RPG Transmission, Kalpataru Power, Jyoti Structures,



GMR Energy, L&T, Essar Power and Torrent Power.

Projects in the pipeline

A competitive tariff-based transmission line project has already been awarded to Reliance Energy Transmission Ltd, a subsidiary of Reliance Energy Limited. The project is a JV with PGCIL and worth INR16bn-20bn.

But now the government intends to award build own operate basis projects completely owned and operated by private players.

Some of the projects in the pipeline are:

- INR40bn 'evacuation' line for North Karanpura in the state of Jharkhand
- INR10bn for augmentation of high voltage direct current (HVDC) line in Talcher-Kolar in the state of Karnataka
- 500km of transmission line for northern India
- 'Evacuation' systems for Maithon, Kodarma, Mejia and Bokaro in the state of Jharkhand, which will require 1,450km of transmission lines

Distribution not far behind

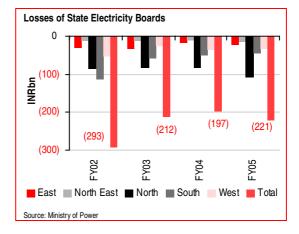
For further detail, please refer to Sumeet Agrawal's report titled Building India: Party to continue dated 10 January 2007.

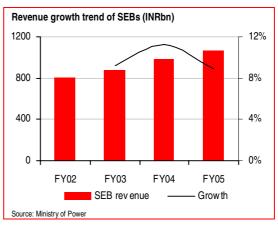
In addition to transmission, expansion of the distribution system to consumers is required.

As with infrastructure development in the transmission segment, reform in distribution is trickling down. Over 90% of the T&D network consists of distribution lines, with a majority of it owned/controlled by State Electricity Boards (SEBs).

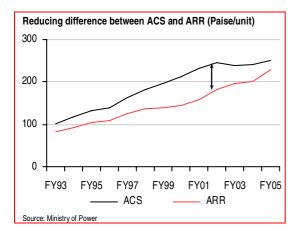
Various reforms have been initiated to improve the distribution network. The aggregate transmission and commercial loss (AT&C) has declined to 36%, down from 39% in FY02 and 50% in the mid-90s. This decline is a result of SEBs upgrading and improving maintenance of existing lines.

Also, there has been remarkable improvement in SEBs' financials, with revenue growth of c9% pa for the period FY02-05 and a reduction in combined losses (without subsidy) from INR293bn in FY02 to INR221bn in FY05.





The gap between average revenue realised (ARR) and average cost of supply (ACS) has been reduced to c20 paise per unit in FY05 vs. 71 paise per unit in FY01.



Investment in distribution has been driven by various schemes like

- Accelerated Power Distribution Reform Programme (APDRP)
- Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY, a rural electrification scheme).

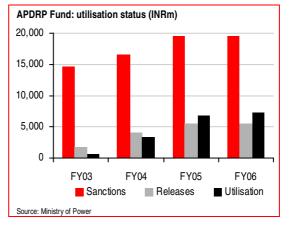
We take a look at these two initiatives below.

INR122bn: orders of APDRP

Accelerated Power Development Programme (APDP) was started in FY01 to reduce the distribution losses of SEBs which were INR260bn, (equivalent to 1.5% of 2000-01 GDP).

In FY03, APDP was changed to Accelerated Power Development & Reforms Programme (APDRP) with the objectives of improving financial viability of states' power utilities, reducing T&D losses to c10%, improving customer satisfaction and the quality of power supply.

The objectives were to be achieved through strengthening and upgrading the existing distribution network with a total outlay of INR400bn. Out of this, INR170bn has been sanctioned and INR100bn has been utilised. INR122bn worth of orders are likely to be on stream in the next few years.



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INR55bn: orders of rural electrification

The RGGVY scheme was started in April 2005 to provide electricity to all villages in India over four years. Most transmission line companies in India have received orders under this scheme.

REC, as the key agency for the RGGVY scheme, had awarded orders worth INR95bn up to November 2006. Orders worth INR55bn should be awarded in the next 3-4 years.

Raising money to fund capex

Government organisations' power capex will be funded by a combination of equity, debt and government support via soft loans and grants.

Divesting stakes

The government has also announced its intention to divest part of its stakes in public undertakings like Power Finance Corporation, Power Grid Corporation and REC.

Power Finance Corporation plans to raise cINR10bn by selling 117m shares, which is 10.22% of its equity. The issue was completed in February 2007 and subsequently the company was listed on the stock exchange.

Power Grid Corporation of India, which owns a major portion of the transmission line companies in India, plans to offload 5% of its equity.



REC, a finance company which funds rural electrification, plans to offload 10% of its equity.

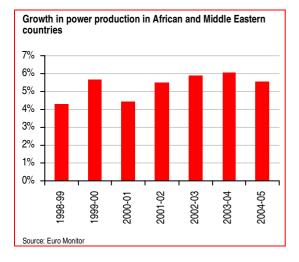
The money raised by PGCIL and REC will mostly used to finance the transmission infrastructure projects.

Opportunities outside India

In addition to growth prospects at home, Indian transmission line companies can look overseas for opportunities, especially third-world countries in Africa and petro-dollar countries in the Middle East. According to industry sources, Africa and Middle East together are likely to spend USD20bn on T&D.

Africa

Some African countries have organised themselves under the South African Power Pool. This involves 12 regional utilities sharing scarce resources with each other. Some of the projects are financed by development banks and the World Bank. These countries have committed to electrification goals to be achieved in the next 20 years. This would provide huge opportunities for power sector growth.



The Gulf

The Gulf Co-operation Council (GCC) is investing heavily to meet the growing demand for power in the region. According to the World Energy Council, the GCC will require 100,000 MW of additional power over the next 10 years to meet demand. According to industry sources, USD57bn will be spent in the next six years in the Middle East and Africa on new capacity addition.

Country	Capacity (in MW)	USDm
Saudi Arabia	20,000	15,000
Iran	20,000	10,000
UAE	6,000	5,100
Kuwait	3,400	2,500
Bahrain	1,200	900
Oman	1,100	900
Qatar	800	600
Jordan	750	445
Lebanon	350	175

Source: MEED

Afghanistan

War-stricken countries like Afghanistan also represent opportunities. Afghanistan is creating national transmission grids which will require 220kV and 110kV transmission lines.

Implications for listed entities

- Utilities players like Tata Power, NTPC, GMR Infrastructure and Torrent Power should benefit from their generation and T&D infrastructure investments.
- **Turbine and boiler makers** such as BHEL and Alstom should gain from demand for their products for power generation.
- T&D equipment players like BHEL, ABB, Siemens and EMCO Transformers should benefit.
- Construction of power plants and T&D infrastructure players like L&T, KEC, Jyoti Structures and Kalpataru Power should also gain.



Turning capabilities into growth

- We believe the Indian T&D sector can meet growing demand
- We estimate industry growth at 14% and our selected stocks to show 25-35% CAGR for the next five years
- Key risks are delays in order tendering, execution of order backlog and increasing competition

In the last chapter, we looked at the key demand drivers for T&D segment. Here we analyse the capacities of the industry and try to quantify growth that the T&D segment will see in India.

We believe that T&D companies under our coverage will grow much faster than the industry average due to market dominance and superior technical skills. Key risks include delays in order tendering, order execution and competition.

Equipment capacities and requirement

Indian transmission line companies will see strong order flow from domestic spending in T&D. According to industry sources, orders from overseas markets like the Middle East and Africa should also be strong.

Capacity requirement

The Ministry of Power has stated that the following will be required:

 Transmission lines. 60,000 km of transmission line will be required to be constructed by 2012 by PGCIL. This will increase with the pace at which new power generation capacity is added.

Transmission line towers. 2,000,000 tonnes of transmission line tower structures will be required to achieve this target. This will translate into 400,000 tonnes of tower structures per year. The bulk of requirement will be generated by PGCIL and National Grid in the domestic market.

Most transmission line companies are active in the overseas markets and some capacity will be required to fulfil those commitments.

Towers requirement				
per annum in tonnes				
400,000				
100,000				
100,000				
75,000				
675,000				

Source: IEEMA

Similarly, 12,000 km of stringing (cables between two transmission towers) per annum will be required for 60,000 km of conductor (cables



carrying high voltage of power) in the next five years.

Conductor stringing requirement				
per annum in km				
12,000				
3,500				
15,500				

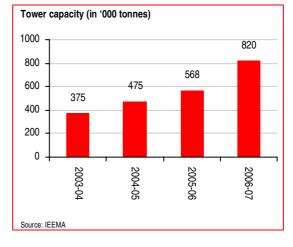
Industry capacity

The transmission tower companies had a difficult year in FY03 due to a slowdown in orders and government focus on power generation instead of T&D.

Since then, the government has recognised the importance of developing T&D. In the last three years, the industry has increased capacity from 375,000 tonnes per annum to 820,000.

For stringing purposes the industry has added c40 machines in the last three years; the number of machines available currently is close to 100.

Thus, we believe that the industry will be able to fulfil the tower requirements. Most T&D companies have unutilised capacity of c50%.



Metal prices moving down

Another factor that would drive profitability for power transmission and distribution companies is the decline in raw material prices.

The primary raw materials for the transmission tower industry are steel and zinc. The prices of these metals have declined in recent quarters.

The industry would benefit from low raw material prices.

Most overseas orders executed by Indian EPC transmission line companies are fixed-value contracts and a decline in raw material prices would improve their margins.

KEC International has a large order backlog of overseas orders and will stand to benefit. Jyoti







Structures and Kalpataru Power, which are more of domestic players, also have 30-40% of order backlog from overseas.

Growth prospects

We have discussed the key drivers in the T&D sector and government initiatives to attract private investment.

We have tried to quantify companies' growth prospects. According to the Ministry of Power, the current network of transmission lines is 330m Ckt Km. The government has plans to add 60,000 Ckt Km at a cost of INR705bn.

According to industry sources, 1 Ckt Km of transmission line cost INR100m. SEBs, RGGVY and private players are expected to spend INR400bn which will translate into demand of 40,000 Ckt Km of lines.

This means the present network of transmission lines of 330m Ckt Km is likely to increase to 430m Ckt Km by 2012. This translates into CAGR of 14% for the period of 2006-12.

We believe that the companies in our coverage will grow 25-35% y-o-y which is much faster than the industry, because:

- They should gain market share as smaller manufacturers would end up as subcontractors
- Designing and technical expertise matters more than tower manufacturing
- They are active in overseas markets, which creates additional demand

In this report we initiate coverage on Jyoti Structures and Kalpataru Power, and re-rate KEC International.

We believe that KEC would record sales CAGR of 22% for FY06-FY09e as 77% of order backlog is

from overseas and domestic orders are likely to pick up.

Jyoti Structures is likely to see sales CAGR of 34% for FY06-FY09e, the key reasons being strong domestic orders and its partnership with Reliance Energy, which should provide financial muscle and help it win bigger contracts.

We believe that Kalpataru Power will see sales CAGR of 46% over FY06-FY09e. The company has a history of fast execution of projects (CAGR of 46% from FY02-06) and other businesses like power generation and infrastructure division will contribute to sales growth.

Risks

We believe profitability will increase more than revenues for transmission line companies as increase in capacity utilisation will lower fixed costs and raw material prices are also trending down. Some key risks include:

- Delays in tendering of orders: The government is the biggest customer for most of the transmission line companies. An economic slowdown might reduce funding and impact the flow of orders
- Execution of order book: The companies in our coverage like KEC, Jyoti Structures, Kalpataru Power might be affected by funding issues or adverse weather
- Competition: Intensifying competition could have an impact on EPC contract profit margins. We believe that company-specific factors like capital structure are also key determinants for profit margins



Power cables

- Power generation capacity additions, growth in T&D sector, industrial growth and real estate demand to push up demand
- Low metal prices would increase margins
- Branded cables to benefit as consumers shift towards security and safety; standardisation of products and VAT are also positive

Power cables

Cables are an essential link to the power transmission story in India and can primarily be categorised into two classes:

- Conductor cables are used to transmit high voltage power from generation plants to substations.
- Power cables are used to transmit power from substations to transformers and finally to consumers. Based on power transmitting capacity power, cables are classified as hightension, medium tension and low tension.

Based on the kind of insulation, power cables can be further classified as:

- XLPE insulated cables
- PVC insulated cables
- Rubber insulated cables
- Speciality cables

Key drivers

We have already identified some of the key demand drivers for the power cable sector which include:

- Addition to power generation capacity
- Generation will require new infrastructure for T&D and existing infrastructure to be upgraded
- Demand from industrial capacity expansion
- Booming real estate demand supported by increased disposable income

Power generation

In our earlier chapters, we detailed government plans to add 66GW of power generation in the 11th Five-year Plan, a CAGR of 9.3%.

For the 12th Five-year Plan (2013-18), India aims to add another 86.5GW of power generation capacity.

This represents a huge opportunity for companies that manufacture power cables.

Focus on T&D sector

In the last chapter, we discussed the government focus on T&D sector. We argue that the government has recognised that growth in power generation has to be supported by increased investments in power transmission and distribution.



As we mentioned earlier, Power Grid plans to spend INR705bn to add 60,000 Ckt Km of lines by 2012. The APRDP scheme – started in 2001 to reduce T&D losses by SEBs – plans to spend INR122bn.

Distribution is expected to improve by increasing access to power for all villages by 2012, supported by plans to spend INR55bn on rural electrification.

To match the pace of the generation in T&D sector private participation needs to be encouraged. The government has identified 14 transmission projects with total investment of INR260bn which will operate under a build own operate scheme by the private players.

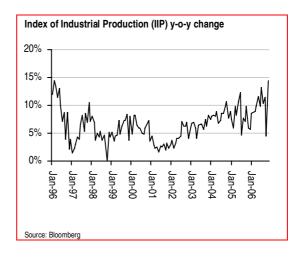
All this will have an impact on power cable makers. In addition, there are also some general drivers of demand for power cables:

- Growth in industrial capacity
- Real estate demand
- Housing sector
- Retail and commercial construction businesses

Industrial capacity expansion

In India, the Index of Industrial Production (IIP) is representative of growth in the industrial sector. The government also announces growth of Mining, Manufacturing and Electricity separately. Looking at the growth trends it is evident that new investment will be required.

Aside from power, other drivers are the mining sector, supported by growing demand for coal, and the manufacturing sector supported by growth in installed capacity as the existing capacity utilisation has reached high levels.

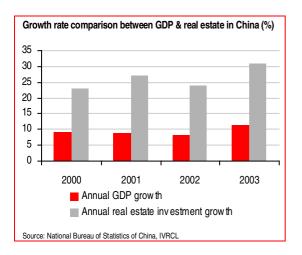


According to industry sources, all new projects will spend 3-4% of total planned investment on power cables.

Real estate demand

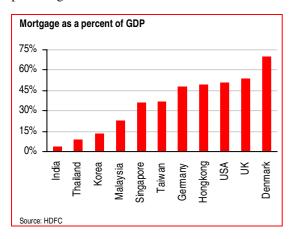
In a recent report, *Building India: Party to Continue* dated 10 January 2007, our Construction & Engineering analyst Sumeet Agrawal says, another sector that demands power cables is real estate. The Indian real estate and construction industry is worth USD12bn. Overall, estimated investment opportunity in real estate and construction over the next five years is in the range of USD50bn – 30% CAGR over the same period.

The growth in the real estate sector will be reflected in the growth in power cables. During a growth period, typically, the real estate market grows 2-3 times faster than GDP.

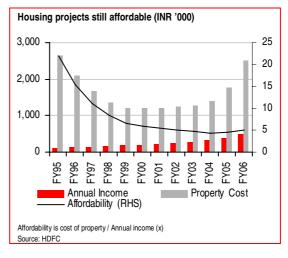


Housing sector

The changing demographic profile, with a rising income-earning age-group and the break-up of multi-generation families, has resulted in a substantial increase in housing demand. Easier access to funding, lower interest rates and tax benefits have also added to demand. Besides, India has the lowest ratio of mortgage as a percentage of GDP.

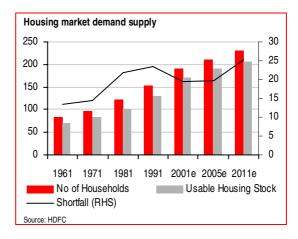


Increasing income levels have reduced the affordability index, i.e. property value is 5x the average annual salary vs. 22x in 1995.



HSBC (X)

According to a study done by the Housing Development Finance Corporation (HDFC), the shortfall in housing in India will increase to 25.3m houses from the current 19.8m by 2011.



This shortfall is despite a sharp increase in investment in the housing sector in the 10th Five-year Plan to INR7,263bn (INR1,510bn in the 9th Plan).

