

India Capital Goods Sector

Research Analyst

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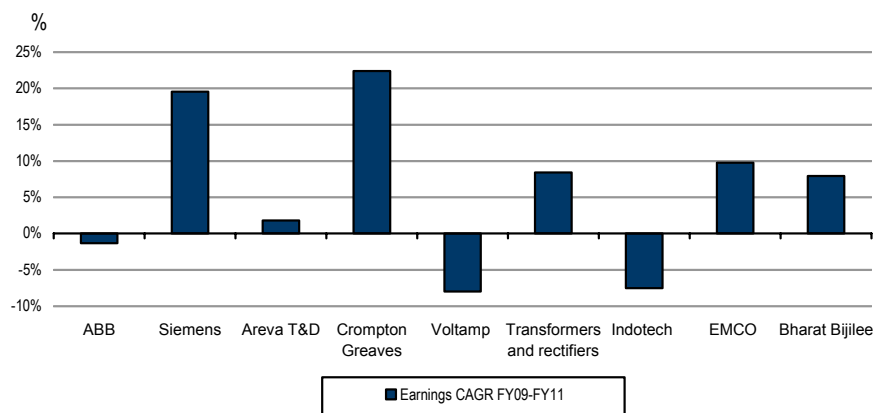
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SECTOR REVIEW

Over-transmission

Figure 1: Earnings CAGR (FY09-11E)



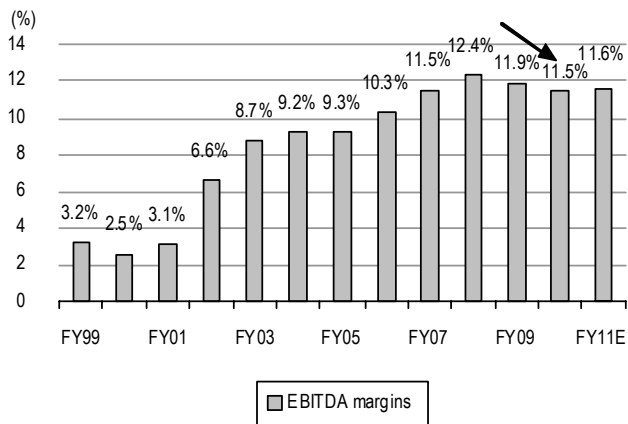
Source: Company data, Credit Suisse estimates I/B/E/S consensus for not rated stocks

- **The power transmission and distribution (T&D) sector** has good secular growth, but with volatile cycle atop. We are currently in a strong down-cycle and a few quarters away from a trough. At some point the sector will be a good investment but not now, particularly given steep valuations. That said, we like Crompton Greaves for company specific factors.
- **Excess capacities globally are driving down prices** for the high voltage transformers and power systems business. Our supply chain checks suggest price pressures will intensify. Three factors that could mark a trough for the cycle are: 1) industrial capex recovery, 2) changes in the import content regulations, and 3) an acceleration in the generation sector capex
- **The next upturn, however, will be a low beta one**, as the previous one had benefited from a low margin base. With sector margins peaking, growth will be dictated by order inflows alone, suggesting slower earnings growth and hence lower peak valuations.
- **Crompton Greaves (assume coverage with an OUTPERFORM) is our favoured pick**, due to its steep valuation discount despite the expected relative earnings outperformance. Strong earnings are driven by the margin resilience due to its focus on the product segment and improving cost structure, which will drive market share gains. While **we initiate coverage of Areva T&D with an UNDERPERFORM**, we maintain the same rating for ABB given rich valuations and the risk of earnings downgrades. We maintain a NEUTRAL rating on Siemens.

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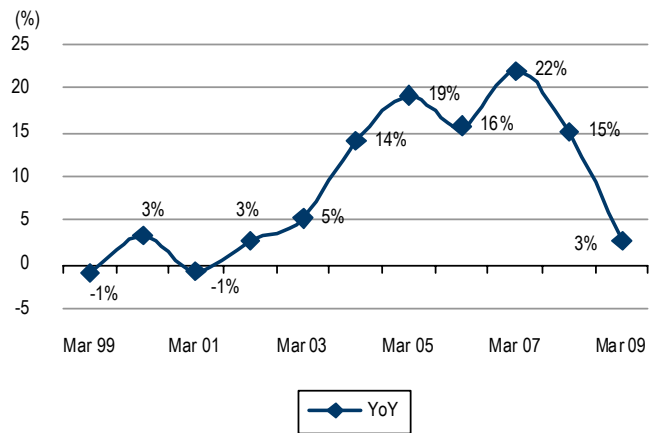
Focus charts

Figure 2: Risk to consensus margin estimates



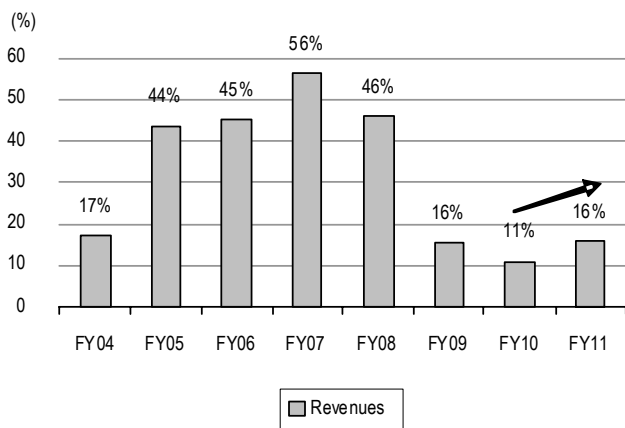
Source: Company data, Credit Suisse estimates

Figure 3: Electrical equipment industry growth dips



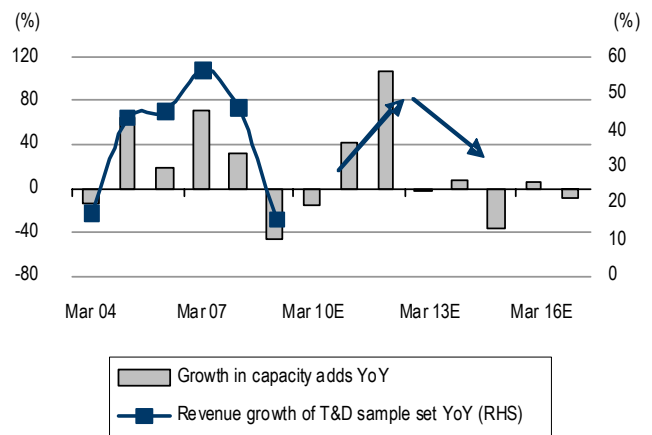
Source: Company data, Credit Suisse estimates

Figure 4: Sector revenue growth to trough in FY10



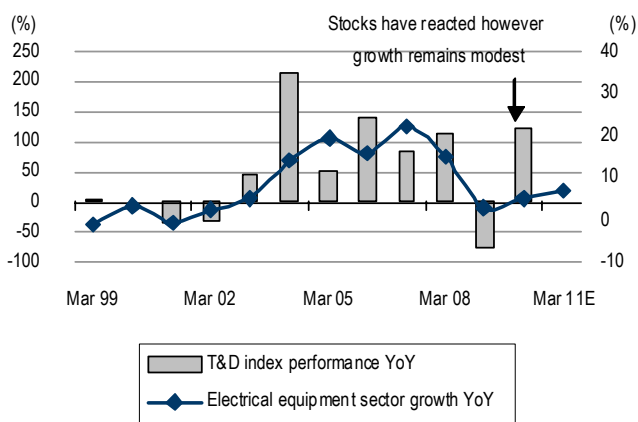
Source: Company data, Credit Suisse estimates

Figure 5: Expect rebound in growth by 2H CY10



Source: Company data, Credit Suisse estimates

Figure 6: Stocks already pricing in a recovery



Source: Company data, Credit Suisse estimates

Figure 7: Sector valuations close to the historical peak



Source: Company data, Credit Suisse estimates

Over transmission

The transmission and distribution sector is a classic cyclical sector, currently in a phase of down-cycle. The revenue shortfall was due to delays in generation capacity addition, slower private sector spending while margin pressures were triggered by excess global capacities, driving in imports and a slower broad industrial environment, increasing competitive pressure on power sector orders. A fragmented market (five companies with a cumulative 70% market share and 10 with a cumulative 80% market share), limited entry barriers and a commoditised product (standardised product) make the sector prone to steep cyclicalities, in our view.

In the long term, we remain positive on the sector's secular growth credentials given historical underinvestment and continued power deficits. We expect the current down-cycle to continue until 2H next year. The upturn next year will be driven by the acceleration in capex in the generation sector driving demand for T&D products and return of industrial orders. At some point ahead the sector will be a good investment, but not now, especially given rich valuations. We introduce Crompton Greaves as our top pick, given its discount to the sector despite strong earnings growth.

Cyclical pressures evident

Overall, prices have declined by over 25% YoY with declines being steeper in the high voltage segment (over 40% YoY) due to competition from imports (Korea and China). Our channel checks suggest continued margin pressure on the systems business (pressure from the foray of construction firms) and high voltage products. Declining prices will impact new order margins and earnings growth. With consensus building in only modest margin declines, we see continued risk of earnings downgrades capping sector valuations.

Edging closer to a trough

We expect a recovery in order inflows in the second half next year, as our power supply-demand model highlights acceleration in generation capacity addition in FY12. T&D spending should intensify as orders for evacuation projects for those plants will commence 12-18 months ahead (lead time for delivery). In simpler terms, the ongoing capex in the generation sector will translate into orders for T&D equipment next year.

We also expect margin declines to slow next year coinciding with a recovery in broad industrial capex, as it reduces competitive pressure on the power sector. The reduction in mandatory import requirement for high voltage (from 66% to 33%) will also reduce competition from imports.

Sector valuations price in recovery

We believe the up-cycle next year will be a low beta one given that the previous cycle had the benefit of low base of margins. With margins peaking, earnings growth will be dictated by only order inflows and would hence grow at a slower pace bringing down peak valuations for the sector. At 26x forward numbers, sector valuations appear rich and prone to correction, in our view.

Despite a cautious stance on the sector, we see relative value in Crompton Greaves (assume coverage with an OUTPERFORM) due to relatively good earnings growth. Unlike its peers, Crompton's margins may remain resilient given its focus on the products segment and better cost structure in the high voltage segment (100% domestic content in another six months) and room for growth in international business margins. We retain our NEUTRAL rating on Siemens due to valuation concerns but it remains our pick relative to ABB and Areva T&D. We have UNDERPERFORM ratings on ABB India and Areva T&D India, as we remain concerned about the likelihood of further consensus earnings downgrades, and absolute valuations are difficult to justify.

T&D is a cyclical sector and currently we are in a strong down-cycle

Prices have declined by over 25% with the HV segment witnessing 40%+ declines YoY

We expect 2H FY11 recovery as generation capex has accelerated

A recovery would be a low beta one given no major margins leverage in this cycle. At 26x forward valuation, the sector appears to price in a recovery

Sector valuations

Figure 8: Valuations and ratings

(Rs mn)	Ticker	Rating	CMP (Rs)	Mkt cap (US\$ mn)	EPS			P/E		
					FY09	FY10	FY11	FY09	FY10	FY11
ABB	ABB IN	U	729	3621	26	20	25	28.2	36.3	30.6
Siemens	SIEM IN	N	512	3859	15	21	22	33.7	24.2	23.7
Areva T&D	ATD IN	U	276	1488	9	8	9	30.6	36.7	29.9
Crompton Greaves	CRG IN	O	362	3112	16	19	24	23.1	19.0	15.4
Voltamp	VAMP IN	NR	740	166	113	83	96	6.5	8.9	7.8
Transformers and rectifiers	TRIL IN	NR	308	88	35	34	41	8.8	9.2	8.0
Indotech	INDT IN	NR	268	63	37	29	31	7.3	9.4	8.4
EMCO	EMCO IN	NR	79	95	9	9	11	8.8	8.5	7.7
Bharat Bijilee	BIJL IN	NR	910	114	84	81	98	10.8	11.2	9.2
KEC international	KECI IN	NR	554	596	24	38	48	23.5	14.4	11.6
Jyoti Structures	JYS IN	NR	136	247	10	13	16	13.0	10.9	8.4
Kalpataru power	KPP IN	NR	923	544	42	61	79	22.1	15.1	11.4

(Rs mn)	Trading value US\$/day	FII limit (%) Board approved	FII stake (%) utilisation	ROE (%) FY11	P/B			EV/EBITDA		
					FY09	FY10	FY11	FY09	FY10	FY11
ABB	7.8	24	12	18%	7.3	6.2	5.2	19.7	22.1	
Siemens	7.5	24	4	21%	8.3	5.8	4.9	20.6	14.7	
Areva T&D	4.5	24	1	22%	9.1	7.6	6.4	18.2	19.2	
Crompton Greaves	6.4	24	14	27%	7.2	5.5	4.2	14.1	12.1	
Voltamp	1.7	24	22	23%	2.8	2.2	1.8	4.8	6.5	5.5
Transformers and rectifiers	0.2	24	2	16%	1.6	1.4	1.2	4.3	4.2	3.6
Indotech	0.5	24	2	17%	1.9	1.6	1.5	4.6	6.2	5.8
EMCO	1.5	49	5	12%	1.0	1.0	0.9	3.0	2.9	2.5
Bharat Bijilee	0.6	24	1	21%	2.6	2.2	1.9	6.5	6.4	5.3
KEC international	0.6	24	6	26%	4.8	3.8	3.0	7.4	7.5	6.3
Jyoti Structures	0.8	40	17	21%	2.7	2.2	1.8	4.7	4.5	3.8
Kalpataru power	1.0	24	7	17%	2.5	2.4	2.0	9.2	6.3	5.1

Source: Company data, Credit Suisse estimates, I/B/E/S consensus for not rated stocks

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Cyclical pressures evident

A cyclical slowdown in demand for power equipment globally and excess capacities built over the past few years of boom have begun to impact equipment pricing in India. Overall, prices have declined over 25% YoY and over 40% YoY in the high voltage segment driven by competition from imports (Korea and China). Our channel checks suggest continued pressure on the systems business and high voltage products. Declining prices will impact margins on order and temporarily delink orders from earnings growth, in our view. With margins close to the historical peaks and consensus building in only a modest decline, we see a further downside risk to consensus earnings estimates.

Excess capacities are driving down pricing. The high voltage transformers and systems business is witnessing price pressures

More downside to consensus margin estimates

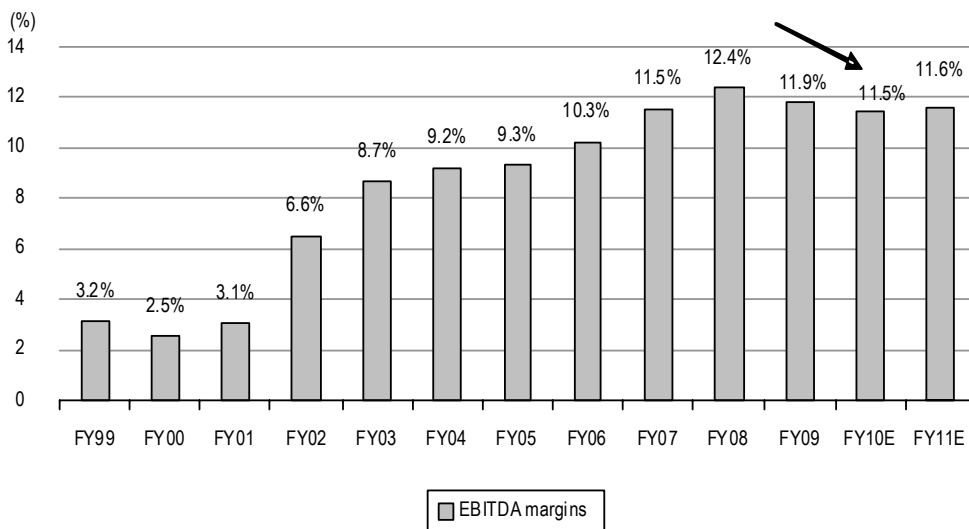
Prices for 765 KV equipment have declined over 40% over the past year, for overall transmission equipment by 15-20% and for distribution equipment by 25-30% compared with a 10-15% moderation in raw material prices.