Investment in housing sector						
(INRbn)	Total investment					
First Five-year Plan (1951 -1956)	12					
Second Five-year Plan (1956 -1961)	13					
Third Five-year Plan (1961-1966)	16					
Fourth Five-year Plan (1969-1974)	28					
Fifth Five-year Plan (1974-1979)	44					
Sixth Five-year Plan (1980- 1985)	195					
Seventh Five-year Plan (1985-1990)	315					
Eighth Five-year Plan (1992-1997)	975					
Ninth Five-year Plan (1997-2002)	1,510					
Tenth Five-year Plan (2002-2007)	7,263					

Source: Planning Commission



Retail and commercial construction

Retail and commercial construction is another driver for urban infrastructure. Rising income levels coupled with increasing disposable income has resulted in a retail boom. According to industry estimates, 75m sq ft of additional retail space will be built over the next five years, resulting in investment of USD2-3bn.

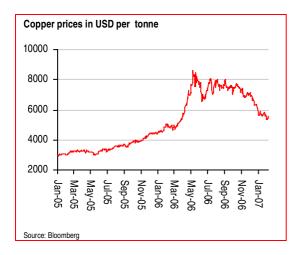
Growth in IT/ IT Enabled Services (ITES) and hospitality industries is also driving commercial space requirement in urban India. The IT/ITES sector alone would require an additional 118m sq ft of office space at an estimated investment of USD3bn (2x investments made during FY02-05) over the next few years, according to industry estimates.

For further detail, please refer to Sumeet Agrawal's report titled Building India: Party to continue dated 10 January 2007.

We believe this growth in real estate would push demand for the T&D sector, and would translate into increasing orders.

Low metal prices hike margins

The primary raw materials for the power cable industry are copper and aluminium. The prices of these metals have eased after sharp rallies in recent years. The power cable industry will stand



to benefit as margins improve if the prices remain at these low levels. Low raw material prices will reduce the working capital requirements for cable companies by reducing inventory levels.

Branded products will benefit

According to industry sources, there is a huge unbranded power cables market in India. The organised market is very active in low tension power cables because of the low investment requirement. But we believe that the organised branded product manufacturers will benefit from recent changes in the industry. We discuss some of the key changes here.

VAT replaces a more expensive tax

The Value Added Tax (VAT) regime in most of the Indian states will make branded products competitive with unbranded products in cables market. Cable manufacturers were paying 12.5% Central Sales Tax (CST), which the unorganised players usually didn't. With 4% VAT replacing the 12.5% Central Sales Tax, branded product manufacturers like Finolex and Havells stand to gain.

Standard specifications for cables

The Government has also standardised cable specifications. It would be quite a challenge for unorganised players to meet the new specifications.



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Working capital requirement increase

The working capital requirement for cable companies has increased due to increases in the prices of the copper and aluminium which are primary raw material. The high working capital requirement has led to exits from the industry.

Brand recognition

With the increase in awareness about safety and security, consumers are shifting increasingly to branded cables manufacturers that adhere to the required specifications and carry the Indian Statistical Institute (ISI) mark.



Finding common traits

- Net profits have grown at a faster pace than revenues
- Generation is capital-intensive while T&D and equipment requires working capital
- Margins expanded due to increase in capacity utilisation

Power universe

We have compared companies in the power value chain – from power generation to transmission distribution companies and electrical equipment suppliers – on three parameters:

- Momentum
- Productivity
- Profitability

We have used a simple average of three years' performance for all the companies.

In this report, we initiate coverage on two transmission line companies, Jyoti Structures and Kalpataru Power, and re-rate KEC International.

In electrical equipment, we initiate coverage on two cables companies, Havells India and Finolex Cables.

Crompton Greaves (Not Rated) manufactures transformers and switch gears, like Havells. Bharat Bijlee and EMCO Transformers, neither of which is rated by HSBC, are purely transformers players while Thermax (Not Rated) produces steam boilers.

From the power generation space we picked a mix of public sector companies like NTPC and private

players like Tata Power and Reliance Energy, for comparison purposes.

Profit growth greater than revenues

Profits at all the companies in our universe have grown at a faster rate than revenues.

Power generation

It is evident from the momentum parameters that the growth posted by T&D, electrical equipment and power cables companies was much faster than it was for power generation companies in the last three years.

Most of these companies had a difficult year in FY03 due to lack of order flow but demand picked after new government initiatives to build power infrastructure.

The parameters suggest that in the last three years, margins of these power generation companies expanded as increased demand led to improved capacity utilisation, thereby reducing fixed cost per unit.

Transmission line

Similar trends can be seen in transmission line companies like KEC International, Jyoti Structures and Kalpataru Power. The net profit margins of Kalpataru were stable even in tough



times due to its presence in diversified business segments.

KEC International had low margins as it had lowmargin projects until FY06. But the company has closed these projects, and 9M FY07 results margins are in line with peers which have triggered the re-rating of this stock.

Jyoti Structures has posted the sharpest improvement in net profit margin among companies in our universe. FY02 was a tough year for the company, when EBITDA margin was reduced to 2.4% but it recovered in FY03 to c9%, which led to a 10-fold increase in net profit.

Electrical equipment

Havells India is the fastest growing company in our Indian electrical equipment universe. The company has expanded rapidly in power cable and switch gear businesses and is now investing in the consumer electrical durables segment. It has maintained its EBITDA margin at 9-10% over the last few years and net profit margin increased from tax incentives it got from its manufacturing facilities in a tax-free zone.

Among the three transformer companies, EMCO Transformers (Not Rated) has shown the best growth in both revenues and net profits. Thermax's (Not Rated) prospects look bright as increased power generation will raise demand for boilers.

Finolex Cables has been a laggard in our universe. The primary reason for the non-performance has been lack of demand of its communications cable division. The power cable business has been performing well.

We believe that Finolex's strategy to convert half of its communications cables division into an electrical cable division has started paying off as volumes are increasing; the communications business is now in the black.

Analysing productivity

Generation is capital-intensive

Power generation is a capital-intensive business and our data points for generation companies indicate higher capex as a percentage of sales compared to transmission line and electrical equipment supplier companies.

T&D companies have very low capex as there is overcapacity in the industry. But as the order flow both from domestic and overseas markets is healthy, capacity utilisation has increased, which is reflected in the high growth in revenues and profits. A similar trend can be seen in the equipment supplier companies.

Power universe: peer group comparison, 3-yr average (FY04-FY06)									
Company	NTPC	Tata Power	REL	KEC Intl	Jyoti	Kalpataru			
Momentum									
Sales growth	11%	3%	3%	34%	41%	46%			
EBIT growth	13%	-4%	65%	37%	53%	84%			
Net earnings growth	19%	5%	80%	117%	447%	97%			
Productivity									
Capex as % sales	24%	7%	7%	2%	2%	6%			
Fixed asset turnover	0.3x	0.5x	0.3x	0.8x	1.1x	1.2x			
Net debt/ total equity	31%	34%	-13%	160%	137%	110%			
Cash conversion (days)	177	90	227	146	134	105			
Profitability									
EBIT Margin	32%	22%	17%	9%	9%	10%			
EBIT/ Assets	11%	11%	5%	7%	10%	12%			
Net RoE	14%	11%	8%	17%	15%	27%			

Source: Prowess, HSBC

Company	Finolex Cables	Havells India	Thermax*	Crompton Greaves*	Bharat Bijlee*	EMCO*
Momentum						
Sales growth	19%	56%	44%	18%	28%	47%
EBIT growth	16%	56%	50%	30%	101%	37%
Net earnings growth	29%	96%	46%	85%	205%	97%
Productivity						
Capex as % sales	3%	5%	2%	2%	2%	3%
Fixed asset turnover	0.6x	1.8x	1.0x	1.6x	1.5x	0.9x
Net debt/ total equity	30%	137%	-5%	56%	46%	107%
Cash conversion (Days)	102	105	154	49	75	173
Profitability						
EBIT Margin	9%	10%	11%	7%	13%	11%
EBIT / Asset	6%	17%	11%	11%	19%	11%
Net RoE	7%	35%	18%	16%	43%	11%

* Not rated by HSBC Source: Prowess, HSBC

Asset turnover – low for generation companies, high for others

As generation is capital-intensive, asset turnover of power generation companies is low. Other companies in the power universe have higher asset turnover ratio than these.

For example, T&D companies execute EPC contracts, which increases asset turnover. The non-core part of contracts is sourced from original equipment manufacturers (OEM).

Among electrical equipment companies in the preceding table, Finolex Cables has low asset turnover because of low contribution from its communication cables division. We expect its asset turnover to improve as part of the communications cable facility has been converted into an electrical cables division.

High working capital requirement

The power business is working-capital-intensive as the business conversion cycle is long.

The long conversion cycle could be the result of industry dynamics or companies strategy. For companies in power generation and T&D, the customers are public companies; this implies high debtors' days.

Finolex's strategy is to keep debtor days low but to carry higher inventory, as inventory can be converted into copper and sold easily.

It is important, however, to analyse how electrical equipment companies fund working capital and capex requirements. The low debt to equity for generation companies indicates that more equity and internal accruals are deployed rather than debt.

T&D and electrical equipment suppliers require more working capital funds rather than capex as they have low capacity utilisations. Most of these companies have high working capital loans and lower term loans.

The recent results of these companies indicate that their dependence on working capital loans has reduced as finance cost has not increased in line with the increase in revenue.

Profitability

Generation companies command higher margin than T&D and electrical equipment companies. The key reason is that most T&D companies and electrical equipment companies have EPC contracts, with margins significantly lower than generation companies.

The trend in the T&D and electrical equipment companies of higher capacity utilisation has led to Electrical Equipment India 26 February 2007



expansion of margins. These companies have seen tough times in FY02 and FY03 and with the improvement in industry fundamentals, the companies have either turned back into the black or have improved profitability.

Power generation companies deploy equity and will have low RoE. Among the T&D companies, Kalpataru Power has higher RoE than Jyoti and KEC. We expect improvement in KEC's RoE as order backlogs are strong and execution should be faster than before.

Among power equipment companies in our universe, Havells India has the highest RoE. The company has substantially raised its revenues and maintained its net profit margin. We expect the profit margin for Finolex to improve as contribution from the electrical division increases. This will improve RoE.



Our matrix

- Transmission line companies are cost leaders; Havells is a cost leader while Finolex Cables is a value pick
- High RoE means high valuation for Kalpataru and Havells; Finolex Cables, KEC International and Jyoti Structures have potential for higher valuation

Asset turnover & EBIT margin

We have compared our power universe in asset turnover and EBIT margins and classified the companies in four quadrants

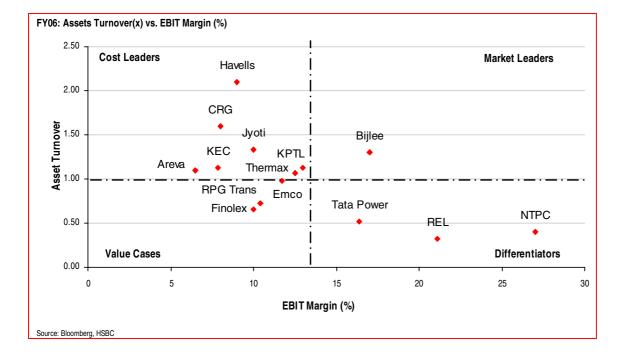
- (Asset Turnover, EBIT margin) Cost leaders (High, Low)
- Market Leaders (High, High)
- Differentiators (Low, High)

• Value Cases (Low, Low).

The dotted lines are the average of our universe – Asset turnover at 1x and EBIT margin, at 13%.

Our universe

All power generation companies in our Indian universe fall under the Differentiator category as they have high margins and asset turnover is lower than average as their businesses are capital intensive.





T&D sector companies like KEC International (KEC), Jyoti Structures (Jyoti) and Kalpataru (KPTL) and Areva have higher asset turnover and lower EBIT margin than average and are cost leaders. RPG Trans qualifies as a value case.

We have a mix of categories in electrical equipment. We have Bharat Bijlee (Bijlee) as market leader and Finolex Cables (Finolex) as a value case. Other electrical equipment manufacturers which include Havells, Crompton Greaves (CRG), Thermax and EMCO are cost leaders.

T&D

The asset turnover of most of the T&D companies is close to 1x. Margins are the key differentiator. KPTL has the highest margin due to diversified business and better margins in its T&D business.

We believe that the other T&D companies will catch up with KPTL's margins indicated in the Q3 FY07 results. As these T&D companies are cost leaders, assuming that they increase asset utilisation, they can improve profitability.

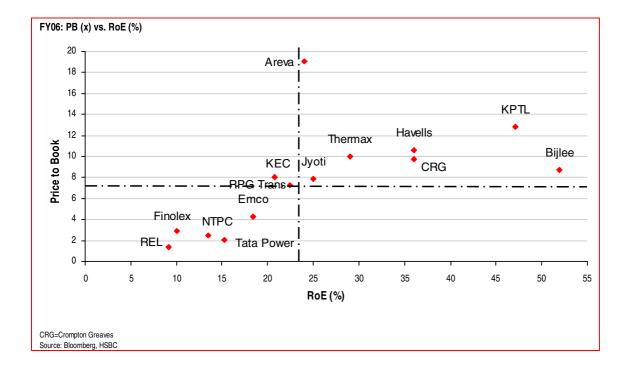
Electrical equipment

Havells India is an example of a company with improving profitability and higher utilisation of assets. We believe that Finolex Cables, which is a value case, will improve on asset utilisation as part of its non-contributing communication cables business has been converted into a high-margin, high-turnover electrical cables business.

Valuations

We have used the valuation matrix of Price to Book (PB) and RoE. Our universe is concentrated towards extreme quadrants of high PB high RoE and low PB, low RoE. It is important to analyse why some companies have higher valuation and which companies have the potential to attain higher valuation.

Among the T&D companies, KPTL commands the highest PB which is justified by high RoE. We believe that KEC and Jyoti will witness an improvement in valuation as EBITDA margin has improved; with its strong order backlog and improved capacity utilisation, this is likely to be



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sustainable.

Among the cables companies, Havells India commands the highest valuation which is justified by high RoE. We believe that valuation for Finolex Cables will increase as the company improves its RoE through focusing on business which is profitable to drive PAT, thereby improving RoE.



Re-rating KEC Intl.

- Improving EBITDA and net margin now close to peers
- Discount to CNX Midcap Index and peers narrowed
- Upgrade from Underweight (V) to Neutral (V); target price INR680

About KEC International

KEC International (KEC) is a dominant player in the EPC transmission line business in India. Our investment case for KEC is that it has a strong order backlog of INR30bn to drive revenue. A large portion of the order backlog (c77%) consists of overseas orders and domestic orders are also likely to grow.

We believe that increased capacity utilisation should improve EBITDA margin. The net profit margin should expand more than EBITDA margin due to lower-than-expected financial cost from debt restructuring. Incremental working capital requirements will be met by internal accruals.

We recently lowered our rating from Overweight (V) to Underweight (V) with a target price of INR480. The key reason was a rally in stock (37% in three trading days, from 11 January 2007) triggered by good Q3 FY07 results, offering limited potential upside of c1% and thus qualifying for an Underweight (V) rating in our rating system.

Looking for re-rating

We have analysed the trading history of KEC which indicates that the company was trading at a discount to its peers like Jyoti and KPTL and also to the CNX Midcap Index. We believe that the key reason for the discount was lower EBITDA margin and higher finance cost than peers, leading to low net profit margin.

Reason for re-rating

The key reason we are re-rating the stock are:

- EBITDA margin has improved to over 12% for 9M FY07, in line with peers
- Declining finance cost has improved net profit margin, which is c5% for 9M FY07; this is in line with peers
- Rolling one-year forward PE discount to CNX Midcap and peers has narrowed

Neutral (V) with target price of INR680

Our new rating is Neutral (V) with a target price of INR680 determined by the mid-point PE multiple and DCF approach valuation.