Consensus building in modest margin declines. We see risk of downgrades

Directionally, we believe the high voltage segment will see continued price pressures based on our conversations with the supply chain. In fact, Hyosung, the key driver of recent price declines, said it would remain aggressive in the Indian market to gain market share, and indicated likely aggression from Chinese equipment names (TBEA and Boulding).

We believe consensus margin estimates for the sector have room for downside as aggregates suggest that they are pricing in only a moderation in margins and not a steep decline.

Figure 9: Consensus EBITDA margins have room for significant downside



Source: Company data, Credit Suisse estimates

Sector prone to price pressures

While BTG equipment prices offered by Chinese players have always enjoyed a 15-20% price advantage, pricing in general has largely remained firm over the past few years. In fact, BHEL continues to grow its order book, with a limited impact on margins, as Chinese players have no major price advantage on BOP (balance of plant) or on EPC. The entry of domestic competitors is, however, expected to be a bigger challenge, due to their ability to gain inroads into NTPC or state utility orders.

The competitive dynamics in the T&D sector are different given the presence of several different companies with similar product offerings and the merit of competition largely

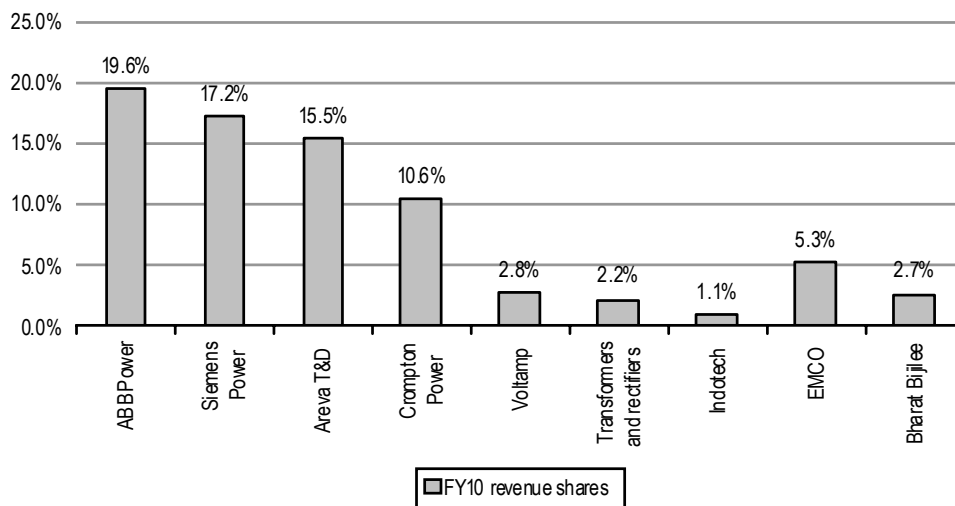
being pricing (delivery and quality are usually similar) and technology. With technology no longer being a differentiator and import content regulations being in place for new technology segments, in addition to excess supply globally, we expect pricing power to remain in favour of the buyers for a few more quarters.

Fragmented market shares

Unlike the BTG segment, in which BHEL has more than 65% market share, there is no clear market leader in the T&D sector, with five companies (ABB, Siemens, Areva T&D, Crompton Greaves, BHEL) aggregating a 70% market share and several other competitors, such as L&T, Hyosung, Voltamp, Bharat Bijilee, Vijai Electricals, Transformers and Rectifiers, BHEL, Indo Tech Transformers, EMCO, Voltamp, controlling the rest.

No clear market leader, hence no pricing power among vendors

Figure 10: Estimates market shares



Includes BHEL in others – which is 20% of the market

Source: Company data, Credit Suisse estimates

Technology no longer a differentiator

Apart from Siemens, ABB and Areva T&D, Crompton Greaves has acquired capabilities in the high voltage segment through the acquisition of Ganz. BHEL is now expected to sign a JV soon to cater to the 765 kV segment and EMCO recently devised plans for such a foray. As such, technology is no longer a differentiator for winning orders or garnering premium pricing.

Technology cannot drive premium pricing

Import content regulations for high voltage

With a mandatory import content requirement of 66% (recently moved to 50%) for new technology projects, domestic firms enjoy no significant cost advantage, in our view, as Siemens, Areva T&D and ABB outsource components from Europe, which may not offer cost advantage over Chinese/Korean firms. However, import content regulations are expected to ease to 33% in two phases (50% first) which should reduce the cost advantage of China/Korea imports.

Mandatory import content is driving price declines

Slower industrial capex spending

Companies like ABB India and Siemens India derive 35-45% of revenues from industrial products (industrial automation, drives, etc.), hence slower industrial capex spending increases the pressure on winning projects in the power segment. Increasing demand for industrial products/projects could potentially reduce pressure on pricing in the power sector as companies can choose to ignore projects with lower margins.

Slower industrial capex is driving more competitors in the power sector

A recovery in industrial capex rests on demand, in our view, as only sustained demand growth can help increase capacity utilisation, improve cash flows and force new capacity creation.

We expect industrial capex spending to increase from 2H FY11

In order to understand the current supply-demand paradigms, we ran sensitivities on steel and cement demand in relation to capacity utilisation and noted that it will be difficult to meet demand post FY13 if the demand growth CAGR is 7% or higher (Figure 11 and Figure 12). Given the lead times required for setting up capacity (2-3.5 years, lead times are higher for greenfield capacity creation), it is likely that there could be a forced revival in industrial capex by 2H FY11.

Industrial capex could recover by 2H FY11

Figure 11: Steel demand growth and capacity utilisation

	2009	2010	2011	2012	2013	2014
Supply MT/demand growth	64.1	76.4	80.0	83.0	83.0	83.0
5%	84	74	74	75	79	83
6%	85	75	76	78	82	87
7%	85	77	78	81	86	92
8%	86	78	81	84	91	98
9%	87	80	83	87	95	103
10%	88	81	85	90	99	109

Source: Company data, Credit Suisse estimates. Assume no capacity adds post FY12

Figure 12: Cement demand growth and capacity utilisation

	FY10E	FY11E	FY12E	FY13	FY14
Supply MT/demand growth	226	277	297	297	297
7%	87	76	76	81	87
8%	88	77	78	84	91
9%	89	79	80	87	95
10%	89	80	82	91	100
11%	90	82	85	94	104
12%	91	83	87	97	109

Source: Company data, Credit Suisse estimates

Survey suggests concerns on pricing environment

We spoke with several companies in the supply chain to understand pricing trends across the voltage segment. We noticed that price competition is high in 765 kV given the presence of international vendors. The overall view is that there will be further price declines from here for high voltage segment and for systems (ie EPC) business

Hyosung

More room for price cuts: Management said prices were already too high in India and it is largely transfer pricing of imported content that makes margins in MNCs' Indian operations appear low. There is still enough room for prices to come down in India and management expects pricing pressures to intensify over the medium term.

Hyosung intends to remain aggressive in Indian market

Not just about costs: Hysoung pointed out cost advantage is clearly not a key factor and that the already high prices/margins are now getting rationalised. In terms of scale, Hyosung has aggregate over 100,000 MVA capacity (60,000 MVA in Korea, 17,000 MVA in Pittsburgh US and 20,000 MVA in China). Capacity in Korea is in fact being increased to cater to rising demand in India. While the scale gives cost advantages, in our view, Hyosung mentioned it sources components from Power Grid-approved vendors in India and then ship the final product from Korea. Even transformer oil, which increases the weight of the product while shipping, is sourced locally and filled in India.

Areva T&D

Our recent meeting with Areva T&D's management indicated that pricing pressures have intensified over the past few months and some recent tenders had Chinese and Korean vendors as L1 with a 15% price difference with the closest competitor.

Areva T&D concerned about price declines

Management highlighted that overall price declines in the transmission sector are about 15-20% and in the distribution sector about 25-30%. Margins in 765 kV segment are lower than 400 KV segments now, as per management

Management believes that a change in the clause, increasing domestic content to about 50% and thereafter 70%, will benefit the domestic firms.

Siemens India

Siemens's management highlighted that it is not seeing any margin pressure on the products business while the systems business is seeing pricing declines given the entry of construction companies. Management expects an uptick in T&D order activity and is also seeing some pick-up in industrial orders.

Siemens sees price pressure only on the systems segment

Crompton Greaves

Crompton Greaves indicated it is not witnessing any margin pressure for the product segment and that price pressures, if any, are restricted to EPC projects. Management is confident in protecting 765 kv margins as it will be in a position to supply 100% domestic content from India in another six months (details in the Crompton Greaves section in this note). Management expects margins in the second half to be similar to that in 1H as it benefits from lower raw material prices, value engineering and global sourcing initiatives.

Crompton believes price pressures are restricted to the EPC business where it does not have significant presence

EMCO

EMCO's management attributed a large part of price declines YoY to moderation in RM prices (13-14% down YoY). Margins on the current order book are largely lower than that in the last year, as per management.

Kalpataru Power Transmission

Management, while optimistic on orders, said competitive intensity in the transmission tower sector has of late increased with about 13-15 active bidders. Competition should impact pricing and margins, according to management, although it did not indicate any significant price war in the transmission tower segment.

Jyoti Structures

While management did not indicate any major price pressures (transmission towers), margin expectation of 11-11.5% (from 13% earlier) could be an indication of competition.

KEC International

KEC's management is seeing higher competition in the domestic market, but said competition has surged across cycles and several competitors had exited the business already.

ABB Group

Our European cap goods analyst Simon Smith highlighted that ABB group's management in 2Q indicated that pricing was under control and margins in order backlog was holding up. In this quarter though it was highlighted that pricing pressures have intensified and are starting to impact margins in the backlog and short-cycle businesses. Another interesting comment from ABB's management was that competition has increased in some of ABB's markets and excess capacity was driving pricing pressure.

Even ABB faces pricing pressure and higher competition in some geographies

More pressure on the high voltage segment and the systems business

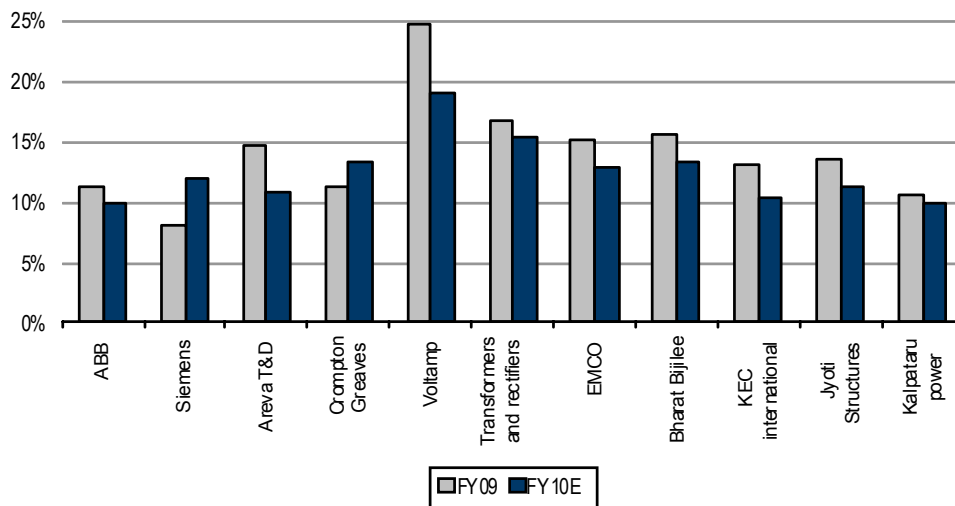
In summary, we note that most of margin pressures for the Tier 1 T&D firms reflect pressure on the systems business, where entry barriers are low and even construction companies have of late been seen bidding aggressively. The margin declines are not led by 765 kV pricing as most firms are yet to book revenues in this segment. However, with margins in the 765 kV segment falling below that of 400 kV for some T&D firms (it is a function of their cost structures), margin declines could continue even next year when revenue bookings commence.

The degree of price pressure is higher in the high voltage and systems business

While prices have declined across most voltage levels, the key question though is whether margin pressures (on orders) at the high voltage segment will accelerate pricing declines in the mid-low voltage segment, as the inability to win orders in the high voltage segment could translate into more pressure on other voltage segments.

Our view though is that although prices have declined across the supply chain, we see limited irrational competition at these voltage levels due largely to the absence of imports. No import content requirement, smaller size of orders, product business rather than EPC and the presence of companies with smaller balance sheets having limited ability to cut prices and bear losses for significant periods of time are some of the reasons for low price competition.

Figure 13: EBITDA margins



Source: Company data, FY10 for Voltamp, EMCO, Bharat Bijlee, Jyoti structures, KEC and Kalpataru are based on consensus numbers

Edging closer to a trough

We expect a recovery in order inflows in the second half of next year, as our power supply-demand model highlights an acceleration in generation capacity additions in FY12. T&D spending should intensify as orders for evacuation projects for those plants will commence 12-18 months ahead of commissioning of capacity (lead time for delivery). In simpler terms, the ongoing capex in the generation sector will translate into orders for T&D equipment next year.

A recovery in fundamentals expected in 2H next year

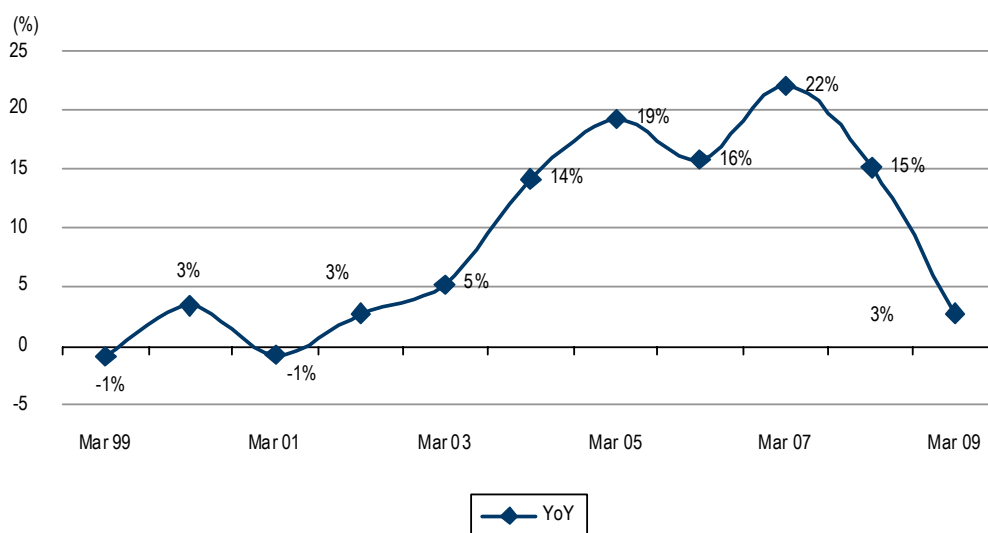
We also expect margin declines to slow next year, coinciding with a recovery in broad industrial capex, as it reduces competitive pressure on the power sector. The reduction in the mandatory import requirement for high voltage (from 66% to 33%) will also reduce competition from imports.

Growth decelerating

The T&D sector has seen several years of strong growth (FY04-08) led by the strength in addition of generation capacity and a low base. The delay in setting up of generation capacity, the delay in approvals of several projects, and slower private sector spending have impacted YoY growth rates for the sector. In fact, data on the electrical equipment industry by IEEMA suggest overall industry growth has moderated to only 2.7% in FY09 and industry utilisation is at 50% i.e., an impact of capacity expansion over the past few years.

Overall revenue growth for the industry has declined significantly

Figure 14: Slower growth rates for the electrical equipment industry



Source: Company data, Credit Suisse estimates

The transformer sector witnessed only 7% growth in FY09 while demand for switchgears has been weak over the past two years.

Figure 15: Product-wise sales

(Rs mn)	Mar 03	Mar 04	Mar 05	Mar 06	Mar 07	Mar 08	Mar 09
Transformers	23,600	24,500	37,000	55,000	81,000	107,000	115,000
YoY (%)		4	51	49	47	32	7
Switchgears	22,100	22,550	31,550	40,000	64,750	65,000	73,000
YoY (%)		2	40	27	62	0	12
Transmission lines	12,000	17,500	31,000	43,500	60,000	82,000	85,000
YoY (%)		46	77	40	38	37	4

Source: IEEMA

Slippages likely

Overall investment in T&D spending is now well documented. However, experience suggests that annual spending is not linear but largely tied up with the pace of setting up of generation capacities.

Underinvestment in T&D continues

While the thumb rule on T&D investments globally is that spending on T&D and generation should have a 1:1 ratio, in India the figure ranges 0.5-0.6x. CEA's (Central Electricity Authority) statistics suggest that in FY08, of the total Rs600 bn investment, power companies spent about 70% on generation, 23% on transmission and 7% on distribution.

Targets could likely be slipped again

Overall, the 11th plan (FY08-12) calls for a spending of Rs1,400 bn for the transmission segment and Rs2,800 bn for distribution (including Rs550 bn for APDRP and the spending on rural electrification). Over the first two years of the plan period, PGCIL had spent Rs147 bn while in FY08 state transmission companies and distribution companies spent Rs68 bn and Rs43 bn, respectively. In the 10th plan, only 67% of the targeted spending on T&D was implemented. With likely 60-65% of planned generation capacities expected to be implemented in the current plan period (FY08-12) actual spending on the transmission sector could be lower than planned by broadly a similar percentage, in our view.

It is likely that only 60-65% of planned capex will get implemented

Figure 16: Transmission sector spending

Rs bn	10th plan target	10th plan actual implemented	%	11th plan capex	YoY (%)
Transmission	744	496	67	1400	182
Power grid /regional grids	403	207	52	750	261
State	341	289	85	650	125

Source: Planning commission

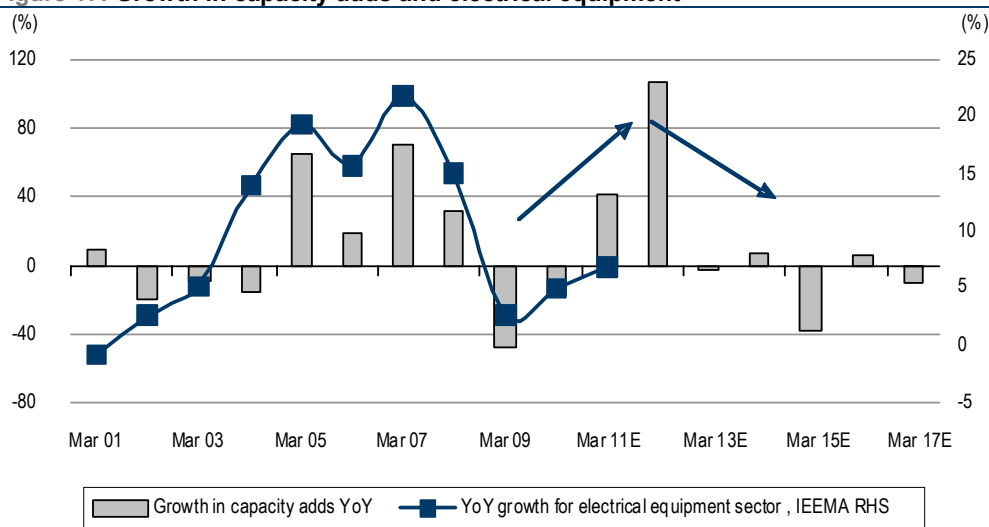
Moderate rebound likely

Across the years, the T&D sector evacuation projects are linked to capacity addition and the correlation between growth in capacity additions and the growth rate of electrical equipment industry appears strong.

Credit Suisse's bottom-up power supply-demand model (Amish Shah, utility sector analyst) suggests that there will be a sharp increase in power capacity addition in FY12. This could indicate a likely rebound in T&D capex starting 2H FY11/FY12.

A rise in generation capex will drive recovery in volumes for T&D with a lag

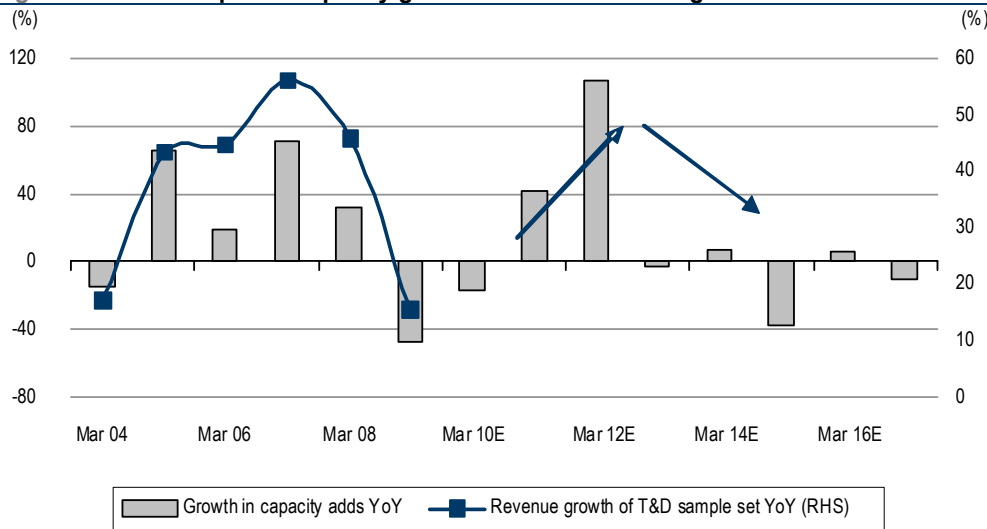
Figure 17: Growth in capacity adds and electrical equipment



Source: Company data, Credit Suisse estimates

We observed similar trends in the growth rates of our T&D sample set of 10 companies (representing 70%+ market share).

Figure 18: Installed power capacity growth and T&D revenue growth

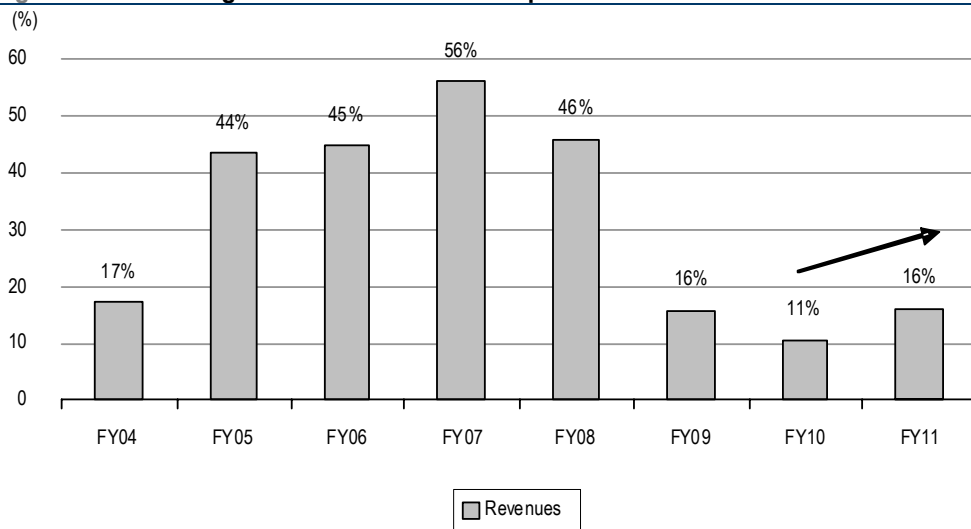


Source: Company data, Credit Suisse estimates

FY10 could be a trough for revenues

An aggregation of consensus forecasts for our sample of top 10 domestic T&D firms suggests that growth could trough by FY10 and witness a modest rebound in FY11.

Figure 19: Revenue growth CAGR for T&D sample set



Source: Company data, Credit Suisse estimates

Private sector investment in transmission networks

The government is planning to award three transmission projects to private firms on a build, own, operate and maintain (BOOM) basis, awarded through a competitive tariff-based bidding. The three projects are Talcher Augmentation Transmission System (Talcher-II), North Karanpura Transmission System and East-North Interconnection System. There are 14 other projects identified by the empowered committee on transmission which are yet to be awarded.

N-E HVDC substation awards delayed

The award of HVDC substations for evacuation of power from North East has been delayed due to technology related issues and is expected to be awarded over the next few months. The award is expected to have an order value of Rs40-45 bn.

Stocks are pricing-in a recovery

The sector is trading at a steep 26x forward valuation and one may be tempted to focus on likely order inflow strength and ignore medium-term earnings growth on the hope that upturns may bring in margin surprises and sharp improvements in earnings growth. The typical comment is, "look at what happened in the previous cycle." Base effect apart, we note that sector margins on an aggregate are already close to historic peaks and have just started coming off. We believe the prospect of margin upside in this up-cycle may be limited and earnings growth will largely be dictated by growth in order inflows, ensuring that on a CAGR basis forward earnings growth will be much slower than in the past few years i.e., we expect lower peak valuations in this cycle. However, we see relative value in Crompton Greaves (assume coverage with an OUTPERFORM rating) and Siemens (NEUTRAL). We have an UNDERPERFORM rating on ABB India and Areva T&D India, as we remain concerned about the likelihood of further consensus earnings downgrades.

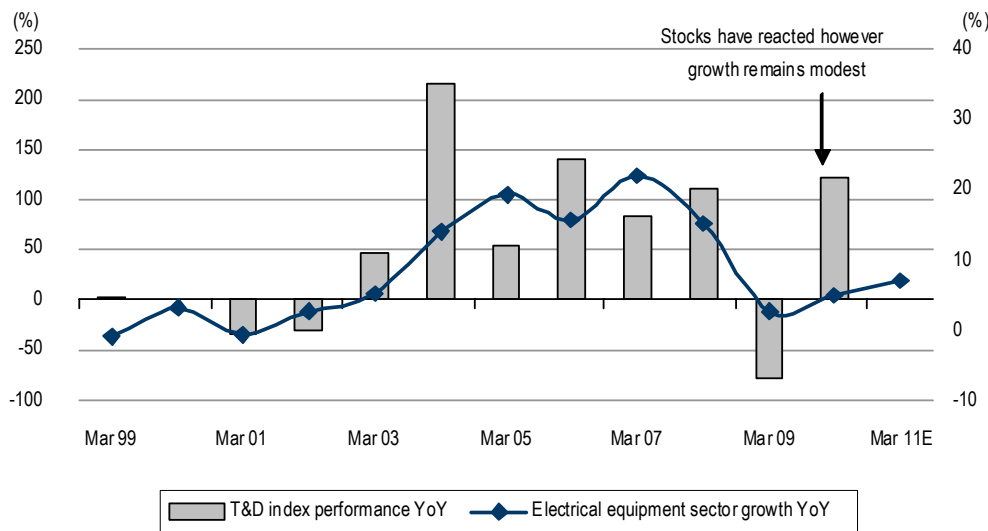
While a recovery is anticipated, stocks are already pricing-in one

Sector performance and industry growth diverge

Industry growth moves in line with generation capacity additions and share prices move in line with trends in industry growth (directionally absolute performance may vary). Over the past year though, stocks have returned over 120% even when sector growth remained modest suggesting that a sharp correction in sector valuations is likely, in our view.

Sector performance typically mimics industry growth. A steep recovery in stock price does not tie up with a modest recovery in growth

Figure 20: Stock performance and industry growth diverge



Source: Company data, Credit Suisse estimates

Sector valuations close to the high end of historical bands

Even in terms of P/E valuations, the T&D sector (large caps) is trading at 26x forward numbers, at the higher end of historical trading bands, despite the limited scope for consensus earnings upgrades.

Sector is trading close to the historical peak

Figure 21: Sector 12-month forward P/E (consensus)

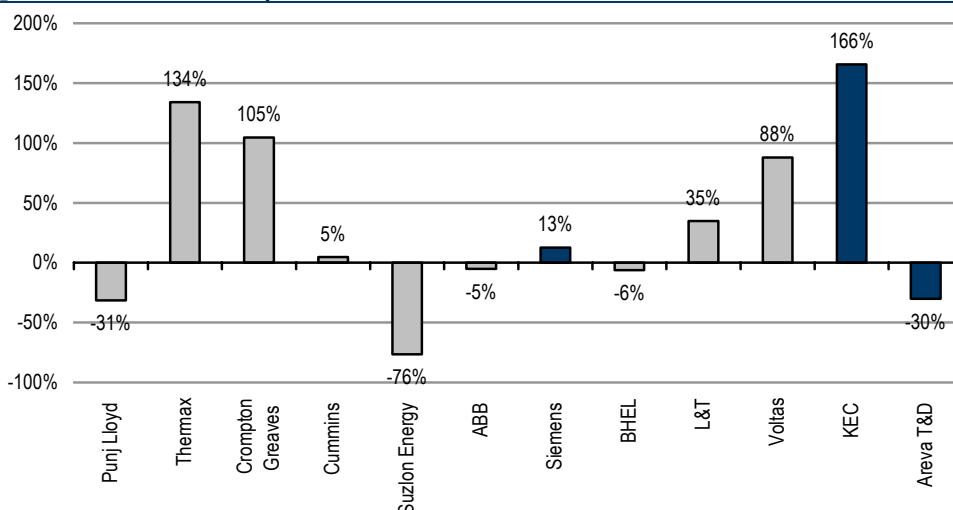


Source: Company data, Credit Suisse estimates

Sector performance mixed

Areva T&D and ABB continue to underperform broad markets (YTD), a reflection of margin pressure and slower earnings growth and subsequent earnings revisions. Despite the issues with the sector, Siemens's strong performance was dictated largely by strong earnings growth due to a YoY base impact and the reversal of prior losses on a project.

Figure 22: Relative stock performance YTD



Source: Company data, Credit Suisse estimates

Our preferred picks

While we find sector valuations rich, our relative preference is for Crompton Greaves, which we assume coverage with an OUTPERFORM rating due to its valuation discount to the sector, higher earnings growth led by the entry into new product segments and more stable margins as price competition is significant in the high voltage segment versus the mid-low segment where Crompton has a much larger market share. While we believe Siemens will benefit from a return in orders next year and is our preferred pick relative to ABB India, rich absolute valuations make us retain our NEUTRAL stance on the stock. We maintain UNDERPERFORM on ABB India and initiate coverage on Areva T&D India with an UNDERPERFORM, as we see significant scope for consensus earnings revisions.

Crompton Greaves Ltd

(CROM.BO / CRG IN)

Rating	(from Neutral) OUTPERFORM* [V]
Price (04 Nov 09, Rs)	362.00
Target price (Rs)	(from 207.72) 479.98 ¹
Chg to TP (%)	32.6
Market cap. (Rs mn)	132,704 (US\$ 2,829)
Enterprise value (Rs mn)	133,001
Number of shares (mn)	366.59
Free float (%)	59.00
52-week price range	382.50 - 106.00

*Stock ratings are relative to the relevant country benchmark.

¹Target price is for 12 months.

[V] = Stock considered volatile (see Disclosure Appendix).

Research Analysts

Venugopal Garre

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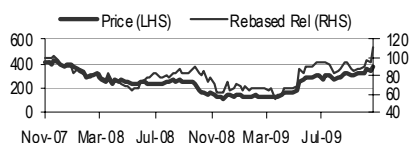
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ASSUME COVERAGE

Strong growth expected

- **We assume coverage of Crompton Greaves** with an OUTPERFORM rating (previously Neutral) and a target price of Rs480 (20x FY11E).
- **We expect market share gains for Crompton Greaves** given a 12- to 18-month lead with Indian peers, as its domestic manufacturing facility will be eligible for bidding of 765 Kv projects, giving it cost advantage and ensuring market share gains (expect a 24% CAGR for domestic order inflows outpacing peers). We also expect the company to broadly maintain margins as competitive pressures are negated through scale advantages and a recovery in growth in the international business. Crompton will benefit from a likely recovery in industrial orders next year and sustained demand for the consumer segment where it enjoys strong market positioning.
- **Consensus has always underestimated earnings trajectory** for Crompton Greaves during upturns. A positive surprise on growth for the international business and profitability as well as industrial capex recovery could lead to earnings upgrades in this cycle, too. Other stock price catalysts include a strong order momentum (it is L1 in an Rs6 bn PGCIL bid) and news flow on potential acquisitions.
- **We see relative value in owning Crompton Greaves** given the large P/E discount to peers, despite higher growth rates, higher ROEs and better working capital metrics. While the discount might have been justified in the past, due to the technology gaps with peers and the lower scale of business, we see limited reasons for the sustenance of such a discount now. A combination of rising multiples and earnings upgrades will drive the stock outperformance, in our view. We value Crompton Greaves on 20x FY11E numbers and value the stake in Avantha Power at 1.5x BV of investments.