- Our DCF model yields fair value of INR580
- We believe that as the discount between KEC and CNX Midcap Index has narrowed; it is reasonable to apply rolling one-year PE multiple of 19x on our FY08 EPS estimate of INR37.6 to arrive at a fair value of INR720

Q3 FY07 results trigger rally

KEC reported strong Q3 FY07 results which triggered a stock rally. The key takeaways from the results were:

- Sales were up 25% y-o-y; this was in line with our estimates
- The key positive surprise was EBITDA margin of 14.1% in Q3FY07; this is the highest in the last eight quarters and an improvement of 480bps over the corresponding quarter last year
- Q3 FY07 net profit margin improved by 280bps y-o-y, which was lower than EBITDA margin improvement. Higher amortisation & depreciation and tax provision was offset by low finance cost, indicating better working capital management

Q3 FY07: Income Statement (INRm)								
Year end Mar	FY07 Q3	FY06 Q3	% change y-o-y					
Gross Income	5,724	4,579	25.0%					
Expenditure	4,918	4,154	18.4%					
EBITDA	806	425	89.6%					
EBITDA Margin	14.1%	9.3%						
Depreciation	83	64	29.3%					
EBIT	724	361	100.3%					
EBIT Margin	12.6%	7.9%						
Interest	149	136	9.6%					
PBT	574	225	155.1%					
PBT Margin	10.0%	4.9%						
Provision for Taxation	192	49	296.5%					
PAT	382	177	116.2%					
Net Profit Margin	6.7%	3.9%						
EPS	10.1	4.7	116.2%					

Source: Company, HSBC

We have analysed EBITDA margin trends for the last three quarters and 9M FY07; substantial improvement is indicated y-o-y in the last three quarters.

For this period, EBITDA margin was the lowest in Q1 FY06 and it was at its peak in Q3 FY07. 9M y-o-y improvement was c302bps at 12.5%. The primary reason for improvement in margin is faster than expected execution of projects, which led to low overheads and material costs.

Quarterly EBITDA comparison y-o-y

Quarters	FY06	FY07	y-o-y chg. (bp)
June	9.0%	10.4%	140
September	9.5%	12.3%	280
December	9.8%	14.1%	433
9-month	9.4%	12.5%	302

HSBC 🚺

Source: Prowess, HSBC

EBITDA and net profit margin in line with peers

We mentioned earlier that the key reason for KEC trading at discount to the peers was lower EBITDA and net profit margins.

We have analysed KEC's margins compared to its peers including Areva T&D India (Not Rated), Jyoti Structures, KPTL and RPG Transmission (Not Rated).

We have looked at the last three quarters for FY07 as compared to the corresponding quarters in FY06.

9M FY07 y-o-y change

Company	KEC	Jyoti	KPTL	Areva	RPG
Sales	16%	44%	109%	28%	93%
EBITDA	58%	73%	139%	116%	172%
EBITDA Margin	302	205	199	575	336
EBIT	61%	76%	142%	132%	200%
EBIT Margin	275	210	202	593	393
PBT	106%	119%	156%	128%	349%
PBT Margin	315	288	234	569	507
PAT	124%	123%	170%	163%	200%
Net margins	209	191	212	440	205

Note: Avera T&D and RPG are not rated by HSBC. EBITDA Margin, EBIT Margin, PBT Margin and Net Margin y-o-y change in basis points (bps) Source: Prowess, HSBC

The key observations include:

The sales of all companies in the table above have grown. Among these companies, KEC had the highest absolute sales. Thus, a higher base has led to slower sales growth relative to other companies.

High capacity utilisation has improved EBITDA margin. For KEC, this has improved to 12.5%, an improvement of c350bps which is higher than its peers Jyoti Structures and RPG. Kalpatrau



	9M FY07					9M FY06				
Company	KEC	Jyoti	KPTL	Areva	RPG	KEC	Jyoti	KPTL	Areva	RPG
Sales	14,527	7,214	10,088	11,125	2,715	12,496	5,023	4,817	8,695	1,407
EBITDA	1,810	872	1,603	1,570	313	1,148	505	670	727	115
EBITDA Margin	12.5%	12.1%	16.0%	14.1%	11.5%	9%	10%	14%	8%	8%
EBIT	1,556	830	1,435	1,469	299	967	471	614	632	100
EBIT Margin	10.7%	11.5%	14.8%	13.2%	11.0%	8.0%	9.4%	12.8%	7.3%	7.1%
PBT	1,131	601	1,300	1,440	241	548	275	509	631	54
PBT Margin	7.8%	8.4%	13.0%	12.9%	8.9%	4.6%	5.5%	10.6%	7.3%	3.8%
PAT	745	386	950	953	156	333	173	352	363	52
Net profit margins	5.1%	5.4%	9.5%	8.6%	5.8%	3.0%	3.4%	7.4%	4.2%	3.7%

Transmission line companies' quarterly results comparison (in INRm)

Note: Avera T&D and RPG are not rated by HSBC.

Source: Prowess, HSBC

traditionally had higher EBITDA margins than KEC.

The improvement in EBITDA margin was reflected in net profit margin. KEC's net profit margin has improved to 5%, an improvement of 210bps y-o-y, which is close to its peers.

We believe the key reason for the stock to trade at a discount to its peers is in line and we believe the discount will narrow.

Valuation

PE multiple

KEC International was listed in March 2006 and was trading at a discount to both Jyoti Structures and KPTL and the CNX Midcap Index until January 2007. From January 2007, the discount has narrowed and is holding on to its gains.

Comparison with peers

We have used rolling one-year forward PE multiple and compared KEC's trading history with its peers like Jyoti Structures and KPTL.

Jyoti Structures: KEC was trading at premium to Jyoti in the initial period after listing. Due to low margins in FY06, KEC's stock started trading at a discount to Jyoti. The average discount during the period from March 2006 until now is 20%.

Jyoti Structures is currently trading at rolling oneyear forward PE multiple of 30x . EBITDA margin and net profit margins of KEC and Jyoti are almost on a par with each other, and we believe KEC should move towards the PE multiple discount mean of 24x.

Kalpataru Power: KEC was also trading at the premium to KPTL. Due to low margins in FY06, KEC's stock started trading at a discount. The average discount between the stock prices of KEC and KPTL from March 2006 until now is 17%.

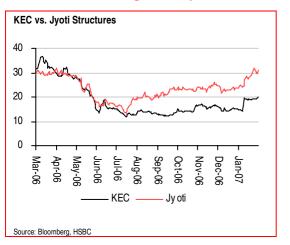
KPTL is currently trading at rolling one-year forward PE multiple up of 25x. KPTL's EBITDA and net profit margin was higher than the industry average primarily due to superior project management and diversified business streams. We believe that KEC should at least move towards the mean PE multiple discount (21x).

With CNX Midcap Index

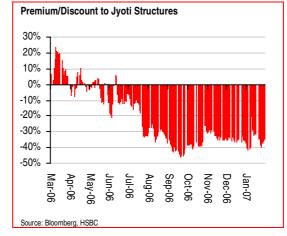
The trading pattern compared to CNX Midcap index was similar to the other two peers. The period of premium was followed by the period of discount. But currently, the discount to the Index has narrowed and we believe with the current state of growth, KEC will move in line with the index rolling one-year forward PE – currently at 19x.

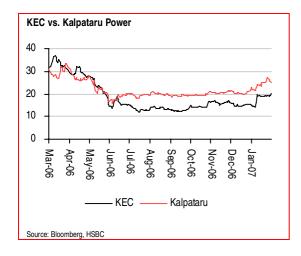
Thus, looking at the trading pattern with the peers and Index, we have a band of rolling one-year forward PE multiple of 19x-24x. We value KEC at the lower end of the band based on our FY08e 37.6 which gives a fair value of INR720.

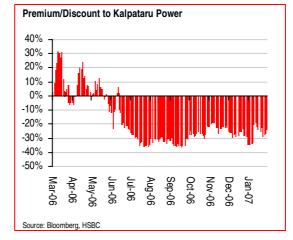


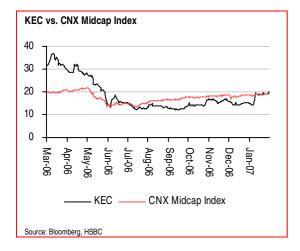


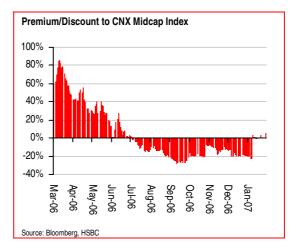
KEC Int'l rolling one-year forward PE band comparison













DCF approach

We have made changes in our DCF drivers. Some of the key changes are:

- We have assumed cost of equity of 13.5% (from 12.5%) to align with our global rating system
- With the higher visibility in the T&D sector we have increased our semi-explicit period from 5 years to 10
- We believe that for sustainable growth and profitability the company needs higher growth in invested capital. We have changed our assumption of invested capital growth from 5% to 10%.

Our three-stage DCF explicitly forecasts to FY09, then trends for a semi-explicit forecast period of 10 years, then fades for another 10 years finishing in 2029.

With changes in forecast drivers, our DCF model yields a fair value of INR580 which is higher than our earlier DCF-based fair value of INR465.

Neutral (V) with target price of INR680

We have used a combination of PE multiple and DCF approaches to determine the target price for KEC:

Our DCF model yields a value of INR580.

Based on our FY08e EPS forecast of INR37.6 and

assuming rolling one-year forward PE of 19x, we arrive at fair value of INR720.

The mid point – INR680 – of the two valuation approaches is our revised target price, increased from INR480.

KEC International is classified as a volatile stock in our rating system, meaning that if the returns range between 3.5-23.5% it is classified as Neutral. With the potential upside 22%, including dividend, we upgrade the stock from Underweight (V) to Neutral (V).

Risks

The key risks to our valuation for KEC are:

- Economic slowdown could lead to diversion of government funds towards priority sectors, which would affect spending on power
- Slowdown in order flows and depleting order backlog would have an impact on revenue growth
- Delays in project execution would delay revenue booking;
- Disappointment on EBITDA margins will impact KEC's valuation
- Any increase in raw material prices (steel) would put pressure on EBITDA margins

DCF Drivers								
Heads	2007	2008	2009	2010	over 20 years	2030		
Asset Turn (x)	4.24	5.39	6.77	8.56	fading to	5.40		
Pre-tax margin	10.0%	10.6%	11.0%	11.5%	fading to	4.9%		
Tax effect	35.2%	35.2%	35.1%	35.1%	fading to	35.1%		
ROIC	27.5%	36.9%	48.4%	63.8%	fading to	17.3%		
Cost of capital	13.5%	13.5%	13.5%	13.5%	fading to	13.5%		
Turnover growth	na	22.0%	25.0%	25.0%	fading to	17.3%		
IC growth	26.3%	17.5%	12.8%	13.0%	fading to	5.0%		
ROIC - Cost of Capital	14.0%	23.4%	34.9%	50.3%	fading to	3.8%		

Source: HSBC



Neutral (V)

Financials & valuation: KEC International

Financial statements									
Year to	03/2006a	03/2007e	03/2008e	03/2009e					
Profit & loss summary (INR	im)								
Revenue	17,273	20,727	25,287	31,609					
EBITDA	1,627	2,404	3,031	3,884					
Depreciation & amortisation	-269	-328	-345	-362					
Operating profit/EBIT	1,358	2,076	2,685	3,521					
Net interest	-593	-482	-499	-516					
PBT	765	1,594	2,186	3,006					
HSBC PBT	0	0	0	C					
Taxation	-272	-561	-769	-1,055					
Net profit	493	1,033	1,418	1,950					
HSBC net profit	493	1,033	1,418	1,950					
Cash flow summary (INRm)								
Cash flow from operations	1,157	1,646	2,460	3,269					
Capex	-385	-200	-200	-200					
Cash flow from investment	-325	-200	-200	-200					
Dividends	0	-45	-95	-130					
Change in net debt	-432	-1,401	-2,166	-2,940					
FCF equity	-27	1,027	1,685	2,279					
Balance sheet summary (I	NRm)								
Intangible fixed assets	2,339	2,202	2,066	1,930					
Tangible fixed assets	1,951	1,959	1,950	1,924					
Current assets	10,764	13,754	18,139	24,113					
Cash & others	636	2,037	4,203	7,143					
Total assets	15,267	18,128	22,368	28,180					
Operating liabilities	9,723	11,207	13,518	16,681					
Gross debt	3,326	3,326	3,326	3,326					
Net debt	2,690	1,289	-877	-3,816					
Shareholders funds	1,872	2,860	4,183	6,004					
Invested capital	4,695	4,671	4,435	4,144					

Valuation data Year to 03/2006a 03/2007e 03/2008e 03/2009e EV/sales 0.5 1.3 1.0 0.8 EV/EBITDA 14.1 8.9 6.4 4.2 EV/IC 4.4 4.0 4.9 4.6 41.9 PE* 20.4 14.9 10.8 P/NAV 11.3 7.4 5.0 3.5 FCF yield (%) Dividend yield (%) -0.1 5.1 8.3 11.3 0.0 0.2 0.4 0.6

Note: * = Based on HSBC EPS (fully diluted)

Issuer information	n						
Share price (INR)	559.35	Target price (INR)	680.00	D Potent'l	tot rtn (%)	21.6
Reuters (Equity) Market cap (USDn	n)	KECL.BO 461			(Equity) (INRm)		ECI IN 20,393
Country Analyst	Sande	India eep Somani	Sec Cor	tor E ntact	ELECTRON	IIC EQUIPI 91 22 226	

Note: price at close of 21 Feb 2007

Ratio, growth and per	share analysis	
Year to	03/2006a	

Year to	03/2006a	03/2007e	03/2008e	03/2009e
Y-o-y % change				
Revenue	40.3	20.0	22.0	25.0
EBITDA	28.2	47.8	26.1	28.2
Operating profit	16.2	52.9	29.4	31.1
PBT	12.3	108.4	37.2	37.5
HSBC EPS	17.7	105.1	37.3	37.5
Ratios (%)				
Revenue/IC (x)	3.6	4.4	5.6	7.4
ROIC	18.3	28.7	38.2	53.3
ROE	19.6	43.7	40.3	38.3
ROA	5.2	8.1	8.6	9.0
EBITDA margin	9.4	11.6	12.0	12.3
Operating profit margin	7.9	10.0	10.6	11.1
EBITDA/net interest (x)	2.7	5.0	6.1	7.5
Net debt/equity	143.7	45.1	-21.0	-63.6
Net debt/EBITDA (x)	1.7	0.5	-0.3	-1.0
CF from operations/net debt	43.0	127.7		
Per share data (INR)				
EPS Rep (fully diluted)	13.36	27.41	37.63	51.75
HSBC EPS (fully diluted)	13.36	27.41	37.63	51.75
DPS	0.00	1.20	2.51	3.44
NAV	49.67	75.89	111.01	159.32

Disclaimer & Disclosures. This report must be read with the disclosures and the analyst certifications in the Disclosure appendix, and with the Disclaimer, that form part of it.



Kalpataru Power

- Sales CAGR at 46% on INR20bn order backlog; EPS at 49% on improving net profit margin over FY06-09e
- Investment in JMC Projects to drive value
- Initiate coverage with Overweight (V) and target price of INR1,575

Investment thesis

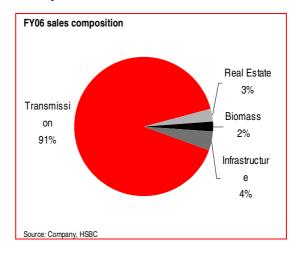
We rate Kalpataru Power Transmission Limited (KPTL) Overweight (V) with a target price of INR1,575, which includes INR95 derived from investment in JMC Projects (India) Ltd (Not Rated). At current levels it is trading at 22.8x FY07e and 16.1x FY08e earnings. We list the key growth drivers here.

- Sales momentum will be strong with INR20bn order backlog. We expect sales to record 46% CAGR over FY06-FY09e.
- Diversified business will keep margin higher than peers. We estimate EPS CAGR of 49% for FY06-FY9e.
- The company rewarded shareholders with bonus issue and raised money through Qualified Intuitional Buyers (QIB) to support the growth momentum.
- ► Low leverage
- Investing in JMC Projects will add value to the shareholders through value appreciation.

Business segments

KPTL is a part of the Kalpataru Group, which holds a 76% stake in the company.

KPTL operates in four business segments, unlike other transmission companies under our coverage which operate in only in the T&D sector. This includes the core business of EPC transmission towers, infrastructure, power generation with biomass as raw material, and real estate development.



Transmission and Distribution

Transmission and Distribution is KPTL's core business, and contributes 85-90% of revenue. This division has generated higher margin than the transmission divisions of KPTL's Indian peers over the years.

The current installed capacity of transmission tower manufacturing is 84,000 metric tonnes. This includes a 100% export oriented unit (EOU) at



Gandhinagar in the state of Gujarat with installed capacity of 30,000 tonnes to feed growing export demand (it also enjoys tax incentives).

Infrastructure

The company entered this segment in FY04 with the primary focus on construction/laying of oil and gas pipelines. It is executing pipeline projects for the Gas Authority of India (GAIL) and Bharat Petroleum Corporation (BPCL). The company is investing in specialised pipe laying equipment to increase volume and revenue.

Biomass power division

This division generates power using renewable and non-conventional energy sources such as agriculture waste like cotton sticks and crop residues like mustard.