Share price performance



The price relative chart measures performance against the BOMBAY SE 30 SHARE SENSITIVE index which closed at 15912.13 on 04/11/09

On 04/11/09 the spot exchange rate was Rs46.91/US\$1

Performance Over	1M	3M	12M
Absolute (%)	12.3	27.5	101.2
Relative (%)	20.9	26.9	34.4

Financial and valuation metrics

Year	3/09A	3/10E	3/11E	3/12E
Revenue (Rs mn)	87,372.6	91,520.2	111,226.2	134,528.1
EBITDA (Rs mn)	9,955.0	11,567.0	14,196.8	16,681.5
EBIT (Rs mn)	8,739.8	10,191.6	12,539.7	14,675.3
Net income (Rs mn)	5,751.1	6,994.3	8,617.7	10,425.9
EPS (CS adj., Rs)	15.69	19.08	23.51	28.44
Change from previous EPS (%)	n.a.	67.5	88.4	
Consensus EPS	n.a.	17.73	20.38	23.90
EPS growth (%)	41.4	21.6	23.2	21.0
P/E (x)	23.1	19.0	15.4	12.7
Dividend yield (%)	0.6	0.8	1.0	1.2
EV/EBITDA (x)	13.5	11.5	8.9	7.2
P/B (x)	7.2	5.5	4.2	3.3
ROE	31.2	28.7	27.2	25.7
Net debt/equity (%)	8.3	1.2	net cash	net cash

Source: Company data, Thomson Financial Datastream, Credit Suisse estimates.

Financials

Figure 23: Key operational metrics

Rs mn	Mar 04	Mar 05	Mar 06	Mar 07	Mar 08	Mar 09	Mar 10	Mar 11	Mar 12
Order inflow	13,488	16,194	54,880	63,776	70,500	88,581	97,528	109,253	130,059
Order backlog	8420	10016	29867	44061	54287	65660	86230	104162	125432
Execution (%)	36	39	23	50	61	60	70	75	75
Income statement (in Rs mn)									
Net sales	17391	19887	41265	56396	68323	87373	91520	111226	134528
Expenditure	15777	18229	38023	51568	60885	77418	79953	97029	117847
Operating profits	1614	1658	3242	4827	7438	9955	11567	14197	16681
PBT	955	1284	2772	4359	6152	8824	10358	12922	15633
PAT - reported	698	1198	2329	2817	4066	5751	6994	8618	10426
Adjusted PAT	658	1198	2329	2817	4066	5751	6994	8618	10426
EPS - reported	2.7	4.6	8.9	7.7	11.1	15.7	19.1	23.5	28.4
EPS - adjusted and fully diluted	2.5	4.6	8.9	7.7	11.1	15.7	19.1	23.5	28.4
Balance Sheet (in Rs mn)									
Share Capital	524	524	524	733	733	733	733	733	733
Reserves and Surplus	2971	3666	7330	8955	12285	17577	23527	30858	39727
Loan funds	3388	3145	4222	9045	8420	7182	5112	3419	2283
Total sources of funds	6907	7350	12192	19017	21560	25631	29510	35148	42881
Net Fixed assets + CWIP	3782	3547	5403	10873	12444	13785	14410	13953	13147
Investments	753	826	651	645	934	1672	4072	5072	6072
Net Current assets	2475	2975	5712	7082	7593	9692	10546	15641	23180
Deferred tax assets and others	-103	2	426	418	588	482	482	482	482
Total application of funds	6907	7350	12192	19017	21560	25631	29510	35148	42881
Cash flow statement (in Rs mn)									
Post tax operating cash before working capital	1530	1823	3632	5723	8263	11577	11567	14129	16636
Changes in working capital	451	-428	-1360	-798	-875	58	-1697	-23	-2458
Cash flow from operating activities	1973	1338	1959	3789	5520	9470	6532	9842	9019
Change in fixed assets	-92	-318	-637	-6365	-2525	-1977	-2000	-1200	-1200
Others	-51	-39	-389	-880	-676	-1366	-1798	-192	243
Cash flow from investing activities	-143	-357	-1026	-7245	-3201	-3343	-3798	-1392	-957
Cash flow from financing activities	-1595	-1113	471	3798	-2289	-2890	-3575	-3379	-2981
Change in cash	234	-132	1404	341	30	3238	-842	5072	5081
Opening cash and equivalents	568	802	669	2073	2415	2445	5656	4814	9886
Closing cash and equivalents	801	669	2073	2415	2445	5682	4814	9886	14967
Key ratios (%)									
ROE (year end)	20	28	30	30	31	32	29	27	26
ROCE	14	19	22	17	21	24	25	25	25
Net debt to equity	74	59	27	68	46	8	1	-20	-31
Growth									
Order inflow	24	20	239	16	11	26	10	12	19
Order book	22	19	198	48	23	21	31	21	20
Net sales	8	14	107	37	21	28	5	22	21
Adjusted PAT	219	82	94	21	44	41	22	23	21
Margins									
Operating EBITDA margins	927.8	833.6	785.6	856.0	1088.7	1139.4	1263.9	1276.4	1240.0
EBITDA margins (including other income)	11.1	9.8	9.4	10.4	11.9	12.2	13.3	13.5	13.3
PAT margins	3.8	6.0	5.6	5.0	6.0	6.6	7.6	7.7	7.7

Source: Company data, Credit Suisse estimates

To outpace industry growth

We expect a combination of market share gains, entry into new segments and recovery in global T&D spending to drive the 15% revenue CAGR (FY09-12E). In our view, Crompton will be able to sustain margins led by 1) the improvement in margins of the international business, 2) lower margin pressures on mid-low voltage products, and 3) improvement in the scale of business (global sourcing). Furthermore, the domestic content advantage in 765 kV will enable it to win market share in this segment.

Strong market positioning

In the 765 kV segment, its only Crompton Greaves, Korean and Chinese vendors that have won orders given their cost advantage (i.e. sourcing from Europe is costlier). Management indicated that it will have an 18-month lead over competition as its Indian factory will be the only one to be eligible for delivering 100% domestically as it will meet the two-year experience criteria in another six months.

A strong market positioning will help the company outpace industry growth

The other domestic peers have set up domestic manufacturing capacity for 765 kV only recently, and hence would be at a relative disadvantage for several quarters. This explains why only Crompton Greaves, Chinese and Korean vendors have won all domestic (765KV) transformer orders over the past few years.

Figure 24: Strong in other segments

Industrial systems	Consumer products
No. 1 in AC motors	Leader in fans with a 23% market share in a 33mn unit annual market
No. 2 in alternators	Lighting: 12% market share
No. 1 in the telecom segment	Pumps: 12% and third position in the total market of Rs37 bn annually
No. 1 in DC motors	

Source: Company data, Credit Suisse estimates

Leveraging the acquisitions

Crompton Greaves has over the years shifted its focus from the industrial and consumer segments to the power T&D sector (70% from power versus 35% in 1997). The acquisitions over the past few years have now increased the international power business mix to 45%. The acquisitions have helped increase the scale of operations, bridge technology gaps and hastened entry into the high voltage T&D segment.

(Over 50% of overseas revenues come from the power segment, 33% from distribution and 17% from contracting services. Of the 33% that is focused on distribution, about 50% is from the wind segment. In terms of geographic mix of the overseas business, about 60% is from Europe, 25-27% from North America and 13% from APAC).

Figure 25: Bridging technology gaps through acquisitions

Date	Client	Product profile	Price
May-05	Pauwels	Manufacturing facilities in Belgium, Ireland, Canada, the USA, Indonesia Ready clientele presence in the high range up to 500 KV transformers; earlier CGI India had capability up to 400 KV	Rs1.8 bn
Oct-06	Ganz	EHV transformers, switchgears, GIS; T&D equipment up to 800 KV or 756 KV	Rs2 bn
May-07	Microsol	Based in Ireland; substation and distribution automation for utility industry	
Jun-08	Sonomatra	Services for onsite maintenance/repair of power transformers and on-load tap changers, oil analysis, oil treatment and retro fitting	Rs8.5 bn
Sep-08	MSE Power Systems (US)	EPC of high voltage electric power systems	US\$16 mn
Mar-09	Avantha Power	Four captive power plants with total capacity of 95 MW which is expanding to 165 MW. It is in the process of establishing two new IPPs with capacity of 600 MW each	41% at Rs2.3 bn

Source: Company data

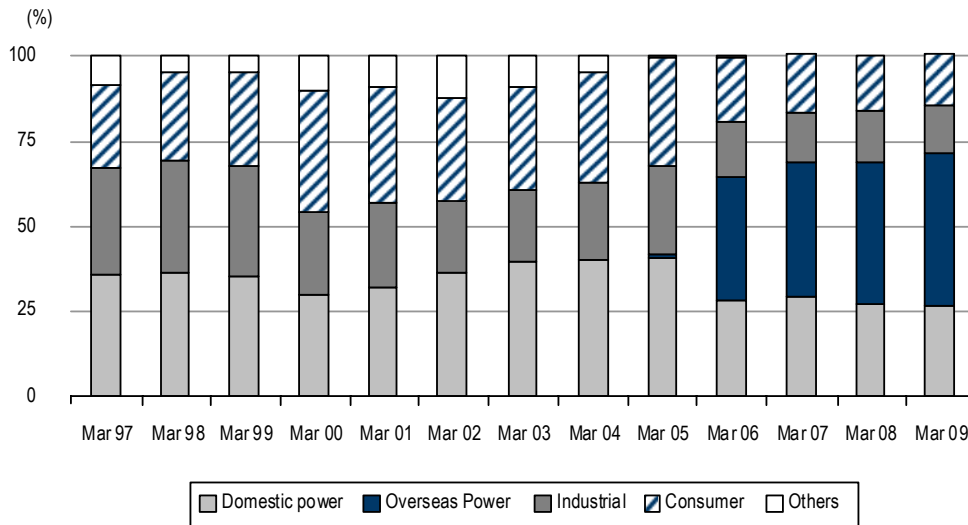
We expect Crompton Greaves to leverage the recent acquisitions to build market share in India through aggressive forays into the high voltage equipment and GIS markets and by strengthening the presence in other segments in India. With India increasingly deploying

high voltage equipment (see Figure 28) the acquisitions have in fact geared Crompton for faster growth opportunities in India.

The acquisitions give scale to the business that will enable the company to have cost savings. Further, the technologies obtained can be utilised to re-engineer products and the sharing of global best practises will improve manufacturing abilities of Indian operations.

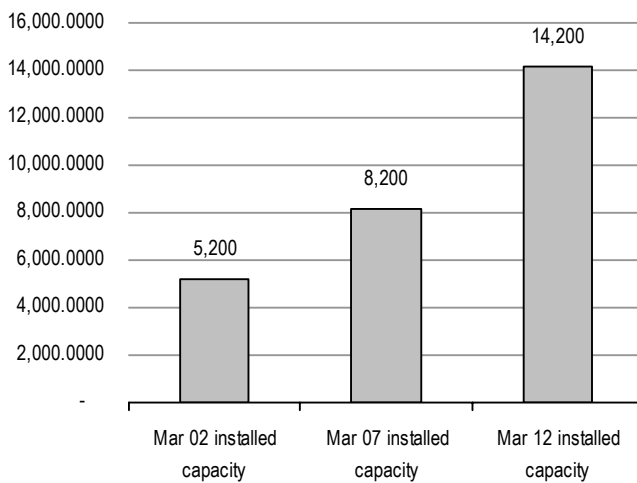
Acquisitions provide scale and technology

Figure 26: Gearing to the power sector has increased over the years



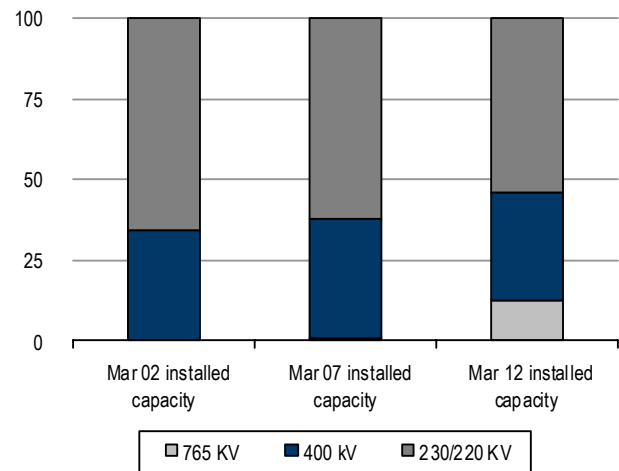
Source: Company data, Credit Suisse estimates

Figure 27: HVDC terminal capacity (MW)



Source: CEA

Figure 28: Voltage mix change over the years



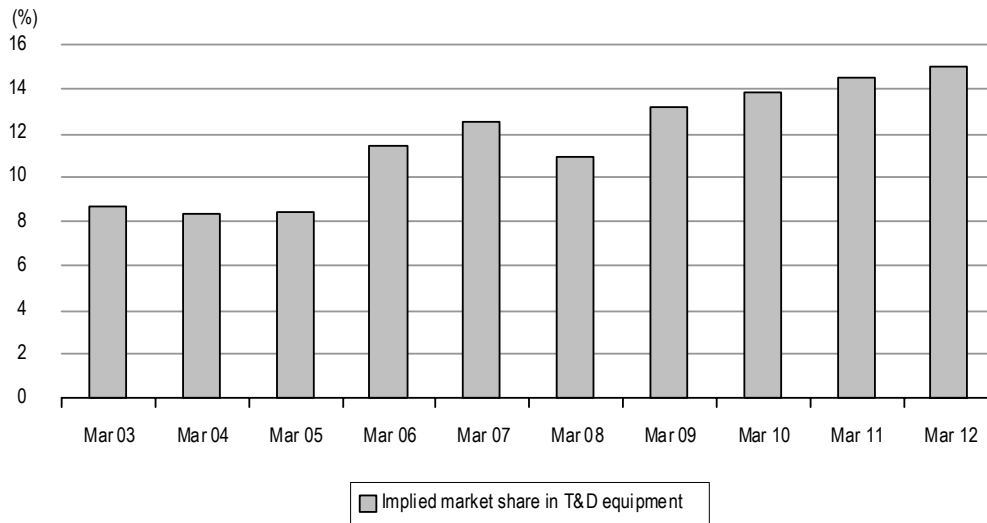
Source: CEA

Modest market share gains ahead

While Crompton has gained market share in the T&D segment over the years, we expect modest market share gains to continue, which should enable order inflows for the company (in the domestic market) to outpace peers.

We expect market share gains

Figure 29: Market share gains

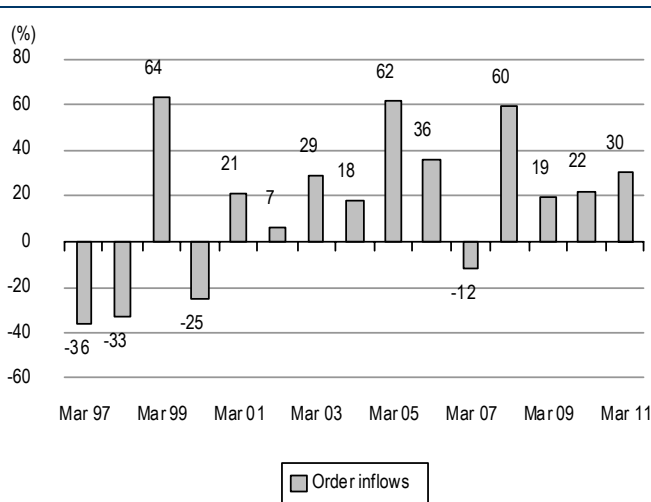


Source: Approx market share numbers based on Credit Suisse estimates

We expect a 24% order inflow CAGR in the domestic power segment (Figure 30). While growth in the domestic power segment will remain strong, we expect a modest 7% CAGR in international power orders (FY09-12) and it is likely that growth could surprise on the upside on demand recovery in the distribution and wind segments, which are currently seeing early signs of recovery.

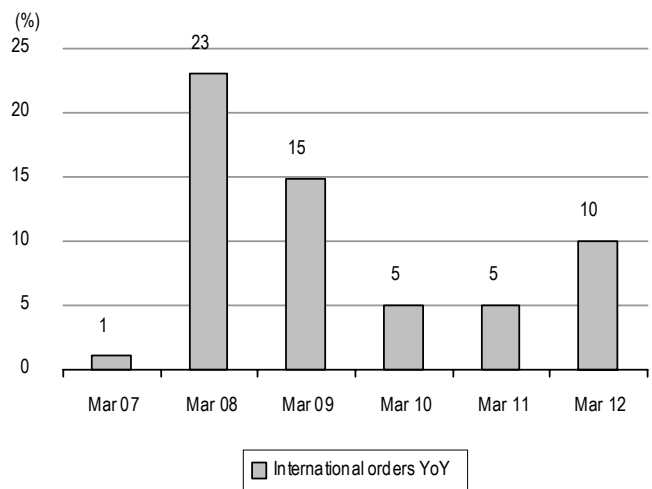
We are also building in a recovery in industrial ordering starting FY11, given our view of sustained end-demand triggering return of industrial capex in 2H FY11. Management also indicated that it is witnessing higher activity in the industrial segment with an increase in enquiries.

Figure 30: Order inflows (domestic power)



Source: Company data, Credit Suisse estimates

Figure 31: International order growth to remain modest – upside surprises though likely



Source: Company data, Credit Suisse estimates

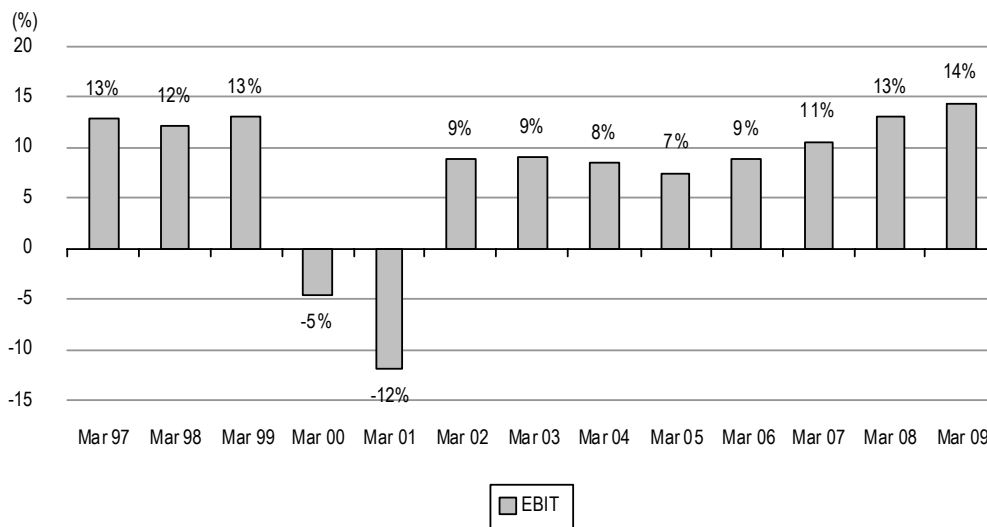
Margins may hold up

Contrary to supply chain checks that suggest pricing pressures and subsequent impact on margins in the domestic T&D sector (especially in the high voltage segment), management is of the view that margins can be sustained.

Management highlighted that the pressure is largely on EPC margins and not on the products business. It has domestic manufacturing advantage, too.

Margins may hold up because of scale and presence in the mid-low voltage segment

Figure 32: Less room for margin growth in domestic power operations (can be sustained though)



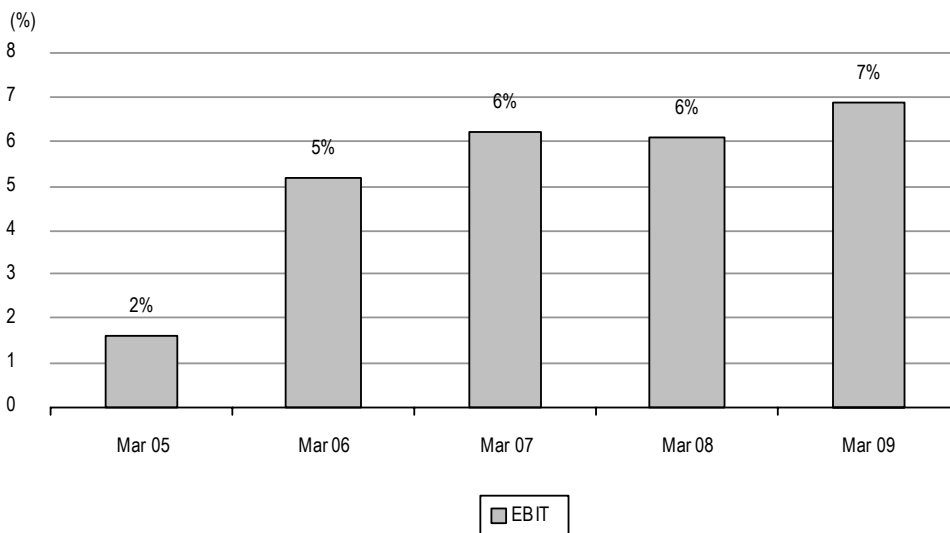
Source: Company data, Credit Suisse estimates

Scope for margin improvement at subsidiaries

With the overseas business contributing over 45% of sales, financial improvement at the subsidiaries will aid group margins. While overall profitability has improved at Ganz, we still see scope for further improvements at Microsol and Pauwels.

Subsidiary margins can see more improvements

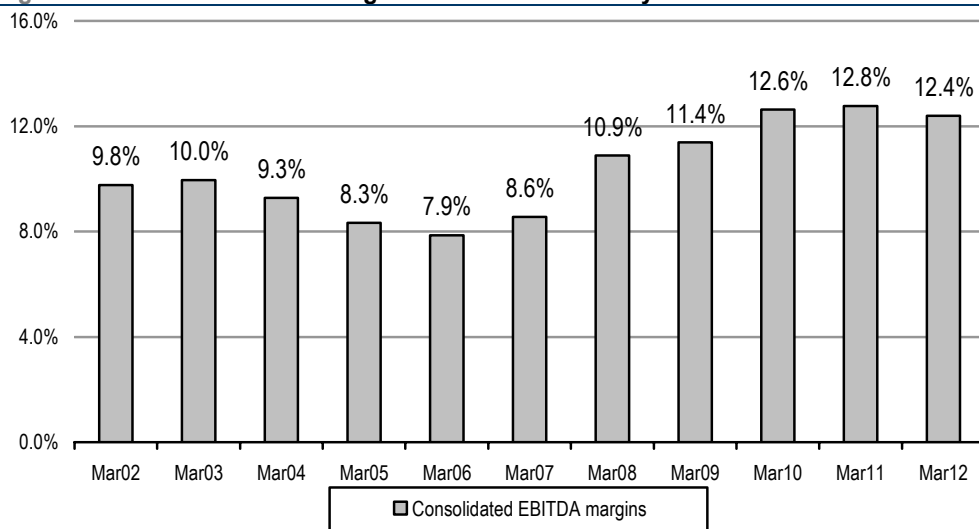
Figure 33: EBITDA margins for the international power segment has more upside



Source: Company data, Credit Suisse estimates

Overall, we model for EBITDA margins to improve by 120 bp and thereafter stabilise at 12.0-13.0% range for FY11 and FY12. Management highlighted that it may be difficult to achieve significant margin improvement from that achieved in 1H.

Figure 34: We model for flat margins over the next three years



Source: Company data, Credit Suisse estimates

Strong September quarter results

While net sales growth in September quarter (4% YoY) was impacted by de-growth in the international subsidiaries, domestic sales growth was strong (16.4% YoY). The bigger surprise was a sharp improvement in margins led by the introduction of new product designs (value engineering) and lower RM expenses (global sourcing). Management indicated that the margins obtained in 1H are sustainable. Being asked about pricing pressure, management indicated that it is not witnessing any pressure on margins because of price declines due to a better cost structure.

September quarter results showed margin surprise

Upped the guidance

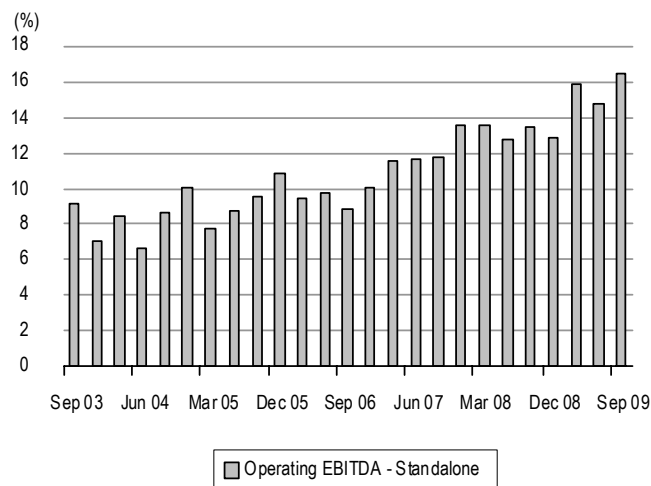
Management expects revenue growth of 14-16% (from 12-14%) for FY10 and 18-22% for FY11 in the domestic business, and 2-5% for FY10 and 7-8% for FY11 in the overseas business. Margins in 2H FY10 will be maintained at 1H FY10 levels.

Figure 35: September quarter results

(Rs mn)	September 2008	June 2009	September 2009	QoQ (%)	YoY (%)
Net sales	20,984	21,975	21,890	0	4
Total material cost	13,291	13,579	13,380	-1	1
Employee cost	2528	2865	2829	-1	12
Other expenditure	2790	3055	2615	-14	-6
OBITDA	2374	2476	3067	24	29
OBITDA margin (%)	11.3	11.3	14.0		
Other income	69	239	153	-36	121
EBITDA	2444	2715	3220	19	32
Depreciation	343	371	388	4	13
EBIT	2100	2344	2832	21	35
Interest	166	45	52	14	-69
Exceptional items	0	0	0		
PBT	1934	2299	2781	21	44
Taxation	725	695	849	22	17
PAT reported	1209	1605	1932	20	60
PAT margin (%)	5.8	7.3	8.8		

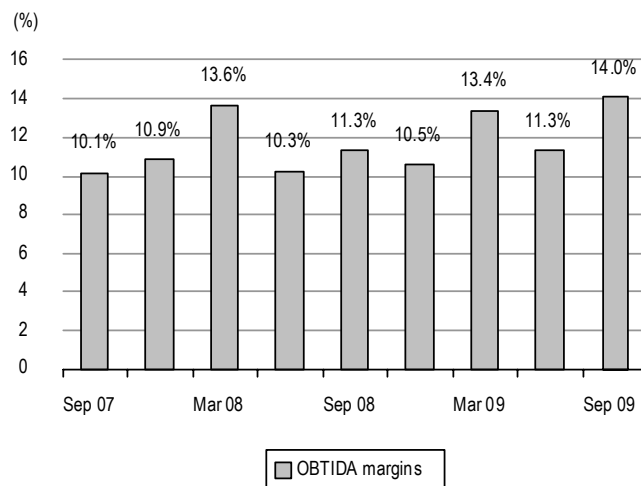
Source: Company data, Credit Suisse estimates

Figure 36: EBITDA margins (standalone)



Source: Company data, Credit Suisse estimates

Figure 37: EBITDA margins (consolidated)



Source: Company data, Credit Suisse estimates

Global environment for the power sector improving

Crompton indicates growth improving

Crompton Greaves said the distribution segment is witnessing some improvement in Europe, while the US remains weak. Management indicated that the offtake of wind transformers has commenced in Europe suggesting heightened activity for the segment.

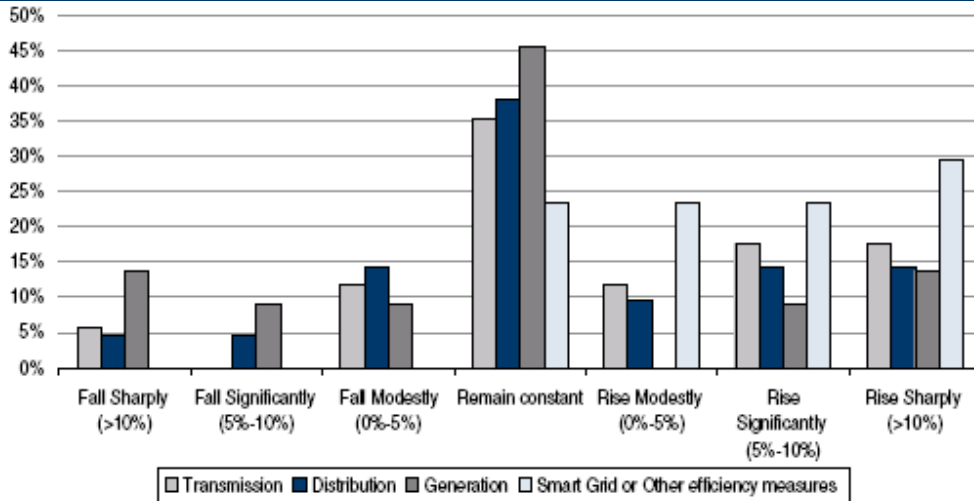
Credit Suisse's survey suggests a likely increase in spending

A survey conducted by Credit Suisse Global capital goods team (Simon Smith and Andre Kukhnin) last month suggests utilities were planning to increase spending over the next 12 months relative to the previous 12 months. The survey had indicated negative investment growth for only two quarters and is now again indicating expansion. Even orders, which in power generation probably relate to investment taking place in two to three years, are showing flat-to-improving trends.

The other main positives in the survey were decelerating price declines, stabilising order lead times and sharply improved financing conditions. The main negative was deterioration in pricing relative to input costs, which may imply manufacturers are experiencing a squeeze in new order margins.

An improving ordering environment especially for the T&D sector should enable Crompton Greaves to increase growth rates in their international subsidiaries. The wind market is also expected to witness 2H acceleration led by the cash grant programmes in the US and an easing financing environment, which should strengthen demand for transmission products for Pauwels and MSE.

Figure 38: Survey suggests some signs of reordering in power sector



Source: Company data, Credit Suisse estimates

Relative valuation attractive

Consensus in the past had typically underestimated the earnings growth trajectory for Crompton Greaves partly because of their inability to predict the acquisitions. We note that recovery in the global power sector spending and the ability to sustain margins could ensure further earnings upgrades.

We also see relative value in the stock as the stock trades at a discount to the sector despite a strong earnings growth trajectory. While the discount might have been justified in the past, due to the presence in the low-mid voltage segment with technology gaps getting bridged, we see few reasons for such a discount to sustain.

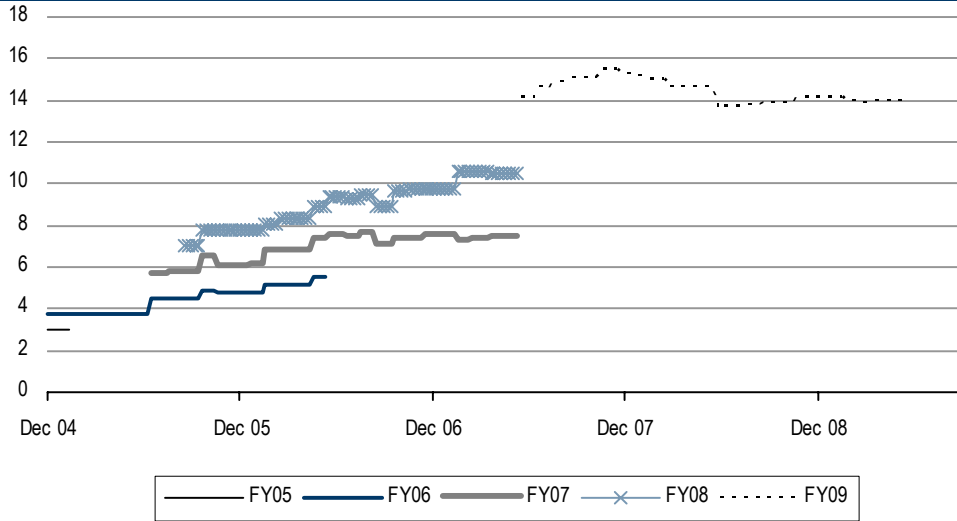
A combination of rising multiples and earnings upgrades will drive the stock outperformance, in our view. We assume coverage with an OUTPERFORM and a target price of Rs480.

Consensus underestimates earnings?

If we observe consensus EPS estimates versus actual numbers for Crompton Greaves, we note that consensus, in the past, had typically underestimated earnings (trends hold good for data prior to FY00 too). While acquisitions may have driven actual EPS to outpace consensus (usually difficult to predict or model for), we note that over the next few years upside can stem from the recovery in the global power sector and strong upside from domestic industrial capex recovery.