The company has two 7 Mega Watt (MW) power plants in the state of Rajasthan. The second power plant was commissioned in November 2006.

It has a Power Purchasing Agreement with Rajasthan Vidyut Prasaran Nigam and other distribution companies. This is a high-margin business but carries a raw material availability risk in case of bad monsoon.

Real estate

The company has developed a residential complex of 267,000 square feet in Mumbai. Most of this complex was sold out in FY06 and is unlikely to be a revenue generator in FY07.

The company has not indicted plans to develop real estate in the near future since group company Kalpataru Construction is in the same business.

Logistics business on drawing board

The company recently raise money through QIP. The part of the money has been invested in JMC Projects where KPTL holds more than c51%. The company plans a foray into the logistic business but has not announced any concrete plans.

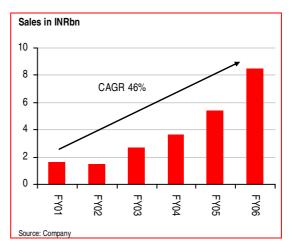
INR20bn order backlog

The current order backlog is INR20bn. Major domestic customers include Power Grid Corporation of India and SEBs. Its EOU caters to the needs in countries in the Middle East and Africa.

With government focus on power generation, transmission and distribution, we expect strong order flow.

Sales momentum to be strong

Sales CAGR was 46% in FY01-06; momentum has been high in the last three years due to rapid execution and strong industry prospects.

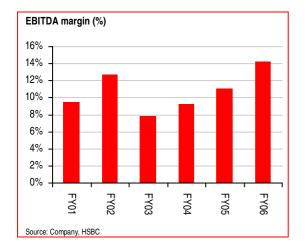


For 9M FY07, sales grew by 109%; we expect sales CAGR of 46% for FY06e-FY09e, slower than the historical growth rate due higher base.

Growth with high margin

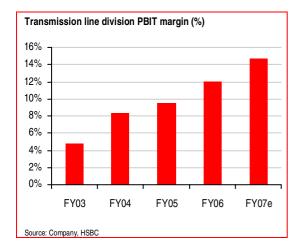
KPTL has a diversified business unlike other Indian transmission companies under our coverage, including high margin operations like power generation and real estate, which has led to higher margins compared to its peers.



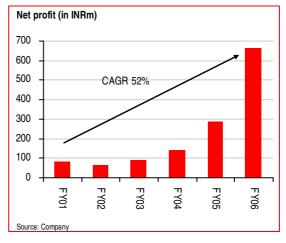


By nature, the EPC transmission line business is a tender-based business; even in this competitive environment the company's EBITDA margin has been greater than of its Indian competitors, especially in the last two years.

Its Profit Before Interest and Tax (PBIT) margin has improved from c5% to c15% in the last five years. Going forward, the sustainability of high margins in the transmission line business will be key.



The power generation business generates PBIT margin of over 30% but the infrastructure business is a low-margin, high-value business. KPTL is increasing its expertise and resources in infrastructure to increase revenue by executing bigger orders. The improvement in the EBITDA margin was reflected in better net margins. The net profit and EPS in last five years recorded a CAGR of 52%. The improvement in profitability has been much higher in the last two years.



We expect net margin to improve further because of a decline in finance cost on utilisation of internal accruals for funding, which increased the working capital requirement. Secondly, we expect a decline in tax rate due to the revenue contribution from the EOU unit and power generation through biomass, both of which are eligible for tax incentives. We expect EPS CAGR of 49% for FY06-FY09e.

9M FY07 results shows strong growth momentum

For 9M FY07, KPTL has shown substantial improvement in sales and profitability.

The company has crossed INR10bn in sales and improved its EBITDA margin by c140bps to reach c16%. Net profit margin improved by 290bps on declining finance cost and tax incentives for the EOU unit and power generation.



9M FY07 results						
INRm	9M FY07	9M FY06	% change y-o-y			
Sales	10,088	4,817	109%			
EBITDA	1,603	670	139%			
EBITDA Margin	16%	14%	142			
Depreciation	114	56	104%			
Interest	189	106	79%			
PBT	1,300	509	156%			
Тах	349	156	123%			
Tax rate	27%	31%	(125)			
PAT	950	352	170%			
Net Margin	9%	7%	288			
EPS	39.6	16.2	144%			

Note: EBITDA margin, Tax rate and net profit margin y-o-y change in basis points (bps) Source: Company, HSBC

EPS grew by 144% which was lower than net profit growth due to issue of new shares for QIB sales. Overall, the results show buoyancy both in business and profitability.

Bonus shares

The Board of Directors of the company approved and announced a bonus of 1:1 in March 2006.

Raised INR3.5bn through QIB

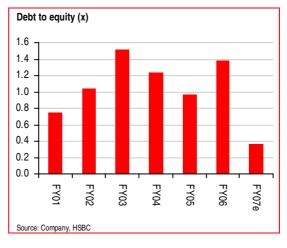
In June 2006, the company decided to raise money by selling shares to Qualified Institutional Buyers (QIB) to the tune of cINR3.5bn.

In September 2006, the company raised INR3.5bn by selling 4.8m shares of face value INR10 each at a premium of INR717 per share to QIB.

Lowering leverage

In last few years the company's debt to equity ratio has been mostly over 1x. It spiked in FY03 and FY6 primarily due to increased working capital requirement and capex.

The recent bonus issue and placement of shares to QIB will substantially lower its debt to equity levels. This will help the company raise money in future. We believe the company is unlikely to raise money in the near future due to strong sales momentum and high profitability.



Investing in JMC Projects

JMC Projects (India) Ltd (JMC) is a listed construction company involved in industrial, power and infrastructure projects.

The current order book is INR8bn which is 5.7x of FY06 sales. KPTL, along with a group company, initially acquired c25% stake in 2004 to diversify into the infrastructure business and since then has increased its stake in the company.

JMC made losses in FY04 and FY05 despite its strong order backlog. The key reasons were slow execution of projects and margin decline due to cost overruns as orders were fixed-value contracts.

The change of control to KPTL management has changed the fortunes of the company and it went into the black in FY06 and had posted strong results for 9M FY07.

Part of the money KPTL raised through QIB has been invested in JMC Projects to increase its stake to over 51%. In January 2007, the company converted 2.3m warrants at the rate of INR152 per share into 1.16m of shares worth INR176m.

KPTL has also decided to subscribe for 1.1m optionally convertible preference shares of INR202 each which will be converted into an equal number of equity shares, at INR222m.



This investment is likely to benefit KPTL as it will strengthen JMC's balance sheet and provide cash required for sustainable growth.

Valuation

We have used a combination of DCF approach and PE multiple approach to determine our target price.

DCF approach

We have used three-stage DCF to value KPTL. We have assumed cost of capital to be 13.5%. We have an explicit period forecast until FY10. There is semi-explicit period of 10 years starting from FY11e. We have assumed fade period to start in FY19e and to last for 10 years. During the fade period RoIC will converge with cost of capital. Our DCF based fair value is INR1,345.

PE valuation

We have arrived at target PE of 22x based on an analysis of KPTL's historical trading pattern.

Over the last three years KPTL has traded in the range of 5x-25x its one year rolling forward PE multiple. During this period the trading pattern indicates that the stock has been re-rated three times.

Until April 2005, the stock was trading in the band of 5-15x. The stock was re-rated with the improvement in industry fundamentals and company performance, and moved to the 15-20x band.

Then there was sharp rally in the Indian mid-cap stocks and KPTL did not lag behind. This phase was followed by a market correction in May 2006. KPTL has recovered from the correction and now trades in the PE band of 20-25x.

We have compared the trading history of KPTL with the CNX Midcap Index. The stock was trading at discount to the Index until April 2005 and since then has mostly been trading at premium. Looking at the last year of trading the premium has averaged at 20%.

We believe that KPTL at its current stage of growth should trade at 22x. Based on our FY08e EPS estimate of INR73.3 and applying rolling one-year PE multiple of 22x we arrive at a fair value of INR1.615.

Overweight (V) rating with a target of INR1,575

We have valued KPTL at mid point - INR1,575 of our DCF fair value INR1,345 and PE multiple based value of INR1.615.

The current market value of investment in JMC Projects is INR2.5bn which would add INR95 to the fair value of KPTL.

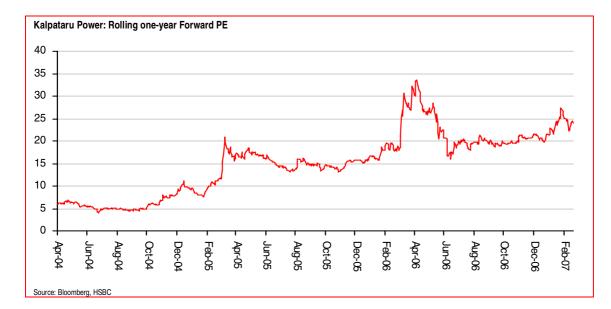
We initiate coverage with an Overweight (V) rating and target price of INR1,575, a potential upside of 34%.

DCF drivers

DCF drivers						
	2007	2008	2009	2010	over 20 years	2030
Asset Turn (x)	6.54	5.15	5.21	5.21	fading to	4.00
Pre-tax margin	14.4%	14.7%	14.9%	14.9%	fading to	4.5%
Tax effect	27.5%	26.5%	25.5%	25.5%	fading to	25.5%
ROIC	68.4%	55.6%	57.8%	57.8%	fading to	13.5%
Cost of capital	13.5%	13.5%	13.5%	13.5%	fading to	13.5%
Turnover growth	na	33.4%	33.8%	57.8%	fading to	13.5%
IC growth	69.4%	32.2%	17.9%	17.9%	fading to	5.0%
ROIC - Cost of Capital	54.9%	42.1%	44.3%	44.3%	fading to	0.0%

Note: Return on Invested Capital (RoIC); Invested Capital (IC) Source: HSBC





Risks

The key risks to our valuation are:

- Slowdown in the economy might affect order flow
- Slow execution of orders would have an impact on sales booking
- Slowdown in availability of raw materials like agricultural waste and crop residue for power

generation

- Raw material price (steel) movement might affect the margin
- Slow execution of capex plans
- Higher than anticipated working capital requirement to increase interest cost burden
- Dilution of equity





Financials & valuation: Kalpataru Power

Year to	03/2006a	03/2007e	03/2008e	03/2009e
Profit & loss summary (INR	m)			
Revenue	8,453	14,974	19,967	26,710
EBITDA	1,193	2,321	3,156	4,253
Depreciation & amortisation	-88	-163	-223	-278
Operating profit/EBIT	1,105	2,158	2,933	3,976
Net interest	-161	-268	-291	-338
PBT	944	1,890	2,642	3,638
HSBC PBT	944	1,890	2,642	3,638
Taxation	-279	-520	-700	-928
Net profit	665	1,371	1,942	2,710
HSBC net profit	665	1,371	1,942	2,710
Cash flow summary (INRm)			
Cash flow from operations	230	1,030	1,801	2,484
Capex	-907	-300	-300	-300
Cash flow from investment	-1,111	-477	-300	-300
Dividends	-62	-124	-304	-365
Change in net debt	1,120	-3,550	-906	-1,482
FCF equity	-833	463	1,210	1,847
Balance sheet summary (I	NRm)			
Intangible fixed assets	0	0	0	(
Tangible fixed assets	1,524	1,661	1,738	1,760
Current assets	6,009	12,549	15,849	20,529
Cash & others	166	3,716	4,622	6,104
Total assets	7,828	14,682	18,059	22,761
Operating liabilities	3,490	5,369	6,925	9,026
Gross debt	2,328	2,328	2,328	2,328
Net debt	2,161	-1,388	-2,295	-3,777
Shareholders funds	1,679	6,314	7,952	10,298
Invested capital	3,876	5,124	6,039	7,159

Valuation data 03/2009e Year to 03/2006a 03/2007e 03/2008e EV/sales 3.9 2.0 1.0 1.4 EV/EBITDA 27.7 12.7 9.0 6.3 EV/IC 5.7 4.7 3.8 8.5 11.5 PE* 38.5 22.8 16.1 P/NAV 7.6 4.9 3.9 3.0 FCF yield (%) Dividend yield (%) -2.7 1.5 3.9 6.0 1.0 0.8 0.9 1.3

Note: * = Based on HSBC EPS (fully diluted)

Issuer information	ı							
Share price (INR)	1178.5	Target price	(INR)	1575	5.0 Po	tent'l tot	rtn (%)	33.6
Reuters (Equity)		KAPT.BO	Bloc	omber	g (Equit	y)	к	PP IN
Market cap (USDn	ר)	707	Mar	ket ca	p (INR	n)	3	31,230
Free float (%)		36.31	Ente	erprise	value ((INRm)		29370
Country		India	Sec	tor	ELEC	TRICAL	EQUIP	MENT
Analyst	Sande	ep Somani	Con	itact		91	22 226	81245

Note: price at close of 21 Feb 2007

Year to	03/2006a	03/2007e	03/2008e	03/2009e
Y-o-y % change				
Revenue	55.6	77.1	33.4	33.8
EBITDA	97.8	94.6	36.0	34.8
Operating profit	101.6	95.3	35.9	35.5
PBT	117.3	100.2	39.8	37.7
HSBC EPS	131.8	68.9	41.7	39.6
Ratios (%)				
Revenue/IC (x)	2.7	3.3	3.6	4.0
ROIC	25.3	34.8	38.6	44.9
ROE	47.2	34.3	27.2	29.7
ROA	12.9	13.9	13.2	14.5
EBITDA margin	14.1	15.5	15.8	15.9
Operating profit margin	13.1	14.4	14.7	14.9
EBITDA/net interest (x)	7.4	8.7	10.8	12.6
Net debt/equity	128.7	-22.0	-28.9	-36.7
Net debt/EBITDA (x)	1.8	-0.6	-0.7	-0.9
CF from operations/net debt	10.6			
Per share data (INR)				
EPS Rep (fully diluted)	30.63	51.72	73.29	102.28
HSBC EPS (fully diluted)	30.63	51.72	73.29	102.28
DPS	10.00	10.06	12.08	15.10
NAV	154.62	238.27	300.08	388.60

Ratio, growth and per share analysis

Disclaimer & Disclosures.	This report must be read with the disclosures and the analyst certifications ir	n the
Disclo	sure appendix, and with the Disclaimer, that form part of it.	

Overweight (V)

D



Jyoti Structures

- INR18bn order backlog; expect order momentum to continue as domestic market is strong and JV would tap overseas market
- We expect sales and EPS CAGR of 34% and 57% respectively for FY06-FY09e
- Initiate coverage with Neutral (V) and target price of INR215

Investment thesis

We rate Jyoti Structures (JSL) a Neutral (V) with a target price of INR215. At current levels it is trading at 25.8x FY07e and 15.6x FY08e earnings. We list the key growth drivers here.

- Order flow momentum would continue from the domestic markets and its joint venture (JV) with Gulf Investment Corporation would help tap overseas markets.
- Sales CAGR 34% for FY06-FY09e backed by order backlog of INR18bn and expected orders from Reliance Energy.
- EBITDA margin should pick up as overheads like staff cost fall on improved order execution.
- Net profit margin to improve as the company has repaid part of its unsecured debt by money raised through preferential allotment of shares. It will be able to finance its increased working capital requirement through internal cash flow.
- We expect EPS CAGR of 57% for FY06-FY09e.

About the company

Jyoti Structures limited (JSL) has two key lines of businesses, transmission lines and substations. JSL undertakes turnkey projects which offer a range of services like design, consulting, tower testing, manufacturing, construction and project management.

Most turnkey projects executed by JSL are domestic but it also has overseas experience of executing projects in 24 countries. To increase order flow from overseas markets, JSL has formed a JV.

Tap Middle East through JV

Overseas orders only make up 20% of the current order book. JSL has formed a JV company, Gulf Jyoti International LLC, with Gulf Investment Corporation that will have a manufacturing base of 33,000 tonnes of transmission towers at Dubai Investment Park.

Its geographical proximity to the Middle East will help the JV increase orders from a market which is increasing spending on power infrastructure.



Relation with Reliance Energy

Reliance Energy Investment Private Limited, an investment arm of Reliance Energy, bought a 14.5% stake in JSL a few years ago but the holding has been reduced c7%. According to JSL management, this investment accrued large profits and part of the holding has been sold to book profits.

Relations between the two companies strengthened after JSL provided technical expertise to Reliance Energy to bid for an INR2bn transmission line build own operate transfer project.

Reliance Energy Transmission, a subsidiary of Reliance Energy Ltd, emerged as the lowest bidder in packages B and C of the project. The final approval is due by end-February 2007.