We see significant scope for consensus upgrades

Figure 39: Consensus typically underestimates EPS for Crompton Greaves



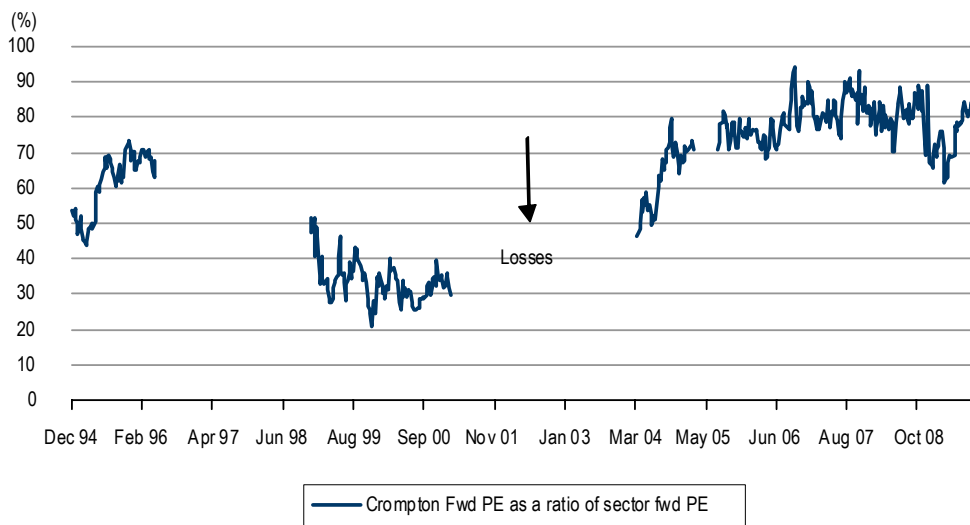
Source: Company data, Credit Suisse estimates

Trading at a discount to the sector

Crompton Greaves has rarely traded at a premium to the sector and has usually been accorded significant discounts to MNC T&D stocks in India. We attribute the discount to: 1) the perception of slower growth due to the 45% revenue mix from slower growth international geographies, 2) the perception of risk, driven by international acquisitions forex, new market risk, etc, 3) the presence in the lower and medium voltage segments in the past which were largely commodity products, and 4) the presence in consumer products with no major synergies with the power segment which drove investors to pure play T&D/industrial stocks.

Discount to peers not justified

Figure 40: The stock usually trades at a discount to the sector(T&D sector)

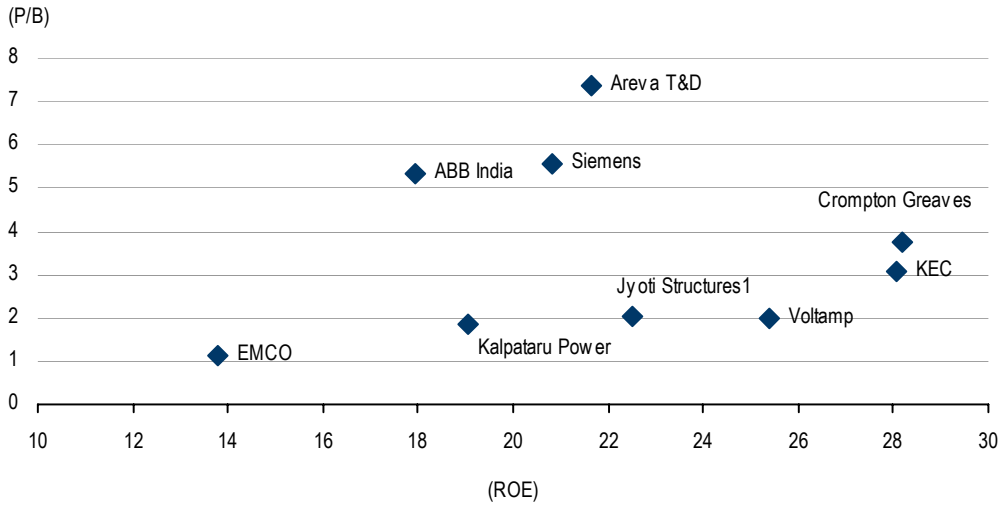


Source: Company data, Credit Suisse estimates

We see relative value to peers

A P/B versus ROE comparison suggests the relative value that Crompton Greaves offers over the large cap T&D peers.

Figure 41: We see value relative to ABB, Siemens and Areva T&D



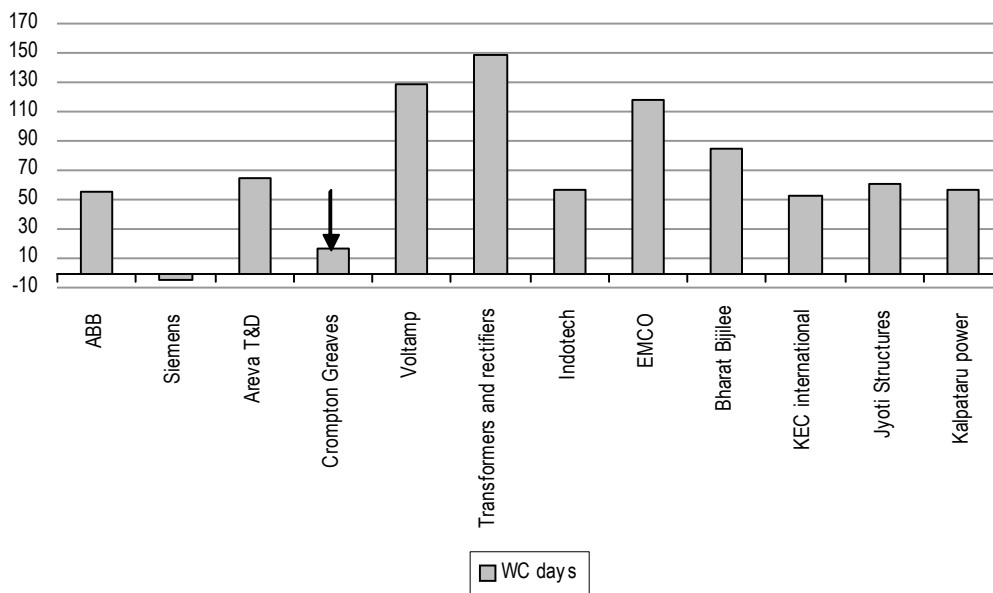
Source: Company data, Credit Suisse estimates

Strong free cash flow generation

Crompton Greaves has one of the best working capital metrics which help generate strong free cash flows. Effective utilisation of free cash could be one of the key drivers of earnings upgrades, in our view.

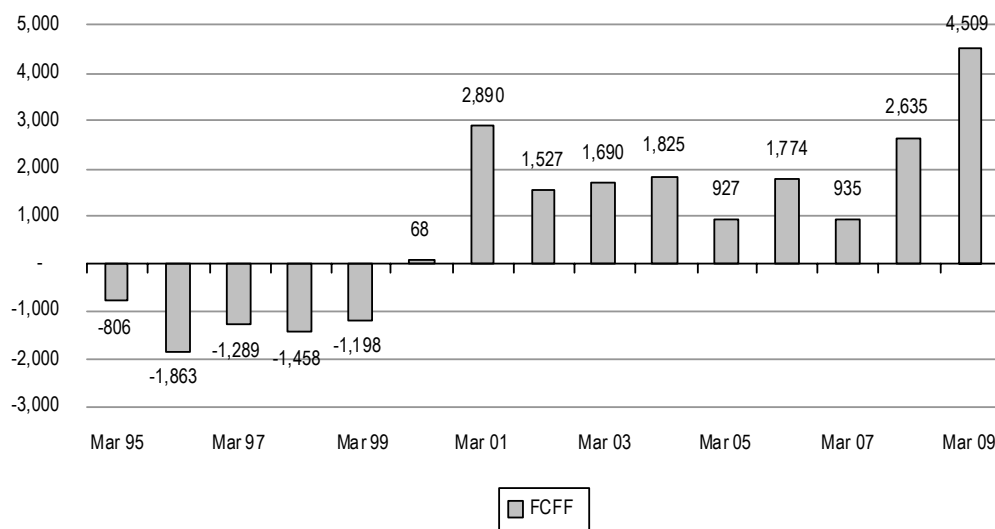
The company has good working capital metrics and generates good free cash

Figure 42: Among the best working capital metrics



Source: Company data, Credit Suisse estimates, NWC (ex cash) to sales (days)

Figure 43: FCFF generation (standalone)



Source: Company data, Credit Suisse estimates

Diversification into power generation

Crompton Greaves now intends to focus on power generation through ownership of power assets and has invested in Avantha Power this year, raising concerns about corporate governance given the related party nature of the transaction and no solicitation of shareholder approvals. However, with the transaction happening at 1x BV and funds being infused into the company, prior investor concerns have now been allayed.

Diversification into power generation is a good strategy

Should Crompton Greaves diversify?

The fundamental question though is whether Crompton Greaves should diversify into utility assets or not as it is more a question of strategic management intent, in our view. While a failed attempt at ownership of distribution assets in the past may have led to investor scepticism on the current foray into power generation, we view the use of free cash flows into power generation, especially if deployed in a merchant format, as value accretive.

Of note, even BHEL now has over 8,800 MW of generation assets through various supercritical JVs with state utilities. L&T is planning to add generation assets and new reports also indicate its plans of buying coal assets outside India.

Update on Avantha Power

Avantha Power has four captive power plants with an aggregate capacity of 95 MW and intends to increase capacity to 165 MW. It plans to set up two new IPPs with capacity of 600 MW each. Avantha Power is soliciting equity investments from private equity investors and the Crompton Greaves stake is expected to decline to 21%.

Value unlocking of this strategic investment through an IPO at a later date is positive for investors, in our view.

Assume coverage with OUTPERFORM

We assume coverage of Crompton Greaves with OUTPERFORM rating and a target price of Rs480 based on SOTP. We value the core business at 20x FY11E (versus the historical trading range of 3x-32x) and value cash investment in Avantha at 1.5x book value .

Figure 44: Target price methodology

Target P/E	20
EPS	23.5
Avantha Power	10
Target price	480
Current price	360
Return	33%

Source: Company data, Credit Suisse estimates

Figure 45: Manufacturing locations

Facilities	State	Products
Industrial systems		
Mandideep	MP	HT motors and rail transport equipment
Kanjur Marg	Maharashtra	Stampings
Ahmednagar	Maharashtra	LT motors, alternators, AC drives and stampings
Bardez	Goa	LT motors
Kundaim	Goa	FHP motors
Tapioszele	Hungary	Rotating machines
Consumer products		
Bethora and kundaim	Goa	Fans and appliances
Baddi	Himachal Pradesh	Fans
Kanjurmarg	Maharashtra	Luminaries
Vadodara	Gujarat	Light sources
Power division		
Kanjur Marg	Mumbai	Power and distribution transformers
Malanpur and Mandideep	MP	Power and distribution transformers
Nasik and Aurangabad	Maharashtra	EHV and MV circuit breakers
Bangalore	Karnataka	EHV and MV instrument transformers Vacuum interrupters Isolators, lighting arrestors, power quality products and services, electronic energy meters
Gurgaon	Haryana	Engineering projects division
Mechelen	Belgium	Pauwels: Custom made medium and large power transformers , large distribution transformers, mobile substations
Cavan	Ireland	Smaller single phase and three phase distribution transformers and micro substations
Charleroi	Belgium	Services division of Pauwels
Washington	USA	Three phase and pad mounted transformers, unitised substations, small power transformers
Winnipeg	Canada	Medium and large power transformers up to 575 MVA ,mobile substations and small power transformers
Bogor	Indonesia	Power transformers from 10 MVA to 260 MVA
Tapioszele	Hungary	Ganz plant manufactures transformers, GIS, contracting and servicing, traction motors
Dublin (Ireland) , jarrow (UK) , Seymour (Connecticut, USA) and Eagle (Idaho, USA)		Microsol facilities manufacture substations, distribution automation products and systems
Northern France	Northern France	Sonomatra facilities for servicing power systems

Source: Company data, Credit Suisse estimates

Financials

Figure 46: Income statement

Year-end 31 March (Rs mn)	FY04	FY05	FY06	FY07	FY08	FY09	FY10E	FY11E	FY12E
Net sales	17391	19887	41265	56396	68323	87373	91520	111226	134528
YoY (%)	8	14	107	37	21	28	5	22	21
Materials and mfg. exp	12179	14315	27759	38619	45660	56938	56423	68026	82595
Staff cost	1427	1511	5536	7171	7968	10627	11476	14355	17535
Sales and admin exp	2171	2402	4728	5777	7256	9852	12054	14648	17717
Expenditure	15777	18229	38023	51568	60885	77418	79953	97029	117847
OBITDA	1614	1658	3242	4827	7438	9955	11567	14197	16681
OBITDA margin (%)	9	8	8	9	11	11	13	13	12
Other income	311	284	653	1051	677	740	602	808	1243
Depreciation	639	427	762	954	1263	1216	1375	1657	2006
Interest	389	232	360	566	701	655	435	427	285
Exceptional items	58	0	0	0	0	0	0	0	0
PBT	955	1284	2772	4359	6152	8824	10358	12922	15633
Total taxation	197	113	453	1495	2054	3047	3338	4264	5159
Minority Interests	3	3	32	47	48	17	-35	-43	-52
Share of profits of associate	-57	30	41	0	17	-9	9	3	4
Reported PAT	698	1198	2329	2817	4066	5751	6994	8618	10426
Adjusted PAT	658	1198	2329	2817	4066	5751	6994	8618	10426
Adjusted PAT margin (%)	4	6	6	5	6	7	8	8	8
YoY (%)	219	82	94	21	44	41	22	23	21
Dividend	367	367	367	471	587	733	1044	1287	1557
Dividend tax	47	49	53	67	100	126	0	0	0
EPS - adjusted	3	5	9	8	11	16	19	24	28

Source: Company data, Credit Suisse estimates

Figure 47: Balance Sheet

March end, Rs mn	FY04	FY05	FY06	FY07	FY08	FY09	FY10E	FY11E	FY12E
Share capital	524	524	524	733	733	733	733	733	733
Reserves and surplus	2971	3666	7330	8955	12285	17577	23527	30858	39727
Total shareholders equity	3494	4190	7854	9688	13018	18310	24260	31591	40460
Minority interest	25	15	117	284	123	139	139	139	139
Secured Loans	2573	2488	3895	8726	8120	6923	4852	3159	2023
Unsecured Loans	815	657	327	319	300	260	260	260	260
Total loans	3388	3145	4222	9045	8420	7182	5112	3419	2283
Total sources of funds	6907	7350	12192	19017	21560	25631	29510	35148	42881
Application of funds									
Gross block	8110	8145	17122	22332	26854	30289	32289	33489	34689
Less: Depreciation	4439	4708	11926	12480	14886	17040	18416	20073	22079
Net block	3672	3437	5196	9852	11968	13248	13873	13416	12610
Capital WIP	111	110	207	1021	476	537	537	537	537
Total fixed assets	3782	3547	5403	10873	12444	13785	14410	13953	13147
Goodwill	16	8	0	0	0	0	0	0	0
Investments	753	826	651	645	934	1672	4072	5072	6072
Long term investments	753	726	641	635	640	627	0	0	0
Current investments	0	100	10	10	295	1045	0	0	0
Deferred tax assets net	-119	-5	426	418	588	482	482	482	482
Inventory	1789	1778	5959	9156	10664	10949	13166	13791	18284
Inventory days	38	33	53	59	57	46	55	55	60
Debtors	5365	5452	10950	14214	17204	20556	21544	22567	27426
Debtor days	113	100	97	92	92	86	90	90	90
Cash and bank	802	669	2073	2415	2445	5656	4814	9886	14967
Loans and advances	1092	1072	2206	3646	3704	4537	4537	4752	5776
Days of sales	23	20	20	24	20	19	19	19	19
Total current assets	9048	8972	21188	29430	34016	41699	44061	50996	66452
Current liabilities	6195	5755	14464	20236	21715	26022	27528	28835	35044
Current liability days	130	106	128	131	116	109	115	115	115
Provisions	379	242	1012	2112	4708	5986	5986	6519	8228
Provision days	8	4	9	14	25	25	25	26	27
Total current liabilities and provisions	6574	5997	15476	22348	26423	32008	33514	35354	43272
Net Current assets	2475	2975	5712	7082	7593	9692	10546	15641	23180
Net current Assets ex Cash	1673	2306	3639	4667	5149	4035	5732	5755	8214
Days of sales	35	42	32	30	28	17	23	19	22
Miscellaneous Expenditure	0	0	0	0	0	0	0	0	0
Total application of funds	6907	7350	12192	19017	21560	25631	29510	35148	42881

Source: Company data, Credit Suisse estimates

Figure 48: Cash flow statement

March-end, Rs mn	FY04	FY05	FY06	FY07	FY08	FY09	FY10E	FY11E	FY12E
PBT	897	1284	2773	4360	6152	8672	10358	12922	15633
Depreciation	453	427	762	954	1263	1216	1375	1657	2006
Others	180	112	97	409	848	1689	-167	-450	-1003
Operating profit before WC changes	1530	1823	3632	5723	8263	11577	11567	14129	16636
Debtors	-276	-15	-6281	-3475	-2180	-3147	-988	-1023	-4859
Inventory	187	12	-4181	-3197	-1483	-251	-2217	-625	-4493
Trade and other payables	552	-470	9096	5919	2805	3228	1507	1840	7917
Others	-11	46	6	-45	-17	228	0	-215	-1023
Operating cashflow	1981	1395	2273	4925	7388	11635	9870	14106	14178
Taxation	-8	-58	-313	-1136	-1868	-2165	-3338	-4264	-5159
Cash flow from operating activities, Rs mn	1973	1338	1959	3789	5520	9470	6532	9842	9019
Change in Fixed assets	-92	-318	-637	-6365	-2525	-1977	-2000	-1200	-1200
Change in Investments	-107	14	-102	-409	-1026	-714	-2400	-1000	-1000
Others	56	-52	-287	-471	350	-652	602	808	1243
Cash flow from investing activities	-143	-357	-1026	-7245	-3201	-3343	-3798	-1392	-957
Change in equity									
Change in loans	-1035	-222	1075	4863	-908	-1374	-2070	-1693	-1136
Dividend paid and tax thereon	-177	-650	-267	-503	-696	-814	-1044	-1287	-1557
Others	-383	-241	-336	-563	-684	-702	-461	-399	-288
Cash flow from financing activities	-1595	-1113	471	3798	-2289	-2890	-3575	-3379	-2981
Net change in cash and cash equivalents	234	-132	1404	341	30	3238	-842	5072	5081
Opening balance of cash and equivalents	568	802	669	2073	2415	2445	5656	4814	9886
Closing balance of cash and equivalents	801	669	2073	2415	2445	5682	4814	9886	14967

Source: Company data, Credit Suisse estimates

Figure 49: Key ratios

March-end, Rs mn	FY04	FY05	FY06	FY07	FY08	FY09	FY10E	FY11E	FY12E
Order inflows	13488	16194	54880	63776	70500	88581	97528	109253	130059
YoY (%)	24	20	239	16	11	26	10	12	19
Order backlog	8420	10016	29867	44061	54287	65660	86230	104162	125432
YoY (%)	22	19	198	48	23	21	31	21	20
Valuation									
Share price (Rs)	362	362	362	362	362	362	362	362	362
Shares outstanding (mn)	262	262	262	367	367	367	367	367	367
Market cap (Rs mn)	94790	94790	94790	132704	132704	132704	132704	132704	132704
Net debt (Rs mn)	2586	2476	2149	6630	5975	1526	298	-6467	-12684
EV (Rs mn)	97376	97266	96938	139334	138678	134229	133001	126236	120019
Net Debt /Equity (x) (%)	74	59	27	68	46	8	1	-20	-31
Gross Debt/ Equity (x) (%)	97	75	54	93	65	39	21	11	6
EPS (Rs)	3	5	9	8	11	16	19	24	28
EPS growth (%)	219	82	94	-14	44	41	22	23	21
CEPS (Rs)	5	6	12	10	15	19	23	28	34
DPS (Rs)	1	1	1	1	2	2	3	4	4
BV (x)	13	16	30	26	36	50	66	86	110
P/E (x)	144	79	41	47	33	23	19	15	13
P/CEPS (x)	73	58	31	35	25	19	16	13	11
Yield (%)	0	0	0	0	0	1	1	1	1
P/BV (x)	27.1	22.6	12.1	13.7	10.2	7.2	5.5	4.2	3.3
EV/EBITDA (x)	50.6	50.1	24.9	23.7	17.1	12.6	10.9	8.4	6.7
EV/Sales (x)	5.6	4.9	2.3	2.5	2.0	1.5	1.5	1.1	0.9
RoCE (%)	14	19	22	17	21	24	25	25	25
RoE (%)	20	28	30	30	31	32	29	27	26
EBIT margin (%)	7	8	8	9	10	11	12	12	12
Sales turnover (%)	2.5	2.7	3.4	3.0	3.2	3.4	3.1	3.2	3.1
Leverage (%)	2.0	1.8	1.6	2.0	1.7	1.4	1.2	1.1	1.1
Net interest burden (%)	0.303	0.153	0.115	0.115	0.102	0.069	0.040	0.032	0.018
Tax burden (%)	21	9	16	34	33	35	32	33	33
OBITDA margin (%)	9.3	8.3	7.9	8.6	10.9	11.4	12.6	12.8	12.4
EBIT(inc other income) margin (%)	7.4	7.6	7.6	8.7	10.0	10.8	11.8	12.0	11.8
PBT margin (%)	5.5	6.5	6.7	7.7	9.0	10.1	11.3	11.6	11.6
PAT margin (%)	3.8	6.0	5.6	5.0	6.0	6.6	7.6	7.7	7.7

Source: Company data, Credit Suisse estimates

Areva T&D India Ltd

(AREV.NS / ATD IN)

Rating	UNDERPERFORM* [V]
Price (04 Nov 09, Rs)	276.00
Target price (Rs)	206.01 ¹
Chg to TP (%)	-25.4
Market cap. (Rs mn)	65,993 (US\$ 1,407)
Enterprise value (Rs mn)	72,559
Number of shares (mn)	239.10
Free float (%)	33.00
52-week price range	366.70 - 135.35

*Stock ratings are relative to the relevant country benchmark.

¹Target price is for 12 months.

[V] = Stock considered volatile (see Disclosure Appendix).

Research Analysts

Venugopal Garre

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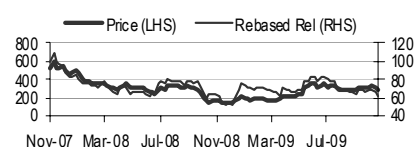
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INITIATION

Margin pressures a concern

- **We initiate coverage of Areva T&D** with an UNDERPERFORM rating and a target price of Rs206 (22x FY11E).
- **Margin declines a concern:** While we expect Areva T&D to benefit from a recovery in order inflow for the T&D sector, we believe margins would remain weak led by start-up costs, lower capacity utilisation and the rising mix of the systems business (50% now). Furthermore, competitive pressures will cap market share gains, slowing the order inflow trajectory (a 14% CAGR versus the over 30% earlier). A combination of tempering margins and slower revenue growth will decelerate earnings to a mere 7% CAGR (CY08-11E) versus the 80% earlier (CY04-08). While we believe Areva T&D has a strong management team in India, it is the victim of a sharp increase in competitive intensity. The cost cutting efforts, rising capacity utilisation, the reduction in the import content regulation should help improve its profitability after few more years.
- **Room for consensus downgrades:** Continued weakness in earnings and more room for consensus earnings cuts are the key negative catalysts for the stock.
- **Rich valuations:** We believe Areva T&D would do well on a longer timeframe given the T&D sector's secular growth. However, we expect the stock to underperform now given rich valuations and the risk of earnings cuts. We are concerned that the sale of Areva's T&D business could disrupt the supply chain (a change in procurement strategy) and management focus (in case of any management moves). In that case, the critical factor in evaluating the future growth trajectory would be the winner of the bid. We initiate coverage with an UNDERPERFORM rating with a target price of Rs206 based on 22x CY11E (average historical multiples).

Share price performance



The price relative chart measures performance against the India - NSE S&P CNX Nifty Index index which closed at 4710.8 on 04/11/09

On 04/11/09 the spot exchange rate was Rs46.91/US\$1

Performance Over	1M	3M	12M
Absolute (%)	-13.3	-12.8	42.6
Relative (%)	-6.4	-13.4	-4.9

Financial and valuation metrics

Year	12/08A	12/09E	12/10E	12/11E
Revenue (Rs mn)	26,412.1	33,774.8	38,315.6	45,038.5
EBITDA (Rs mn)	3,854.9	3,781.0	4,460.0	5,243.6
EBIT (Rs mn)	3,514.6	3,291.7	3,954.7	4,652.2
Net income (Rs mn)	2,159.7	1,797.1	2,238.9	2,635.8
EPS (CS adj., Rs)	9.03	7.52	9.36	11.02
Change from previous EPS (%)	n.a.			
Consensus EPS	n.a.	9.18	11.90	14.24
EPS growth (%)	-0.2	-16.8	24.6	17.7
P/E (x)	30.6	36.7	29.5	25.0
Dividend yield (%)	0.65	0.54	0.68	0.80
EV/EBITDA (x)	18.2	19.2	16.3	13.8
P/B (x)	9.1	7.6	6.4	5.3
ROE	31.2	20.8	21.6	21.3
Net debt/equity (%)	58.5	76.1	63.5	52.7

Source: Company data, Thomson Financial Datastream, Credit Suisse estimates.

Financial summary

Figure 50: Financial summary

Year-end 31 December (Rs mn)	2004	2005	2006	2007	2008	2009	2010	2011
Key operational metrics	12M	9M	12M	12M	12M	12M	12M	12M
Order inflow	0	15282	24180	29343	41030	43475	50569	61569
Order backlog	6531	12236	18771	27465	40950	45522	57775	74306
Execution								
Income statement (Rs mn)								
Net sales	7747	8695	16058	20063	26412	33775	38316	45039
Expenditure	7203	8006	13960	16488	22557	29994	33856	39795
Operating profits	543	689	2098	3575	3855	3781	4460	5244
PBT	348	594	1991	3432	3355	2745	3392	4095
PAT – reported	212	363	1370	2163	2263	1797	2239	2636
Adjusted PAT	212	363	1273	2163	2160	1797	2239	2636
EPS – reported	1.1	1.8	5.7	9.0	9.5	7.5	9.4	11.0
EPS – adjusted	1.1	1.8	5.3	9.0	9.0	7.5	9.4	11.0
Balance sheet (Rs mn)								
Share capital	399	399	478	478	478	478	478	478
Reserves and surplus	1453	1710	3340	5015	6772	8149	9864	11883
Loan funds	16	100	33	1012	4692	4692	4692	4692
Total sources of funds	1868	2209	3851	6506	11942	13319	15034	17053
Net fixed assets + CWIP	488	651	1117	2293	6470	9482	10476	11385
Investments	97	97	97	0	0	0	0	0
Net current assets	1175	1325	2387	3930	5085	3450	4171	5281
Deferred tax assets and others	109	137	251	283	387	387	387	387
Total application of funds	1868	2211	3851	6506	11942	13319	15034	17053
Cash flow statement (Rs mn)								
Post tax operating cash before working capital	0	910	2377	3927	4650	3781	4460	5244
Changes in working capital	0	-331	-1441	-2384	-1586	-691	-716	-1060
Cash flow from operating activities	0	352	220	408	1543	2142	2591	2725
Change in fixed assets	0	-253	-369	-1374	-4217	-3500	-1500	-1500
Others	0	38	475	111	121	-47	-187	-182
Cash flow from investing activities	0	-215	106	-1263	-4096	-3547	-1687	-1682
Cash flow from financing activities	0	4	-305	556	2771	-920	-899	-992
Change in cash	0	142	21	-298	217	-2325	4	51
Opening cash and equivalents	0	270	412	522	223	451	-1875	-1870
Closing cash and equivalents	0	412	522	223	441	-1875	-1870	-1820
Key ratios								
<i>Valuation, Balance sheet based (%)</i>								
ROE (year end)	11	17	36	39	31	21	22	21
ROCE (average)	12	16	34	34	20	16	16	17
Net debt to equity	-14	-15	-13	14	58	76	63	53
Growth (%)								
Order inflow	0	0	58	21	40	6	16	22
Order book	0	87	53	46	49	11	27	29
Net sales	0	12	85	25	32	28	13	18
Adjusted PAT	0	71	251	70	0	-17	25	18
Margins (%)								
Operating margins	7.0	7.9	13.1	17.8	14.6	11.2	11.6	11.6
EBIT (incl. other income) margin	5.4	6.8	11.9	16.7	13.3	9.7	10.3	10.3
PAT margins	2.7	4.2	7.9	10.8	8.2	5.3	5.8	5.9

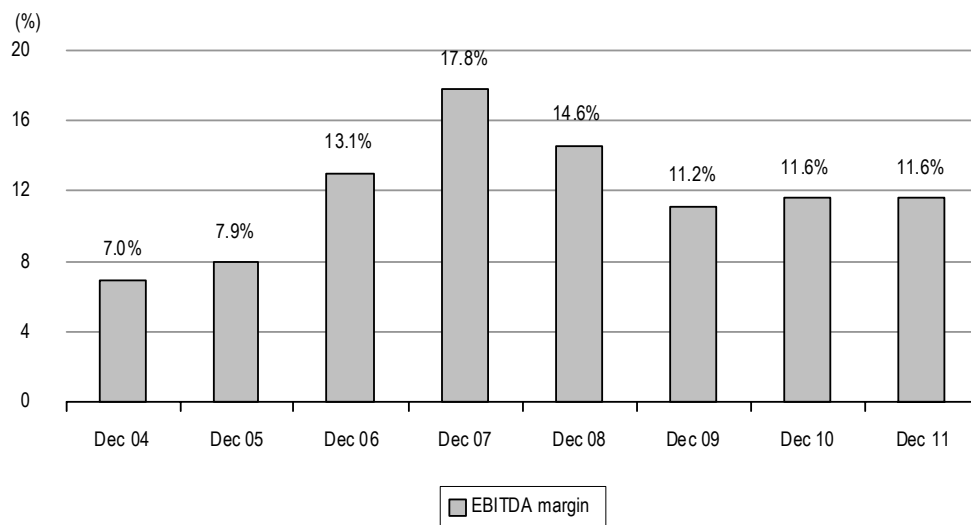
Source: Company data, Credit Suisse estimates

Margins under pressure

A combination of the weak pricing trend and low capacity utilisation at new factories (i.e. start-up costs) led to a sharp deterioration in margins in the September quarter with EBIT margin declining by over 8 p.p. We expect Areva T&D margins to decline over 350 bp this year and improve by about 50 bp next year due to rising capacity utilisation, no further restructuring costs, cost-saving efforts and changes in the import content clauses. We, however, see downside risk to our margin estimates if price competition remains irrational.

Expect margin declines to continue

Figure 51: EBITDA margin estimates



Source: Company data, Credit Suisse estimates

More price pressures likely

Management pointed out that in some recent PGCIL high voltage transformer package tenders, Chinese and Korean equipment manufacturers were L1 in two of the orders with an over 10-15% difference in prices versus those of domestic players. An unnamed domestic competitor has also joined the price war, according to management, and quoted prices similar to that of international peers. In terms of trends in pricing, management indicated that price pressures have, in fact, increased over the past few months. The reasons for price pressures are obvious. High margins in the India T&D sector, coupled with excess global manufacturing capacities and an industrial capex slowdown in India, shifted most companies' focus to the T&D segment orders.

Price pressures are expected to continue in the high voltage segment

Margins could stabilise by CY11

While management expects further price pressures, rising capacity utilisation at new factories as well as changes in the import content mandates by Power Grid should help support margins. We expect price pressures to rationalise and margins to stabilise by CY11, given our expectation of industrial capex recovery in early CY11 and a likely rebound in T&D capex growth.