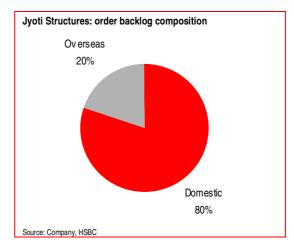
Package B includes building sub-stations and grid lines in the western state of Maharashtra at an estimated cost of INR1.1-1.2bn. Package C includes setting up of gridlines in the state of Gujarat at an estimated cost of INR0.5-0.6bn. Both projects are slated for completion by 2010.

We believe that it is likely that JSL will execute the orders as they supported Reliance Energy in the bidding process; management may consider equity participation in the build own operate transfer project.

Going forward, this relationship might be used to bid for big transmission line projects. JSL can provide technical skills while Reliance Energy can offer financial support, thereby reducing cost and increasing margin.

INR18bn order backlog

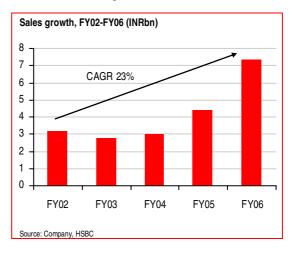
JSL's current order backlog stands at INR18bn, which is 245% of FY06 sales. The order conversion cycle for the current order backlog is 16-18 months. We believe that the domestic order flow would be buoyant due to increased government focus on improving transmission and distribution.



Sales momentum to continue

During FY02-FY06, JSL's sales CAGR was 23%. For 9M FY07, sales increased by 44% y-o-y. We forecast sales CAGR of 34% for FY06-FY09e. We believe sales momentum will continue, because of:

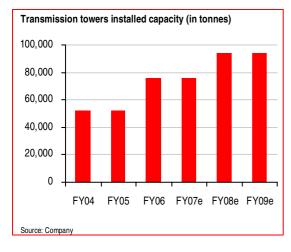
- Strong order backlog. We expect it to improve through the Reliance Energy-JSL partnership and on its own merits. We expect further orders from overseas through the JV, Gulf Jyoti International
- Capacity expansion both domestic and overseas through its JV





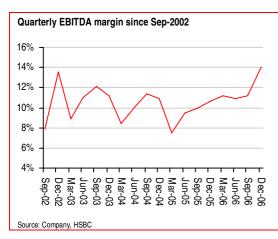
Capacity expansion

JSL has increased its transmission towers installed capacity from 76,000 tonnes to 94,000 tonnes at its current facility. The capacity utilisation rate has increased from c40% in FY04 to c76% in FY06, indicating improved demand and execution.



EBITDA, net profit margins show signs of improvement

JSL's EBITDA margin is showing signs of improvement. Quarterly margins could be affected by one-off good or bad margin order execution. During the last 18 quarters, EBITDA margin was volatile until March 2005, when it bottomed out at 7.5%, because of low capacity utilisation, leading to increased overhead cost and high raw material (steel) prices.



Since then, EBITDA margin has trended upwards and in the quarter ended December 2007, it was at 14%, an 18-quarter high. For 9M FY07, EBITDA margin improved by c200bps y-o-y primarily due to decline in raw material and staff costs. The key question is, though, whether this high margin is sustainable.

INRm	9M FY06	9M FY07	у-о-у
Sales	5,023	7,214	44%
Raw material	3,086	4,254	38%
As % of Sales	61.4%	59.0%	
Staff Exp.	145	180	24%
As % of Sales	2.9%	2.5%	
Other exp.	1,288	1,908	48%
As % of Sales	25.6%	26.4%	
Expenditure	4,518	6,342	40%
EBITDA	505	872	73%
EBITDA Margin	10.1%	12.1%	203

Note: EBITDA margin, Tax rate and net profit margin y-o-y change in basis points (bps) Source: Company, HSBC

We believe that with the strong macro factors that are favouring this sector. JSL's EBITDA margin would be in the range of 12.0-13.5% for FY07e-FY09e.

A trigger for EBITDA margin improvement would be the composition of turnkey order inclined towards 'bought-outs' and stringing, which require low volumes of raw material or are dependent on production efficiency. However, competition might pull down margins for JSL.

Low finance cost to push up net profit margin

Transmission towers is a working-capitalintensive business, and with most orders funded by the government; this could lead to delayed payment. 9M FY07 interest cost saving of 77bps y-o-y indicates that JSL has been able to reduce the interest burden even at an increased level of operational activity.

9M FY07 results: comparison with last year						
INRm	9M FY06	9M FY07	у-о-у			
EBITDA	505	872	73%			
Depreciation	32	42	32%			
As % of Sales	0.6%	0.6%	-5			
Interest	198	229	15%			
As % of Sales	3.9%	3.2%	-77			
PBT	275	601	119%			
Tax	102.2	215.3	111%			
Tax rate	37%	36%	-135			
Net Profit	173	386	123%			
Net Profit Margin	3%	5%	191			

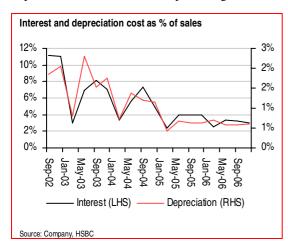
Note: Depreciation, Interest, Tax rate and net profit margin y-o-y change in basis points (bps) Source: Company, HSBC

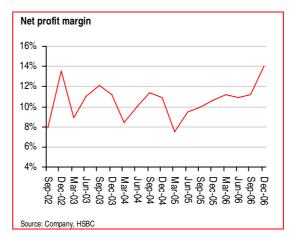
We believe interest cost saving can be attributed to three reasons:

- Improved profit meant increased cash to fund working capital requirement
- Repayment of part of unsecured debt
- Capital expenditure funded by recent preferential allotment of shares to Foreign Institutional Investors (FII) and warrants converted by promoters

JSL management has indicated that if the company has sufficient cash at the end of FY07, unsecured debt of INR406m will be repaid.

EBITDA margin improvement was reflected in the improved net profit margin; interest and depreciation cost reduced as a percentage of sales.





HSBC (X)

No dilution post warrants and QIP

In April 2006, JSL issued 1.55m shares on a preferential basis at INR572 per share to FIIs. The total proceeds from this issue were INR887m.

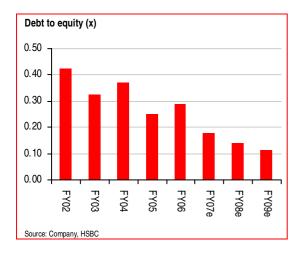
In January 2007, the warrants held by promoters of the company were converted into equity shares of INR2.2m for a consideration of INR80m.

The money raised through the issue will be utilised for repayment of unsecured debt and working capital requirement. Management has indicated no further dilution of equity post these issues.

Debt to equity position

At the end of 9M FY07, the company had repaid unsecured debt of INR300m with the money raised through preferential allotment of shares. This will reduce the interest cost burden and improve debt to equity ratio.





Valuation

We have used combination of a DCF approach and PE multiple approach to determine our target price.

DCF approach

We have used three-stage DCF to value JSL. We have assumed cost of capital to be 13.5%. We have an explicit period forecast till FY10. There is semi-explicit period of 10 years starting from FY11e. We have assumed fade period to start in FY19e and to last for 10 years. During the fade period RoIC will converge with cost of capital. Our DCF based fair value is INR165.

PE valuation

We have arrived at target PE of 23x based on an analysis of JSL's historical trading pattern.

Over the last two years, JSL has traded in the range of 15-25x its one year rolling forward PE

multiple. There was a spike in this period, followed by a correction in the Indian stock market.

Compared to the CNX Midcap Index, JSL largely traded at a premium. During the last few months it has been trading in the band of 20-25x.

We believe that JSL at its current stage of growth should trade at a PE multiple of 23x, which provides us with a PE based FY08e fair value of INR260 based on our FY08e EPS estimate of INR11.4.

Neutral (V) with target price of INR215

Our target price – INR215 – is the mid-point of our DCF fair value INR165 and PE multiple based fair value of INR260.

Jyoti Structures is classified as a volatile stock in our rating system, meaning that if the returns range between 3.5%-23.5% it would be classified as Neutral. It has potential upside of 20%, and we initiate coverage with Neutral (V).

Risks

The key risks to our valuation are:

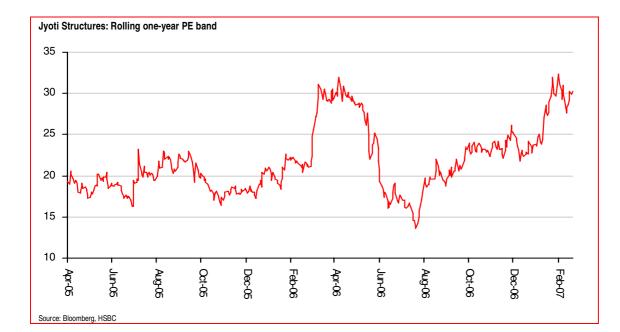
- Slowdown in the economy, which might affect order flow
- Slow execution of orders, which would affect sales booking

DCF Drivers						
Heads	2007	2008	2009	2010	over 20 years	2030
Asset Turn (x)	3.70	4.16	4.65	5.35	fading to	3.00
Pre-tax margin	9.2%	10.7%	11.6%	12.0%	fading to	6.5%
Tax effect	37.0%	35.0%	35.0%	35.0%	fading to	30.7%
ROIC	21.5%	29.0%	35.0%	41.8%	fading to	13.5%
Cost of capital	13.5%	13.5%	13.5%	13.5%	fading to	13.5%
Turnover growth	na	36.2%	26.4%	25.0%	fading to	1.2%
IC growth	21.0%	13.1%	8.5%	7.5%	fading to	5.0%
ROIC - Cost of Capital	8.0%	15.5%	21.5%	28.3%	fading to	0.0%

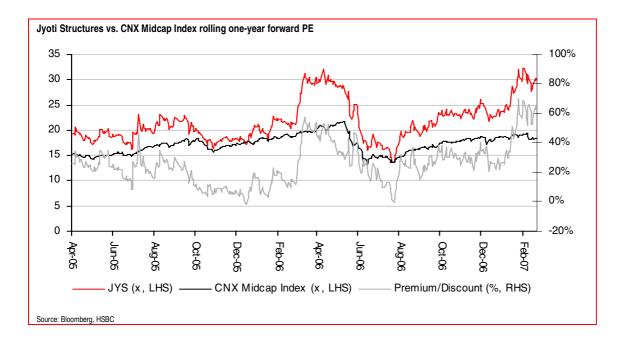
Note: Return on Invested Capital (RoIC); Invested Capital (IC)

Source: HSBC





- Raw material price (steel) price movement might have an impact on net profit margin
- Slow execution of capex plans
- Higher than anticipated working capital requirement, which would increase interest cost
- Dilution of equity





Financials & valuation: Jyoti Structures Ltd

Year to	03/2006a	03/2007e	03/2008e	03/2009e
		03/20076	03/20006	03/20036
Profit & loss summary (INR	im)			
Revenue	7,402	10,506	14,309	18,092
EBITDA	769	1,293	1,859	2,447
Depreciation & amortisation	-48	-61	-75	-89
Operating profit/EBIT	720	1,233	1,785	2,358
Net interest	-258	-323	-328	-354
PBT	462	910	1,456	2,004
HSBC PBT	0	0	0	Ċ
Taxation	-185	-337	-510	-701
Net profit	277	573	947	1,303
HSBC net profit	277	573	947	1,303
Cash flow summary (INRm)			
Cash flow from operations	-82	468	1,074	1,575
Capex	-177	-200	-250	-250
Cash flow from investment	-144	-200	-250	-250
Dividends	-31	-73	-120	-165
Change in net debt	623	-841	-376	-805
FCF equity	-526	-55	496	970
Balance sheet summary (I	NRm)			
Intangible fixed assets	0	0	0	C
Tangible fixed assets	546	686	861	1,022
Current assets	4.889	6.564	8.385	10,526
Cash & others	38	580	955	1,761
Total assets	5,602	7,416	9,413	11,715
Operating liabilities	2,557	3,233	4,403	5,567
Gross debt	1,609	1,309	1,309	1,309
Net debt	1,571	730	354	-451
Shareholders funds	1,216	2,686	3,512	4,650
Invested capital	2,840	3,437	3,888	4,220

Year to	03/2006a	03/2007e	03/2008e	03/2009e
EV/sales	2.0	1.4	1.0	0.7
EV/EBITDA	19.7	11.1	7.5	5.4
EV/IC	5.3	4.2	3.6	3.1
PE*	46.5	25.8	15.6	11.3
P/NAV	10.1	5.3	4.1	3.1
FCF yield (%)	-3.9	-0.4	3.6	7.1
Dividend vield (%)	0.2	0.5	0.8	1.2

Note: * = Based on HSBC EPS (fully diluted)

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Issuer information	ı						
Share price (INR)	178.40	Target price	(INR)	215.00	Potent'l tot r	tn (%)	20.5
Reuters (Equity)		JYTS.BO	Bloo	omberg (E	quity)	J	YS IN
Market cap (USDn	ר)	311	Mar	ket cap (INRm)	1	3,765
Free float (%)	,	75.15	Ente	erprise va	lue (INRm)		14329
Country		India	Sec	tor	Electric	al Equi	oment
Analyst	Sande	ep Somani	Cor	ntact	91	22 226	81245

Note: price at close of 21 Feb 2007

Ratio, growth and per share analysis

Year to	03/2006a	03/2007e	03/2008e	03/2009e
Y-o-y % change				
Revenue	68.2	41.9	36.2	26.4
EBITDA	85.2	68.2	43.8	31.6
Operating profit	91.7	71.1	44.8	32.1
PBT	155.0	96.9	60.1	37.6
HSBC EPS	106.3	80.3	65.2	37.6
Ratios (%)				
Revenue/IC (x)	3.1	3.3	3.9	4.5
ROIC	18.2	24.7	31.7	37.8
ROE	25.6	29.4	30.5	31.9
ROA	8.6	11.9	13.8	14.5
EBITDA margin	10.4	12.3	13.0	13.5
Operating profit margin	9.7	11.7	12.5	13.0
EBITDA/net interest (x)	3.0	4.0	5.7	6.9
Net debt/equity	129.2	27.2	10.1	-9.7
Net debt/EBITDA (x)	2.0	0.6	0.2	-0.2
CF from operations/net debt		64.1	303.3	
Per share data (INR)				
EPS Rep (fully diluted)	3.84	6.92	11.43	15.72
HSBC EPS (fully diluted)	3.84	6.92	11.43	15.72
DPS	0.44	0.90	1.49	2.05
NAV	17.60	33.42	43.71	57.87

Disclaimer & Disclosures. This report must be read with the disclosures and the analyst certifications in the Disclosure appendix, and with the Disclaimer, that form part of it.

Neutral (V)



Finolex Cables Limited

- Strengthening position in electrical cable market; optical fibre cables to make communication cables business profitable
- We expect sales CAGR of 35% and EPS CAGR of 40% for the period FY06-FY09e
- Initiate coverage with Overweight (V) and target price of INR158

Investment thesis

We rate Finolex Cables Limited (FCL) Overweight (V), with a target price of INR158, which includes INR22 derived from investment in Finolex Industries. At current levels, the shares are trading at 18.3x FY07e and 13.5x FY08e earnings. We believe that the key growth drivers are likely to be:

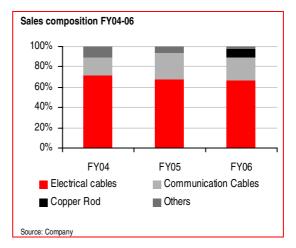
- Sales in the profitable electrical cables business will grow as JFTC capacity has been converted and new capacity will be on stream for FY08
- We expect margins to expand as communication cables become profitable
- Investment in new products and electrical cables should support sales and profit momentum in the future

Company outline

Finolex Cables Limited is the flagship company of the INR20bn Finolex group, which is owned by the Chhabria family. Finolex cables has a c32% stake in its sister concern, Finolex Industries.

Business segments

FCL currently operates in two main business segments, electrical cables and communication cables. It also manufactures fibre and copper rods for captive consumption and PVC sheets for external sale.



Focused on electrical cables

The electrical cable business has been the main driver of the company's revenue and profitability. This division manufactures light-duty electrical cables and power and control cables.

Finolex brand stands for quality

The electrical cables are sold under the Finolex brand, which is known for high quality.



Because of their consistent quality, Finolex cables command a price premium over cables produced by the company's peers. Even though the cable market is large and unorganised, and some makers sell unbranded, low quality products cheaply, FCL has maintained price premiums without compromising on quality.

With the standardisation of cable categories and the introduction of the Value Added Tax (VAT), the makers of low-quality products will tend to lose market share and Finolex will stand to gain. According to management, FCL currently holds 30% of the domestic cable market.

FCL's cable business enjoyed CAGR of c22% during FY02-FY06. The key industries which use these cables include the building industry, the automobile industry, the agricultural irrigation industry and the electricity distribution industry.

More capacity added

FCL has added capacity in the cables division both to maintain its market share and to cater to the growing market for the branded players as the industry becomes more standardised.

Its cable capacity has increased from 1,030 Thousand Core Kilometres (TCKMs) to 1,380 TCKMs. The additional capacity of 350 TCKM is a result of the conversion of capacity for Jelly Filled Telephone Cables (JFTC), which have a distribution capacity of up to 3.3 kV, into capacity for cables with larger distribution capacity.

A new facility for light-duty electrical cables is planned for completion in two stages at an estimated cost of INR2bn. This facility will have the flexibility to produce medium density electrical cables with a rating of up to 66kV, a large advance from the 3.3kV maximum rating of the present light electrical cables. The facility will start contributing to revenue by Q1 FY08.

Communication cables

The communication cables division comprises traditional telephone cables, optical fibre cables and new generation communication cables.

New generation cables					
Cables	Application				
Local Area Network (LAN) cables Co-axial cables V-SAT cables	Indoor and outdoor networks, voice and data transmission, broadband usage Cable TV networks For connecting V-SAT dishes to base				
PE insulated telephone	stations Telephone instrument connections to				
cables	EPABX				

Source: Company

Focus on optical fibre cables

The use of broadband for internet is gaining acceptance in India. The mobile service providers, such as Airtel, Tata Indicom, and Reliance Infocomm, are actively spending on developing infrastructure to provide internet broadband service.

By FY07, FCL will have increased its optical fibre capacity three-fold in FY06, to 48,000km. It also has installed capacity to produce 60,000km of optical fibre per year. Optical fibre is the principal raw material for optical fibre cables.

We believe that this segment will be the key revenue driver for FCL's communication cable division as the JFTC business has slowed down.

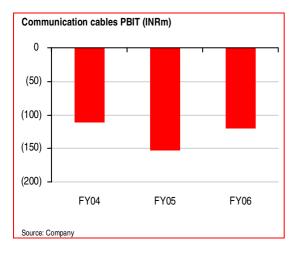
JFTC is a dying business

FCL is one of the few companies capable of producing JFTC cables, which are used for fixedline phones. The growth in the use of cellular phones has caused a constant reduction in the demand for JFTC cables. The preference of consumers for cellular phones over fixed-line phones will lead to the slow death of this business.

JFTC demand slumped in FY03 and then remained flat. The company depends on two primary buyers – Bharat Sanchar Nigam Ltd



(BSNL) and Mahanagar Telephone Nigam Ltd (MTNL) – for JFTC orders. These orders are infrequent and unprofitable. Over the past three years, the company has been suffering losses in this business, in contrast to the profits made in the cables business. There was urgent need to shift JFTC capacity into cable capacity.



The flexibility of the manufacturing facility allowed FCL to convert its JFTC capacity into electrical cable capacity. Half of the current JFTC capacity, of 10,612 km, has been converted into capacity for 350 TCKM of electrical cables. The remaining JFTC capacity will be used as part of the total product portfolio to provide one-stop shopping for all kinds of cables.

Other products

FCL's long-term strategy is to become a one-stop provider of all electrical products and solutions. In line with this strategy, the company is moving into newer products. The contribution of these products might be low, but they add value to the overall product offering.

Modular electrical switches

In June 2006, FCL switches were introduced under the brand name of Finoswitch. These switches are sold in two ranges to cater to the niche premium market and the mass market.

Compact fluorescent lamps

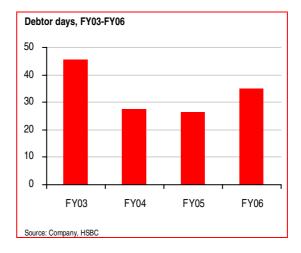
In August 2006, FCL introduced these lamps under the brand name of Finoglow. It manufactures compact fluorescent lamps (CFLs) in the range of 5 watt (W) to 26W.

Apart from these products, FCL also produces PVC sheets, which are used in roofing, display boards, exhibitions, partitions, etc. Some copper cathode rods and fibre produced are sold externally, but most are consumed in-house.

Sales through distributors and dealers

Most of FCL's business is channelled through the company's distribution network, rather than direct or bulk sales. FCL has 1500 distributors and 15,000 dealers. This distribution network is supported by 17 branch offices and 16 depots located throughout the country.

FCL has arranged for channel financing from various banks for its distribution network. This has reduced the debtor days for the company, which reduces its working capital requirement.



Maintaining margins

Raw material costs passed on to customers

The principal raw material for FCL is copper. FCL sources its copper requirement from the local market through long-term agreements, and prices are linked to those on the London Metal Exchange (LME). Copper prices on the LME saw a northward trend until May 2006, but in past few months, they have given up some of their gains.

Even though copper prices have been high, FCL's electrical business has maintained its margin because FCL can easily pass on higher raw material costs in its prices for customers. The visa versa is also true.

The hike in copper prices has helped branded producers, as small, unorganised players do not have the financial flexibility to obtain the working capital required for more costly inventories of copper and are thus forced to exit from the industry.

Backward integration to maintain quality

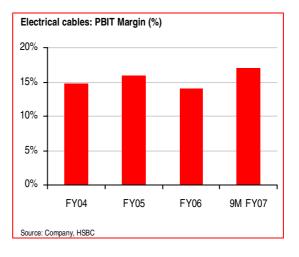
In the past few years, FCL has invested in building capacity for its principal raw materials.

- Copper rods used for copper based electrical and communication cables
- Optic fibre used for optical fibre cables

The aim is to achieve operational efficiencies. This approach also helps the company to maintain consistent quality and to ensure timely supply.

Electrical cables business key to profitability

The JFTC cables business slumped in 2003 and has suffered losses since then. However, the electrical cables business has been consistently profitable.



We believe the electrical cables business will continue to be the major contributor to FCL's profitability, because the company has recently been:

- Converting JFTC capacity to electrical cable capacity
- Constructing a new plant for electrical cables
- Producing copper rods in-house

We believe that these measures have started paying off, as PBIT margin in the electrical cable division rose to 17% in 9M FY07, from 13% in 9M FY06. Company profitability will be further improved if its communication business expands the positive margin it achieved in the first half of FY07.

9M FY07 results

FCL posted strong results in the first nine months of FY07, in spite of no profit contribution from JFTC cables. Revenue was up 51%, largely due to higher sales of electrical cables in terms of volume.

EBITDA margin improved by 237bps as a result of cutting raw material and SG&A costs. The improvement in EBITDA margin was reflected in the net profit margin, as a higher tax burden was offset by a reduction in depreciation cost as a percentage of sales. EPS was up 110% y-o-y.

HSBC (X)

9M FY07 results (INRm)

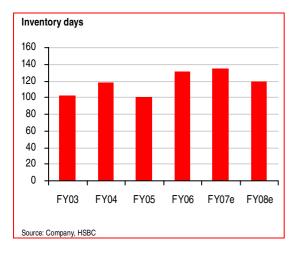
Item	9M FY07	9M FY06	y-o-y change
Sales	7,567	5,006	51%
EBITDA	1,158	647	79%
EBITDA Margin	15%	13%	237
Depreciation	196	190	3%
As % of sales	3%	4%	(122)
EBIT	962	457	111%
Interest	111	73	52%
As % of sales	1.5%	1.5%	0
PBT	851	384	122%
Tax	250	98	155%
Tax rate	29%	26%	381
PAT	602	286	110%
PAT Margin	8%	6%	224
EPS	3.9	1.9	110%

Source: Company, HSBC

High working capital requirement for inventory

As mentioned earlier, FCL sales are derived through distributors and dealers, and debtor days are reduced through channel financing. The inventory levels have increased, and we expect them to increase further in absolute terms, which will require additional working capital.

We believe that the company would be able to finance its working capital requirement with internal cash flows. Marketable securities could be sold to cover any shortfall.



Investments to be used for WC

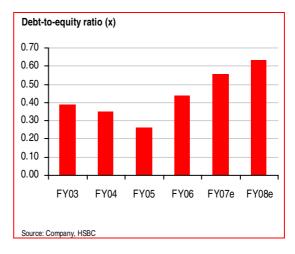
In FY06, the company had marketable securities worth of INR2.72bn, including INR1.5bn in Finolex Industries, a sister concern. The market value of the quoted securities was INR4.72bn at the end of FY06.

The company has INR1.1bn of marketable securities which can be made available for working capital requirements without increasing its debt on the books.

Low debt-to-equity ratio

The company has planned to spend INR2bn for its new plant for manufacturing electrical cables. To maintain growth momentum, management will need to continuously invest in this business. The company intends to fund its capex with a combination of debt and equity. The current debt to equity ratio is 0.44x, so the company can raise more debt in the future.

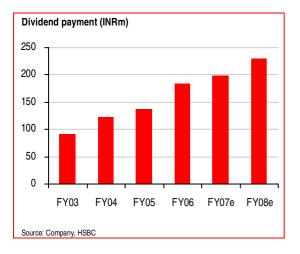
We have assumed a higher debt to equity ratio in our forecasts as we believe that the company might increase its debt to add value for its shareholders.



Dividend payments

FCL regularly pays dividends to its shareholders. Even though the company has not stated any dividend policy, we believe that it would pay steadily growing dividends.





Valuation

We have used a combination of DCF approach and PE multiple approach to determine our target price.

DCF approach

We have used a three-stage DCF analysis to value FCL. We have assumed the cost of capital to be 13.5%. We have explicit forecasts until FY10. There is semi-explicit period of 10 years starting from FY11e. We have assumed the fade period starts in FY19e and lasts for 10 years. During the fade period RoIC will converge with the cost of capital. Our DCF based fair value is INR145.

PE valuation

We have arrived at target PE of 18x based on an analysis of the historical trading pattern of FCL.

Over the past three years, FCL has traded in the range of 7x-25x its one-year rolling forward PE multiple. Since January 2005, the PE band has

narrowed to 15x-25x. The graph on the following page suggests that the company has been trading near a 20x rolling one-year forward PE.

We have compared FCL's trading history with the CNX Midcap Index. The stock traded at a discount to the Index until May 2005, but started trading in line with the index since then. Currently, the CNX Midcap Index trades at 19x the FY08e earnings of its component companies.

We believe that for FCL, the communication cables business needs to become profitable to command a higher PE valuation. We are comfortable applying a PE multiple of 18x, which is a discount to the Index, to arrive at our fair value. Based on our FY08e EPS estimate, of INR7.2, we arrive at a fair value of INR130.

Overweight (V) with target price of INR158

Our fair value for FCL is INR136, the midpoint of our DCF fair value, of INR145, and our PE multiple based fair value, of INR130.

FCL holds c32.4% of Finolex Industries. The current value of this investment is INR3.3bn, which adds INR22 to FCL's fair value.

We initiate coverage with an Overweight (V) rating and a target price of INR158, potential upside of 62%.

DCF Drivers							
	2007	2008	2009	2010	over 20 years	2030	
Asset Turn (x)	1.50	1.75	2.01	2.17	fading to	1.50	
Pre-tax margin	12.5%	12.9%	12.7%	13.2%	fading to	6.5%	
Tax effect	30.0%	30.0%	30.0%	30.0%	fading to	30.0%	
ROIC	13.1%	15.7%	7.8%	20.0%	fading to	13.5%	
Cost of capital	13.5%	13.5%	13.5%	13.5%	fading to	13.5%	
Turnover growth	na	35.0%	30.0%	25.0%	fading to	13.5%	
IC growth	15.8%	13.2%	15.8%	0.0%	fading to	5.0%	
ROIC - Cost of Capital	-0.4%	2.2%	4.3%	6.5%	fading to	0.0%	

Source: HSBC



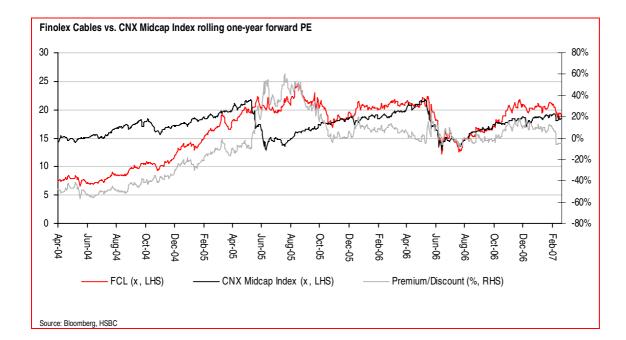


Risks

than we now project

The key risks to our valuation and rating are:

- A slowdown in the economy might affect sales growth
- Raw material costs, i.e., copper prices, might rise, which could affect margins
- Capex plans might be implemented more slowly than we foresee
- The company may need more working capital





Financials & valuation: Finolex Cables Ltd

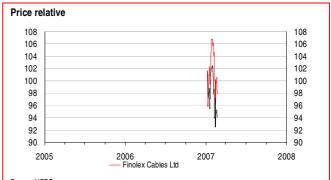
Financial statements				
Year to	03/2006a	03/2007e	03/2008e	03/2009e
Profit & loss summary (INR	m)			
Revenue	7,762	10,831	14,622	19,008
EBITDA	1,057	1,601	2,224	2,903
Depreciation & amortisation	-313	-278	-393	-564
Operating profit/EBIT	744	1,323	1,831	2,339
Net interest	-128	-156	-250	-363
PBT	616	1,167	1,581	1,976
HSBC PBT	616	1,167	1,581	1,976
Taxation	-113	-350	-474	-593
Net profit	504	817	1,107	1,383
HSBC net profit	504	817	1,107	1,383
Cash flow summary (INRm))			
Cash flow from operations	-153	416	1,004	1,400
Capex	-491	-750	-1,000	-1,500
Cash flow from investment	23	-250	-1,000	-1,500
Dividends	-153	-209	-227	-262
Change in net debt	500	43	223	362
FCF equity	-459	-334	4	-100
Balance sheet summary (II	NRm)			
Intangible fixed assets	0	0	0	(
Tangible fixed assets	2,288	2,760	3,367	4,302
Current assets	6,345	8,253	9,996	11,731
Cash & others	592	1,549	2,327	2,965
Total assets	11,356	13,235	15,585	18,256
Operating liabilities	940	1,188	1,613	2,100
Gross debt	2,343	3,343	4,343	5,343
Net debt	1,751	1,794	2,016	2,378
Shareholders funds	5,361	5,969	6,849	7,970
Invested capital	7,101	8.276	9,424	10.969

Ratio, growth and per share analysis								
Year to	03/2006a	03/2007e	03/2008e	03/2009e				
Y-o-y % change								
Revenue	32.1	39.5	35.0	30.0				
EBITDA	43.8	51.4	38.9	30.5				
Operating profit	56.1	77.8	38.4	27.8				
PBT	66.0	89.3	35.5	25.0				
HSBC EPS	63.7	62.2	35.5	25.0				
Ratios (%)								
Revenue/IC (x)	1.2	1.4	1.7	1.9				
ROIC	9.1	12.0	14.5	16.1				
ROE	9.7	14.4	17.3	18.7				
ROA	5.9	7.5	8.9	9.7				
EBITDA margin	13.6	14.8	15.2	15.3				
Operating profit margin	9.6	12.2	12.5	12.3				
EBITDA/net interest (x)	8.3	10.2	8.9	8.0				
Net debt/equity	32.7	30.1	29.4	29.8				
Net debt/EBITDA (x)	1.7	1.1	0.9	0.8				
CF from operations/net debt		23.2	49.8	58.9				
Per share data (INR)								
EPS Rep (fully diluted)	3.29	5.34	7.24	9.04				
HSBC EPS (fully diluted)	3.29	5.34	7.24	9.04				
DPS	1.00	1.37	1.48	1.71				
NAV	35.05	39.03	44.78	52.11				

Valuation data								
Year to	03/2006a	03/2007e	03/2008e	03/2009e				
EV/sales	1.8	1.3	1.0	0.8				
EV/EBITDA	13.2	9.1	6.6	5.2				
EV/IC	2.0	1.8	1.6	1.4				
PE*	29.7	18.3	13.5	10.8				
P/NAV	2.8	2.5	2.2	1.9				
FCF yield (%)	-3.8	-2.6	0.0	-0.8				
Dividend yield (%)	1.0	1.4	1.5	1.7				

Note: * = Based on HSBC EPS (fully diluted)

Issuer information							
Share price (INR)	97.80	Target price (INR)	158.0	0 Potent'l te	ot rtn (%)	61.6
Reuters (Equity) Market cap (USDm)		FNXC.BO 338			(Equity) (INRm)		XC IN 4,957
Country Analyst	Sande	India eep Somani	Sec Cor	tor ntact	Communicat	tions Equi 91 22 226	



Source: HSBC

Note: price at close of 21 Feb 2007

Disclaimer & Disclosures. This report must be read with the disclosures and the analyst certifications in the Disclosure appendix, and with the Disclaimer, that form part of it.

Overweight (V)



Havells India

- Riding high on switchgear and cables business and increasing contribution from electrical consumer durables
- Further capacity expansion and acquisition on the cards; we expect sales and EPS CAGR of 50% in FY06-FY09e
- We initiate coverage with an Overweight (V) rating and target price of INR635

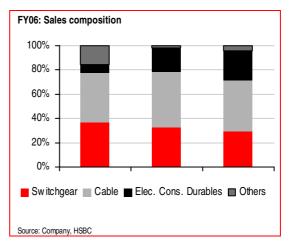
Investment thesis

We rate Havells India Ltd (Havells) Overweight (V) with a target price of INR635. At current levels, its shares are trading at 26.6x FY07e and 17x FY08e earnings. We believe that the key growth drivers for the company will be:

- By improving capacity utilisation and adding new capacity, the company will drive sales at a CAGR of 50% for the period FY06-FY09e
- EBITDA margin is likely to decline due to an increase in contribution from cables and electrical consumer durables, which carry lower margins than switchgears
- We expect net profit margin to be sustained due to lower finance costs than before, and savings on tax
- Working capital requirement can be funded through internal accruals, while the money raised will be used to fund expansions and acquisitions.

Business segments

Havells India Ltd (Havells) is part of the Qimat Rai Group (QRG), which has a presence in almost all of India's electrical equipment businesses. Havells operates in three primary segments: cables and wires, switchgear and electrical consumer durables.



Switchgears

Havells is among the largest manufacturers of miniature circuit breakers (MCB), residual current circuit breakers (RCCB) and distribution boards in India. This gear is used to protect building circuits. The company also manufactures industrial circuit protection switchgears, including changeover switches, fuses, miniature current circuit breakers (MCCB), and contractors and starters.



Cables and wires

Havells produces a range of low- and high-tension PVC and XLPE cables. It also manufactures coaxial TV and telephone wires and FR/FRLS wires.

Electrical consumer durables

This division produces compact fluorescent lights, fans and light fittings. The contribution from this division has increased from 6% in FY04 to 25% in FY06 as the company has ramped up its capacity over the years.

Product	Unit	Installed Capacity	Capacity Utilised %	
Cables	Km	470,000	61%	
Electrical consumer durables	No.	22,400,000	67%	
Switchgears	No.	33,600,000	55%	
Industrial switch gears	No.	1,800,000	96%	
EWA	No.	6,000,000	46%	
Bath fittings	No.	750,000	92%	
Household meters	No.	840,000	61%	

Source: Company, HSBC

Amalgamation of Crabtree

As part of QRG's strategy to consolidate its group companies, Crabtree India Ltd was merged with Havells in FY06. The MCCB division of Crabtree had been merged with Havells in FY01.

Crabtree manufactures modular plate switches and sockets. Its revenues, of INR519m in FY06, were added to Havells's switchgear division that year.

Partnering for electric motor manufacturing

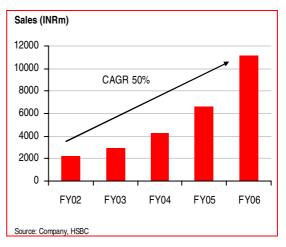
Havells has recently entered into collaboration with a European motor manufacturing company to develop an electrical motor manufacturing plant at Nimrana, in the State of Rajasthan.

Looking for inorganic growth

The company has indicated that it is looking for an acquisition size of USD50m-200m. The mode for financing the acquisition will be decided later.

Rocketing sales

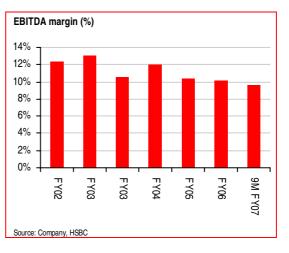
Havells has grown much faster than its peers in past few years. From FY02 to FY06, its sales grew at a CAGR of 50%. We believe that strong sales momentum will continue with an increase in capacity utilisation and diversification into electric motors. We expect sales to grow at a CAGR of 50% in FY06-FY09e.



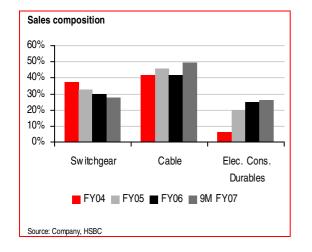
Margins

Pressure on EBITDA margin

EBITDA margin has declined in recent years. Revenue has grown very rapidly, at the cost of margin.





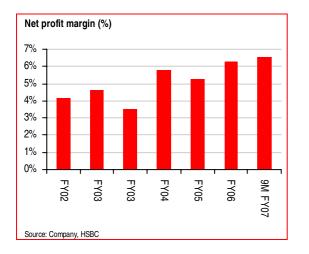


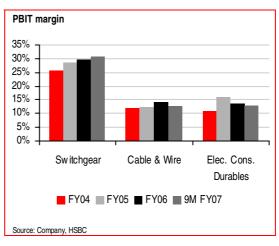


The EBITDA margin has fallen due to a change in the product mix from higher margin products to lower margin products in higher volume.

The switchgear business carries high margins, and its EBITA margin has increased from 26% in FY04 to 31% in the first nine months of FY07. The sales contribution from this business has been gradually dropping from 37% in FY04 to 28% in 9M FY07.

The margins on cables and wires remain stable, but the margins on electrical equipment have been compromised to increase sales volumes. We believe that the company's overall margins will be fall in the future as contributions from the cable and wire division and the electrical equipment division increase.



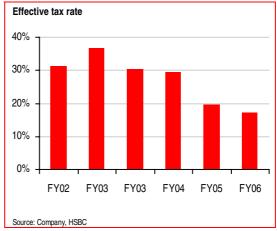


Net profit margin to be sustained

Even though EBITDA margin suffered due to high contribution from a low-margin businesses, the net profit margin has expanded. This expansion was due in part to a slower growth of depreciation and finance costs than the growth in sales, but the primary contributor to expansion was decline in tax burden.

Havells has a business strategy of developing manufacturing facilities in parts of India which provide tax incentives. The fall in the tax rate in FY06 was attributable to the operation of a facility in Haridwar, a tax haven.

The fall in the EBITDA margins has been offset by a drop in the tax burden, so the net margin has remained intact.





Net profit recorded a CAGR of 63% in FY02-FY06, while EPS increased at a CAGR of only 35% due to the dilution of earnings at various stages to fund expansion.

We expect net profit and EPS CAGR of 50% in FY06-FY09e, assuming no further dilution of earnings.

9M FY07 results

In the first nine months of FY07 sales grew 66% y-o-y, confirming the buoyancy of the business. The EBITDA margin declined due to higher contributions from low-margin businesses, such as electrical durables. However, the net profit margin was sustained at 7% due to lower interest cost and tax savings.

9M FY07 Results

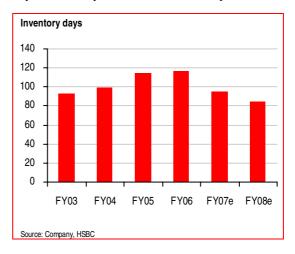
Items	9M FY07	9M FY06	y/y change
Sales	11,098	6,680	66%
EBITDA	1,068	726	47%
EBITDA Margin	10%	11%	(124)
Depreciation	67	43	57%
As % of Sales	1%	1%	(3)
EBIT	1,001	683	47%
EBIT Margin	9%	10%	(120)
Interest	134	119	12%
As % of Sales	1%	2%	(58)
PBT	867	564	54%
Tax	140	119	17%
Tax Rate	16%	21%	(503)
PAT	727	444	64%
Net Margins	7%	7%	(10)
EPS	13.4	8.2	64%

Source: Company, HSBC

Working-capital-intensive business

The electrical equipment business requires large working capital. Havells needs to maintain high inventory levels for smooth operations. An increase in raw material costs might cause the value of the inventory to surge, even though its volume remains unchanged. We expect a reduction in inventory days.

The company has managed to reduce its debtor days from 101 in FY05 to 46 in FY06. We believe that debtor days can be maintained at about 46 days. Credit days have remained mostly stable.

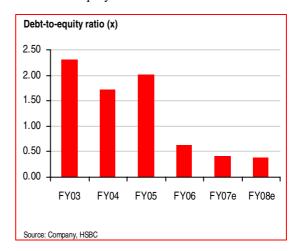


Comfortable debt-to-equity ratio

In FY06, Havells's debt-to-equity ratio declined to 0.6x, from 2.x in FY05, mainly because:

- The company repaid INR484m of debt upon the maturity of bonds
- Net profit surged by 107% in FY06, to INR632m, increasing shareholders' equity

We believe that in order to sustain strong business momentum, Havells will invest more in the business with a combination of debt and internal accruals. Thus, more debt will be added to the balance sheet, but strong profit growth will keep the debt-to-equity level low.





Bonus issue

In July 2006, as a reward to shareholders, Havells announced a stock split in the ratio of one share for every equity share held. The new shares were distributed in August 2006.

Dividend payment

Havells has paid regular dividends in the past decade. The company does not have any stated dividend policy but intends to pay more dividends as its profits grow. We believe that the company will continue to increase its dividend payment, though perhaps not in line with its profits.

Raising money for further expansion

Havells has announced a new electrical motor manufacturing facility in the state of Rajasthan and an acquisition in Europe. In order to fund these expansions the company has recently announced plans to raise USD150m through the issuance of FCCBs/QIPs /ADRs/GDRs.

In January 2007, at an Extraordinary General Meeting of shareholders, the company passed two resolutions:

- Increase the borrowing limit to INR25bn
- Increase authorised Share Capital to INR400m

The company has incurred capex of INR730m until 9M FY07 and expects capex of INR1150m

for the full year. Capacity has been added in all divisions. For FY08, the company has announced capex of INR700m.

Valuation

We have used a combination of the DCF approach and PE multiple approach to determine our target price.

DCF approach

We have used a three-stage DCF analysis to value Havells. We have assumed the cost of capital to be 13.5%. We have explicit forecasts until FY10. There is a semi-explicit period of 7 years starting in FY11e. We have assumed a fade period to start in FY17e and to last for 10 years. During the fade period, RoIC will converge with the cost of capital. Our DCF based fair value is INR680.

PE multiple

We have arrived at a target PE of 20x based on an analysis of the company's historical trading pattern.

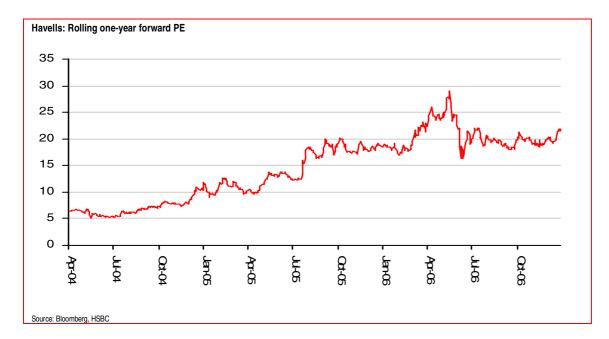
Over the past three years, Havells has traded in the range of 7x-30x its one-year rolling forward PE multiple. Since June 2005, the PE band has narrowed to 15x-25x. The graph below suggests that the company has been trading near 20x its rolling one-year forward PE.

We have compared Havells's trading history with the CNX Midcap Index. The stock traded at a discount to the Index until July 2005, but started trading in line with the index since then.

DCF Drivers							
Heads	2007	2008	2009	2010	over 20 years	2030	
Asset Turn (x)	5.12	7.05	8.73	8.73	fading to	5.00	
Pre-tax margin	9.0%	8.7%	8.7%	9.2%	fading to	8.4%	
Tax effect	17.0%	17.0%	17.0%	17.0%	fading to	17.0%	
ROIC (RHS)	38.1%	51.1%	63.4%	66.5%	fading to	13.5%	
Cost of capital	13.5%	13.5%	13.5%	13.5%	fading to	13.5%	
Turnover growth	na	55.9%	35.9%	66.5%	fading to	13.5%	
IC growth	13.2%	9.7%	24.8%	24.8%	fading to	5.0%	
ROIC - Cost of Capital	24.6%	37.6%	49.9%	53.0%	fading to	0.0%	

Note: Return on Invested Capital (RoIC), Invested Capital(IC) Source: HSBC





Currently, the CNX Midcap Index trades at 19x the FY08e earnings forecasts for its component companies.

Even though Havells has been growing at a much faster rate than the Index, its margins are under pressure. We are comfortable applying a PE multiple of 20x to arrive at our fair value. Based on our FY08e EPS estimate, of INR29.3, we arrive at a fair value of INR585.

Overweight (V) with target price of INR635

Our target price for Havells is INR635, the midpoint of our DCF-based fair value, of INR680, and our PE multiple based fair value, of INR585.

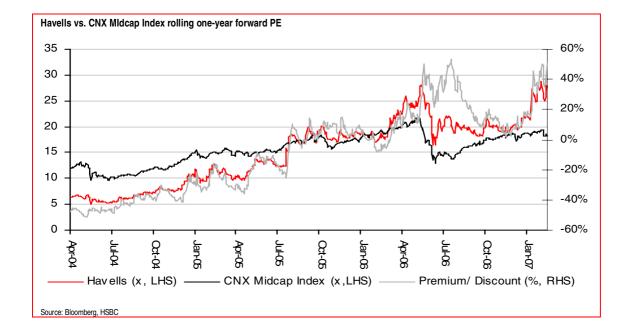
Havells India is a volatile stock in our universe. With potential upside of 27% we initiate coverage with an Overweight (V) rating and a target price of INR635.

Risks

The key risks to our valuation and rating are:

- Sales volumes might not grow as fast as capacity, causing a drop in capacity utilisation
- Expansion plans might be delayed
- Costs of primary raw materials, such as copper and aluminium, may rise
- The EBITDA margin may fall faster than we project due to a higher-than-expected increase in sales at low-margin businesses
- Net margins might decline due to greaterthan-expected costs of finance and depreciation and/or to higher tax rates than we expect
- Earnings may be diluted by the issuance of FCCBs







Financials & valuation: Havells India Ltd

Financial statements					
Year to	03/2006a	03/2007e	03/2008e	03/2009e	
Profit & loss summary (INR	im)				
Revenue	10,072	15,612	24,343	33,074	
EBITDA	1,029	1,494	2,289	3,140	
Depreciation & amortisation	-64	-94	-162	-247	
Operating profit/EBIT	965	1,400	2,127	2,893	
Net interest	-180	-180	-221	-303	
PBT	785	1,220	1,906	2,590	
HSBC PBT	785	1,220	1,906	2,590	
Taxation	-153	-207	-324	-440	
Net profit	632	1,012	1,582	2,150	
HSBC net profit	632	1,012	1,582	2,150	
Cash flow summary (INRm)				
Cash flow from operations	1,424	1,944	2,080	2,531	
Capex	-640	-1,150	-600	-1,000	
Cash flow from investment	-626	-1,150	-600	-1,000	
Dividends	-29	-77	-80	-92	
Change in net debt	-645	-540	-1,179	-1,136	
FCF equity	567	613	1,259	1,228	
Balance sheet summary (I	NRm)				
Intangible fixed assets	0	0	0	C	
Tangible fixed assets	1,532	2,588	3,026	3,779	
Current assets	3,716	4,782	8,107	11,626	
Cash & others	83	623	2,302	3,938	
Total assets	5,280	7,402	11,165	15,438	
Operating liabilities	2,113	3,293	5,041	6,738	
Gross debt	1,098	1,098	1,598	2,098	
Net debt	1,015	475	-704	-1,840	
Shareholders funds	1,760	2,696	4,198	6,256	
Invested capital	3,052	3,454	3,789	4,730	

Valuation data Year to 03/2006a 03/2007e 03/2008e 03/2009e EV/sales 2.8 1.8 1.1 0.8 EV/EBITDA 27.1 18.3 11.4 8.0 EV/IC 6.9 9.1 7.9 5.3 17.0 PE* 41.3 26.6 12.5 P/NAV 14.8 10.0 6.4 4.3 FCF yield (%) 2.1 2.3 4.7 4.6 Dividend yield (%) 0.1 0.3 0.3 0.3

Note: * = Based on HSBC EPS (fully diluted)

Issuer information	ı						
Share price (INR)	500.70	Target price	(INR)	635.00	Potent'l tot r	tn (%)	26.8
Reuters (Equity) Market cap (USDr Free float (%)	1)	HVEL.BO 609 32.69	Mar	omberg (E ket cap (l	1 2/	2	VL IN 26,917 27360
Country Analyst	Sande	India India ep Somani	Sec		Electric		pment

Note: price at close of 21 Feb 2007

Year to	03/2006a	03/2007e	03/2008e	03/2009e
Y-o-y % change				
Revenue	72.1	55.0	55.9	35.9
EBITDA	69.2	45.2	53.2	37.2
Operating profit	70.1	45.1	51.9	36.0
PBT	81.6	55.4	56.2	35.9
HSBC EPS	101.8	55.2	56.2	35.9
Ratios (%)				
Revenue/IC (x)	3.5	4.8	6.7	7.8
ROIC	27.0	35.7	48.8	56.4
ROE	48.1	45.4	45.9	41.1
ROA	16.8	18.3	19.0	18.1
EBITDA margin	10.2	9.6	9.4	9.5
Operating profit margin	9.6	9.0	8.7	8.7
EBITDA/net interest (x)	5.7	8.3	10.3	10.4
Net debt/equity	57.7	17.6	-16.8	-29.4
Net debt/EBITDA (x)	1.0	0.3	-0.3	-0.6
CF from operations/net debt	140.3	409.0		
Per share data (INR)				
EPS Rep (fully diluted)	12.13	18.84	29.43	40.00
HSBC EPS (fully diluted)	12.13	18.84	29.43	40.00
DPS	0.56	1.43	1.48	1.71
NAV	33.78	50.16	78.11	116.39

Ratio, growth and per share analysis

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Overweight (V)



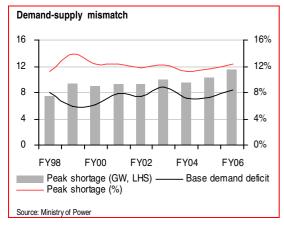
Appendix 1

- India to accelerate its investment plant in power infrastructure with 61GW of new capacity
- 12th five year plan taking shape with planned capacity addition of 86.5GW
- Two UMPPs awarded, others in the pipeline

Vision 2012

India has taken concrete steps towards realising its ambitious dream of "power for all" by 2012. The 8.4% base demand deficit for FY06 has highlighted the urgency for capacity addition. After a slow run rate of 4.2GW capacity addition per annum since the 9th Plan (FY98-02, year to March 2006), India is set to add 11-13GW per annum in the 11th Plan (FY08-FY12).

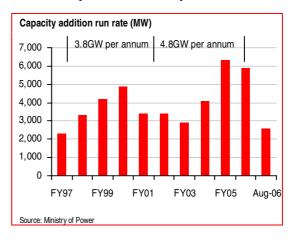
Demand-supply mismatch continues



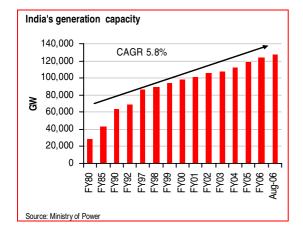
India's existing power shortage (12.3% of peak load demand and 8.4% of base load demand in FY06) could worsen if generation capacity fails to keep pace with the growing Indian economy. The elasticity of the electricity generated w.r.t GDP is 1.04x for the period between FY91 and FY04. As per projections by the Planning Commission in the Draft Integrated Energy Policy, India requires 627-778GW of installed capacity (c5-6 times the current base) by 2031-32, based on 7-8% GDP growth.

India's generation capacity addition so far

India has added on an average 4.2GW of capacity per annum since the beginning of the 9th Five-year Plan (FY97-02), which is scheduled to accelerate to 12-13GWpa in the 11th Five-year Plan.







India and China had approximately the same capacity in 1950 (China 1850MW and India, 1713MW). India has added capacity at a CAGR of 4.1% in the last decade and China, at 9%. This rapid capacity addition has resulted in China boasting a generation capacity of 508GW, 4x India's 126GW capacity.

Capacity addition to get a boost

Ambitious 11th Five-year Plan

This slow pace of capacity addition has left India a power deficit state. The government has set an ambitious target of setting up a total of 100GW in the 10^{th} and 11^{th} Plans.

12th Five-year Plan taking shape

India has recently announced a power generation capacity addition plan with a 30% increase in capacity addition plan to 86.5GW for the 12th Five-year Plan (FY13-17e).

The key highlight of these estimates is increased emphasis on hydropower generation capacity addition of 30GW, up 75% and nuclear power capacity addition of 12GW, up 2.8x.

The other salient feature of the plan is increasing market share of higher MW (660/800MW) supercritical thermal unit. The higher Megawatt thermal unit (660/800MW) would contribute c71.6% of the total thermal capacity addition in the 12th Five-year Plan. The shift towards supercritical technology would result in Indian power equipment companies investing in technology as well as moving up the learning curve.

n GW)

Sector/Fuel	11th	% of total	12th Plan	% of total	% change
	Plan		12011100		/o onunge
Hydro	17189	25.9%	30000	34.7%	75%
Thermal	46114	69.4%	44500	51.4%	-4%
Coal/Lignite	44000	66.2%	44500	51.4%	1%
Gas/LNG	2114	3.2%	NIL	na	na
Nuclear	3160	4.8%	12000	13.9%	280%
Total	66463	100.0%	86500	100.0%	30%

Source: CEA

HSBC (X)

Capacity addition led by central utilities

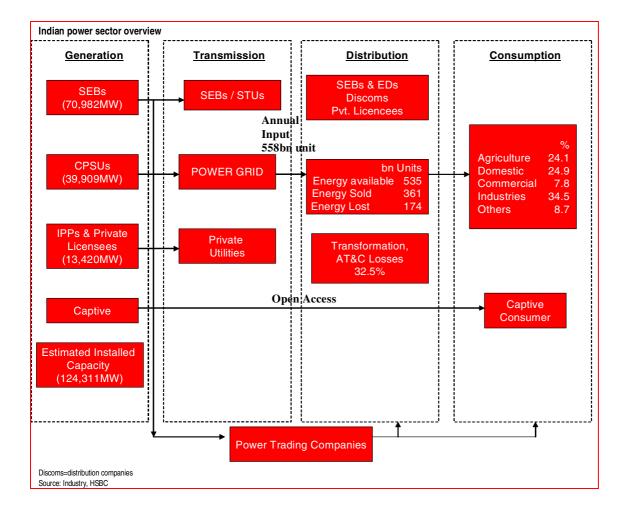
The central utilities – NTPC, National Hydro Power Corporation (NHPC) and Damodar Valley Corporation (DVC), to name a few – should lead the capacity addition programme for the 10^{th} and 11^{th} Plans. The central utilities are slated to contribute to 56% and 53% of the total planned capacity in 10^{th} and 11^{th} Plan respectively. Central utilities have strong balance sheets and can undertake these capacity additions. This reinforces our confidence in the execution of the capacity addition plan.

Private players not lagging behind

The power reforms initiated by the government of India and the Electricity Act 2003 have resulted in significant participation from private players like Tata Power and Reliance Energy.

Private sectors had added 6.1GW (23% of incremental capacity between December 2000 till date). The private sector currently constitutes 12% of the installed capacity base vs. 4% in FY96. We expect private players to contribute in a major way to power addition plan, with installed capacity base of 30-31GW by 2012.

Private players like Reliance Energy, Tata Power, Lanco Infratech, CESC and Jaiprakash Group have announced capacity additions of more than 48GW over the next 5 years. Although we do not expect all of the capacity announced to materialise, some of the projects are in advanced states of finalisation. Our utilities analyst, Michael Lee, expects c24GW of private capacity to be added in the 11th Plan. This is a significant



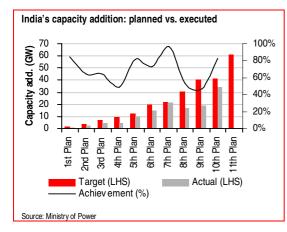


addition and will help power equipment players like BHEL, ABB India and Siemens.

Execution is the key

India had faltered in execution, with only 68% of proposed capacity added since the beginning of the 1st Five-year Plan. Realising that power is key for sustaining strong economic growth, the Ministry of Power (MoP) has started focusing on execution for the 10th and 11th Plans.

We believe that although the 10th Plan will fall short of the target, the spill-over should be completed in the 11th Plan. There has been greater focus than before on execution, and groundwork has been done before awarding the projects.



11th Plan expectations intact in spite of slippage in 10th Plan

We remain positive on the achievement of the 11th Plan based on our interaction with various industry people. Slippage in achieving the 10th Plan target is widely expected, with only 34GW of new capacity added against the proposed 41GW (83% of achievement) by the end of the 10th Plan. This does not deter our positive stance on the achievement of the 11th Plan (barring minor slippage). Our confidence stems from the fact that the road map for the 11th Plan had already been laid down and steps toward this have been initiated in the 10th Plan: Advance ordering of some projects has already been done. As per the Central Electricity Authority (CEA), orders for 17GW of capacity (28% of planned capacity) with thermal plants alone consisting of 11.9GW have been already been placed with various vendors.

Status of the 11th Plan capacity addition*				
Fuel	Total plan (MW)	% of total	Total ordered (MW)	% Ordered
Thermal	33,536	55%	11,929	36%
Nuclear	4,940	8%	1,440	29%
Hydro	22,420	37%	3,612	16%
Total	60,896	100%	16,981	28%

* As at June 2006 Source: CEA, Ministry of Power

- Power reforms like the Electricity Act 2003 and National Tariff Policy resulted in bringing in reforms in the power sector.
 Various initiatives like payment security mechanism have resulted in 100% collection efficiencies. This has helped improve financials of the power utilities companies.
- Capacity addition is led by financially sound Central utilities like NTPC. NTPC has demonstrated its execution capability in the past and is likely to add 21.9GW (36% of the total 11th Plan capacity addition) during the 11th Plan.
- Private players with ambitious plans are not far behind in contributing to capacity addition.
- Ultra mega power projects provide the booster for large-scale capacity addition at a single stroke. Although we do not expect all the proposed 8 projects for the 11th Plan to be on-stream on schedule, some of them should become operational. Recently a significant step was taken with the awarding of two UMPP projects to private players.



For further details, please refer to Sumeet Agrawal's report titled `Building India: Party to continue' dated 10 January 2007.

Government awards two UMPPs

Who got the projects?

Sasan. The consortium of Lanco Infratech and Globeleq Singapore Pte Ltd has bid the lowest per unit tariff for the 4000 MW Sasan project in the state of Madhya Pradesh. It is a pit head coalbased project with a captive coal blocks allocated by the Ministry of Coal.

Tariff bids for Sasan (INR per unit)		
Bidders	Tariff	
Lanco Infratech	1.19	
Reliance Energy	1.29	
Tata Power	1.41	
Essar Group	1.65	
Jaiprakash Group	1.65	
Sterlite Group	1.75	
NTPC	2.10	
L&T	2.25	

Source: Power Line

According to Lanco management, the project will consist of six plants of 660MW each. Financial closure of projects is expected by January 2008. All 6 plants are slated to be commissioned 54 months after financial closure, with the first plant commissioned 36 months after the closure.

Sasan: commissioning targets		
Heads	Target	
Financial closure	Jan-2008	
660MW Sasan I	Jan-2011	
660MW Sasan II	April-2011	
660MW Sasan III	July-2011	
660MW Sasan IV	October-2011	
660MW Sasan V & VI	March-2012	

Source: Lanco, HSBC

Mundra. Tata Power bid the lowest per unit tariff for the 4000 MW Mundra project in the state of Gujarat. Coal for this project is imported. The project will be set up near the Adani Port.

Tata Power expects the closure of this project by August 2007 and intends to raise INR90bn of debt. The commissioning of plants is slated to start by 2011.

Tariff bids for Mundra project (INR per unit)

Bidders	Tariff
Tata Power	2.26
Reliance Energy	2.66
Adani Group	2.69
Essar Group	2.8
L&T	3.22
Sterlite Group	3.75

Source: Power Line

Status of other UMPPs

The power industry is buoyant, with the smooth awarding of the first two UMPPs. The awarding of UMPPs will be a major contributor to order flows for the transmission line companies in the domestic market.

The government has initiated the selection process among bidders for two other ultra mega power projects, at Krishnapatnam in the state of Andhra Pradesh and Tilaiya in the state of Jharkhand.

The Andhra Pradesh project is scheduled to be awarded by March 2007 with the proposed SPV of Coastal Andhra Power Ltd. 17 bidders – 6 of which are international – have qualified for this project.

SPV promoted by Power Finance Corporation, Jharkhand Integrated Power Ltd, has invited a request for qualification (RFQ) / request for participation (RFP) from potential bidders. The Jharkhand project is likely to be awarded by July 2007.

Clearance is awaited from the Ministry of Environment for project at Tadri in the state of Karnataka. According to news reports, the project at Girye in Maharashtra is likely to be scrapped due to implementation issues. The Ministry of Power has requested the state government to look at alternative sites, including those near Dighi Port and Dhopave.



Disclosure appendix

Analyst certification

The following analyst(s), who is(are) primarily responsible for this report, certifies(y) that the views expressed herein accurately reflect their personal view(s) about the subject security(ies) and issuer(s) and that no part of their compensation was, is or will be directly or indirectly related to the specific recommendation(s) or views contained in this research report: Sandeep Somani

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This report addresses only the long-term investment opportunities of the companies referred to in the report. As and when HSBC publishes a short-term trading idea the stocks to which these relate are identified on the website at www.hsbcnet.com/research. Details of these short-term investment opportunities can be found under the Reports section of this website.

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Rating definitions for long-term investment opportunities

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For each stock we set a required rate of return calculated from the risk free rate for that stock's domestic, or as appropriate, regional market and the relevant equity risk premium established by our strategy team. The price target for a stock represents the value the analyst expects the stock to reach over our performance horizon. The performance horizon is 12 months. For a stock to be classified as Overweight, the implied return must exceed the required return by at least 5 percentage points over the next 12 months (or 10 percentage points for a stock classified as Volatile*). For a stock to be classified as Underweight, the stock must be expected to underperform its required return by at least 5 percentage points over the next 12 months (or 10 percentage points for a stock classified as Volatile*). Stocks between these bands are classified as Neutral.

Our ratings are re-calibrated against these bands at the time of any 'material change' (initiation of coverage, change of volatility status or change in price target). Notwithstanding this, and although ratings are subject to ongoing management review, expected returns will be permitted to move outside the bands as a result of normal share price fluctuations without necessarily triggering a rating change.

*A stock will be classified as volatile if its historical volatility has exceeded 40%, if the stock has been listed for less than 12 months (unless it is in an industry or sector where volatility is low) or if the analyst expects significant volatility. However,



stocks which we do not consider volatile may in fact also behave in such a way. Historical volatility is defined as the past month's average of the daily 365-day moving average volatilities. In order to avoid misleadingly frequent changes in rating, however, volatility has to move 2.5 percentage points past the 40% benchmark in either direction for a stock's status to change.

Prior to this, from 7 June 2005 HSBC applied a ratings structure which ranked the stocks according to their notional target price vs current market price and then categorised (approximately) the top 40% as Overweight, the next 40% as Neutral and the last 20% as Underweight. The performance horizon is 2 years. The notional target price was defined as the mid-point of the analysts' valuation for a stock.

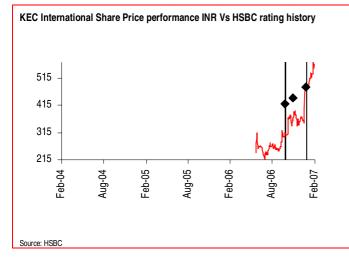
From 15 November 2004 to 7 June 2005, HSBC carried no ratings and concentrated on long-term thematic reports which identified themes and trends in industries, but did not make a conclusion as to the investment action that potential investors should take.

Prior to 15 November 2004, HSBC's ratings system was based upon a two-stage recommendation structure: a combination of the analysts' view on the stock relative to its sector and the sector call relative to the market, together giving a view on the stock relative to the market. The sector call was the responsibility of the strategy team, set in co-operation with the analysts. For other companies, HSBC showed a recommendation relative to the market. The performance horizon was 6-12 months. The target price was the level the stock should have traded at if the market accepted the analysts' view of the stock.

Rating distribution for long-term investment opportunities

As of 26 February 2007, the dis	stributio	n of all ratings published is as follows:
Overweight (Buy)	42%	(16% of these provided with Investment Banking Services)
Neutral (Hold)	38%	(16% of these provided with Investment Banking Services)
Underweight (Sell)	20%	(11% of these provided with Investment Banking Services)

Share price and rating changes for long-term investment opportunities



From	То	Date
N/A	Overweight	19 October 2006
Overweight	Underweight	17 January 2007
Target Price	Value	Date
Price 1	420.00	19 October 2006
Price 2	440.00	22 November 2006
Price 3	480.00	17 January 2007

Source: HSBC



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