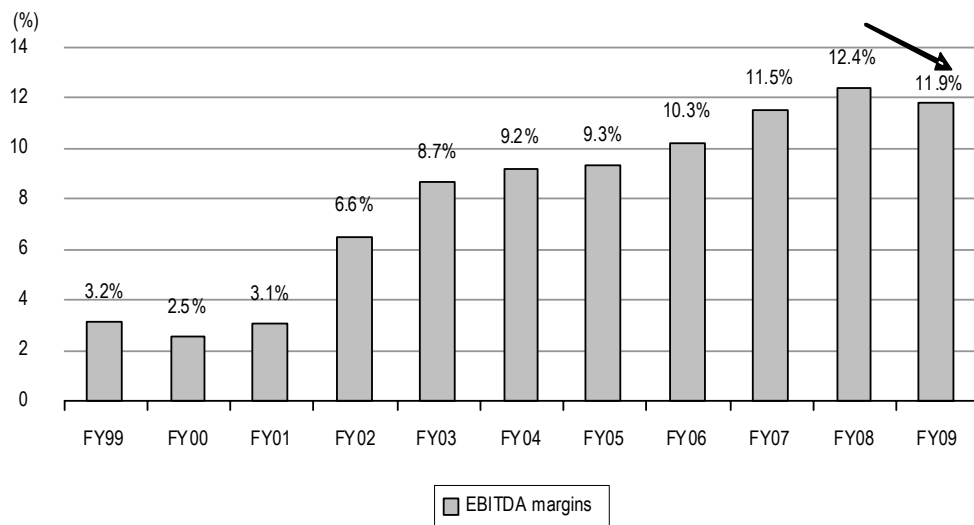
Management, however, cited the difficulty in predicting competitive actions as a reason for the inability to express margin trends going forward. Rather, the focus is more on internal processes now with attempts to rationalise costs and improve efficiencies. The impact of these actions would though have a marginal impact on margins as the room to cut costs is typically limited. The bigger cost savings can come largely from increasing domestic content or being able to negotiate good raw material prices, both difficult to achieve, in our view, as Areva T&D will not have much control over RM prices, which are largely market dictated, while the ability to increase domestic content is restricted by mandates.

Figure 52: September quarter results: sharp decline in margins

(Rs mn)	3Q08	2Q09	3Q09E	QoQ (%)	YoY (%)
Net sales	5864	7883	7397	-6	26
(Increase)/decrease in stock	-485	48	45		
Consumption of raw materials	4104	5059	5127	1	25
Material cost	3619	5106	5172	1	43
Staff cost	546	700	730	4	34
Others expenses	698	1005	860	-14	23
Restructuring/relocation costs	49	36	0		
Total expenditure	4912	6847	6761	-1	38
EBITDA	952	1035	636	-39	-33
EBITDA margin (%)	16	13	9	-35	-47
EBITDA (ex restructuring costs)	1001	1071	636	-41	-37
EBITDA margin (%)	17	14	9	-37	-50
Depreciation	107	115	174	51	62
EBIT	845	920	462	-50	-45
EBIT margin (%)	14	12	6	-47	-57
Interest	92.7	162.5	120.9	-26	30
Other income	1.6	0	0		
PBT	754	758	341	-55	-55
PBT margin (%)	13	10	5	-52	-64
Total tax	249	257	116	-55	-53
Tax rate (%)	33	34	34		
Exceptional Items	19	0	0		
Tax adjustment	2	0	0		
Reported PAT	522	501	225	-55	-57
Recurring PAT	505	501	225	-55	-55

Source: Company data, Credit Suisse estimates

Figure 53: Sector margins have started coming off in FY09



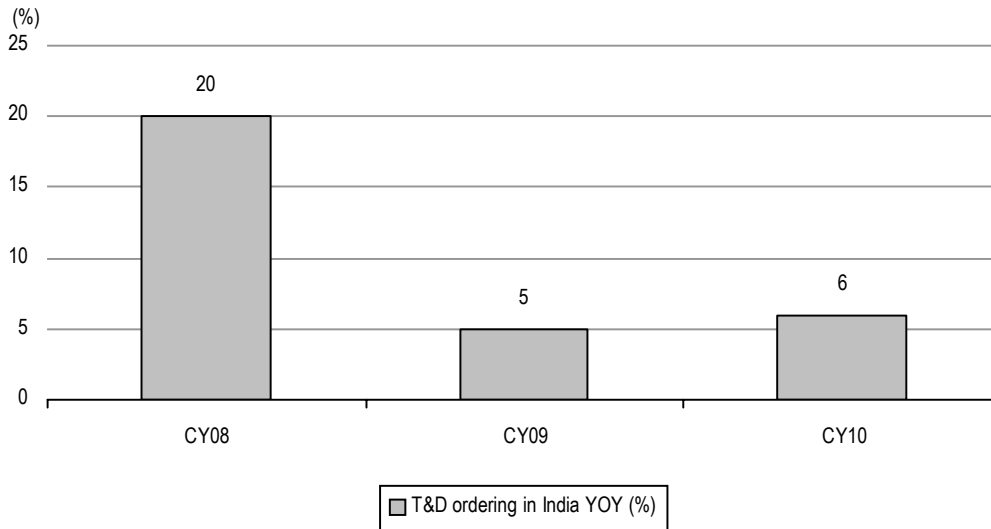
Source: Company data, Credit Suisse estimates

Growth to decelerate

Areva T&D pegs the annual T&D equipment spending at €4 bn annually, growing at a slower pace in CY09 and CY10 (5-6% YoY). Areva T&D points out that the postponement of some power generation projects and slower growth in private sector demand are responsible for the growth rate moderation. The commentary post-September quarter

results, however, suggests that the industry segment could recover by 3Q/4 of CY10 as funds raised by IPOs and QIPs get deployed.

Figure 54: Management expects growth to slow in CY09 and CY10 – recovery in 2H CY10



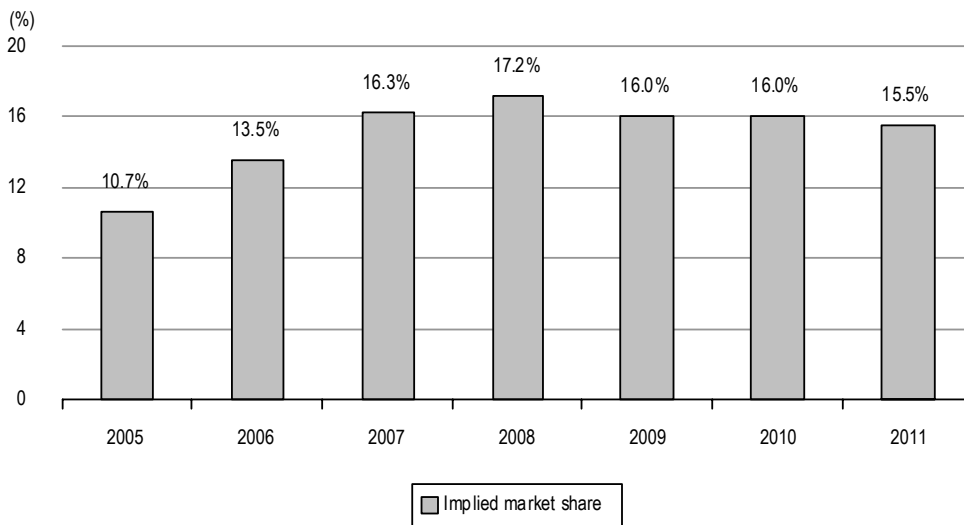
Source: Company data, Credit Suisse estimates

Market share growth may get capped

Areva T&D’s market share has grown over 500-700 bps over the past few years led by aggressive pricing and continued investments in domestic capacity. An increase in competitive intensity could cap market share gains, in our view. A change in the import content related regulation for high voltage equipment from 66% to 30% (likely in two phases) may though aid growth, given Areva T&D’s large capacities in India.

Slower market share gains will impact order inflow growth

Figure 55: Market share growth may get capped



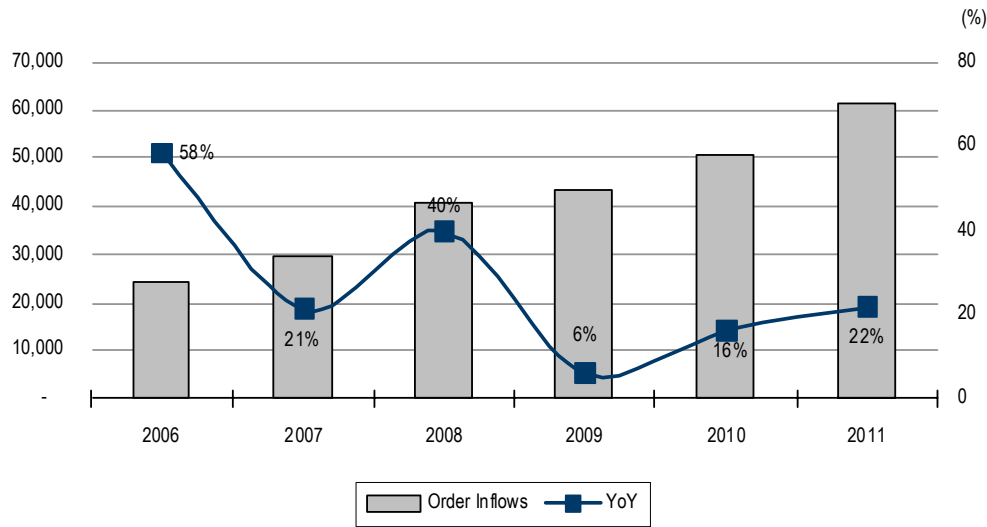
Source: Company data, Credit Suisse estimates

The pace of order inflows could slow ...

A cap in market share gains could slow inflow growth for Areva T&D and we expect an 14% inflow CAGR over CY08-11 compared with the over 30% growth achieved over the past two years.

In terms of order visibility, Areva T&D's management believes it is currently L1 in certain projects that have not been awarded yet (size of the projects too is unknown).

Figure 56: Order inflows YoY

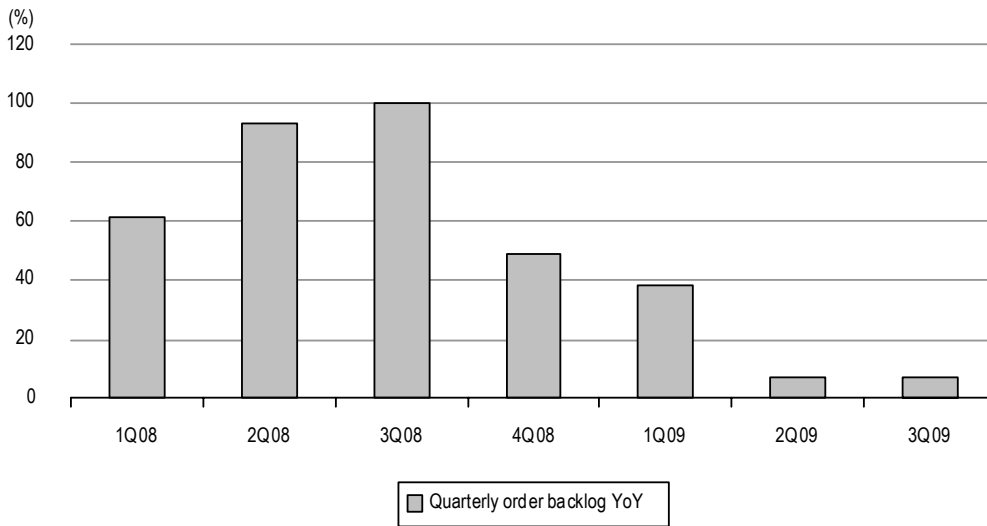


Source: Company data, Credit Suisse estimates

... impacting revenue growth

Order backlog growth for Areva T&D has slowed to 7% in the September quarter indicating revenue growth over the next few quarters will remain muted.

Figure 57: Quarterly order backlog YoY



Source: Company data, Credit Suisse estimates

Figure 58: Recent orders

Company	Rs mn	Comments
Lanco Infratech	1,705	765 KV generator transformers, shunt reactors for Anpara C
Powergrid	552	500 MVA transformer order
West Bengal State Transco	667	400 KV substation at Kharagpur
Jindal Steel and Power	1,200	400/220 Kv substation and power transformers, for their Green
Field Integrated Steel Project at Angul, Orissa		
HVPNL	700	Design and construction of 400 KV air insulated substation at Nawada near Faridabad
Hindalco	2,696	2 x 220 kv conversion substations. The order involves design, supply, installation and commissioning of 5x100 kA, 1650V DC rectifier stations, at each location of Bargwan (Singrauli - Madhya Pradesh) and Lapanga (Sambalpur - Orissa)
Enercon India	307	
Uranium corporation of India	262	
Powergrid – Bina	722	765 KV
Powergrid – Stana	303	765 KV
Powergrid – Lucknow	239	765 KV
Powergrid – Balia	218	765 KV
MSETCL	9,000	Design and construction of 220 KV and 132 KV substations. 36 substations over three years
Power grid	1,500	765 Kv Jatikalan
HVPNL Nawada	700	Turnkey design and construction of 400 KV air insulated substations at Nawada. Supply of 2X135 MVA power transformers and high voltage circuitry breakers, instrument transformers and other T&D products
SCPTCL Bisrampur and Patan	400	
Essar Transformers	650	
Chennai Airport Power Distribution	500	
Adani Power Tiroda Substation	370	Substation order
Lanco 765 Kv	360	Transformer order

Source: Company data, Credit Suisse estimates

Recent expansion to support the long-term plans

Areva T&D has incurred Rs9.5 bn over the past two years to expand manufacturing facilities in India. Capex YTD is around Rs2.5 bn and another Rs1 bn is expected to be incurred this year. Over eight new manufacturing facilities have been set up at three different locations (Figure 59). Areva T&D plans to increase transformer manufacturing capacity from 15,000 MVA last year to 35,000 MVA by CY11 to meet the growth targets and current capacity has edged up to around 25,000 MVA.

Figure 59: New production facilities at Areva T&D

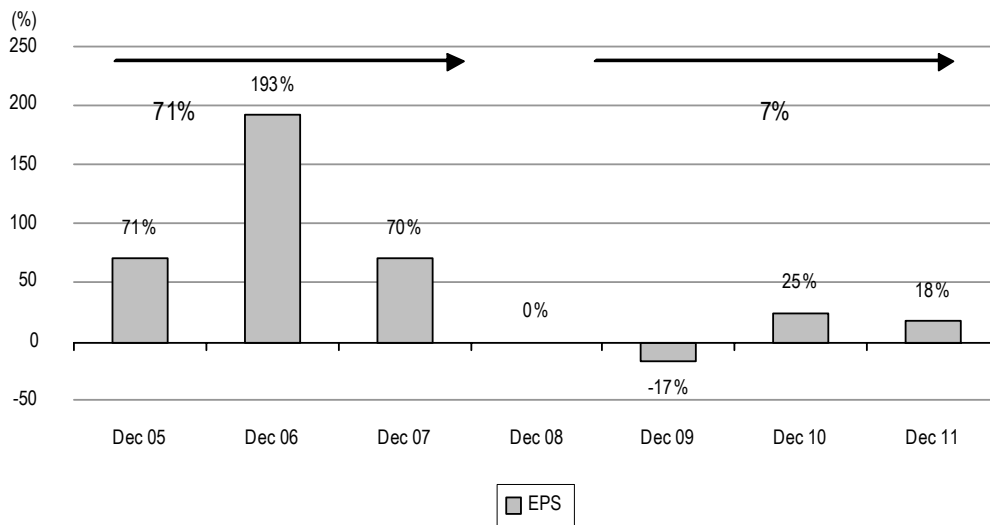
Location	Sq m (Manufacturing site)	Products
Vadodara	350000	Ultra high voltage and distribution transformers and switchgears India's largest transformer testing facility Four factories (power transformer up to 1,200 kV AC and 800 kV DC, competency centre for primary distribution switchgears; secondary distribution switchgears and distribution transformers)
Hosur	87007	Condenser bushings, instrument transformers Current transformers up to 800 kV, capacitor voltage transformers up to 1200 kV, line traps up to 800 kV, condenser bushings up to 420 Kv, UHV testing laboratory up to 1,200 kV
Padappai	57900	Gas insulated substations (India's first manufacturing site), circuit breakers/disconnectors

Source: Company data, Credit Suisse estimates

Slower earnings CAGR ahead

We expect the earnings CAGR for Areva T&D to slow from the 71% during FY05-08 to 7% during FY08-11, driven by a combination of slower revenue growth and margin compression.

Figure 60: Earnings growth CAGR to slow



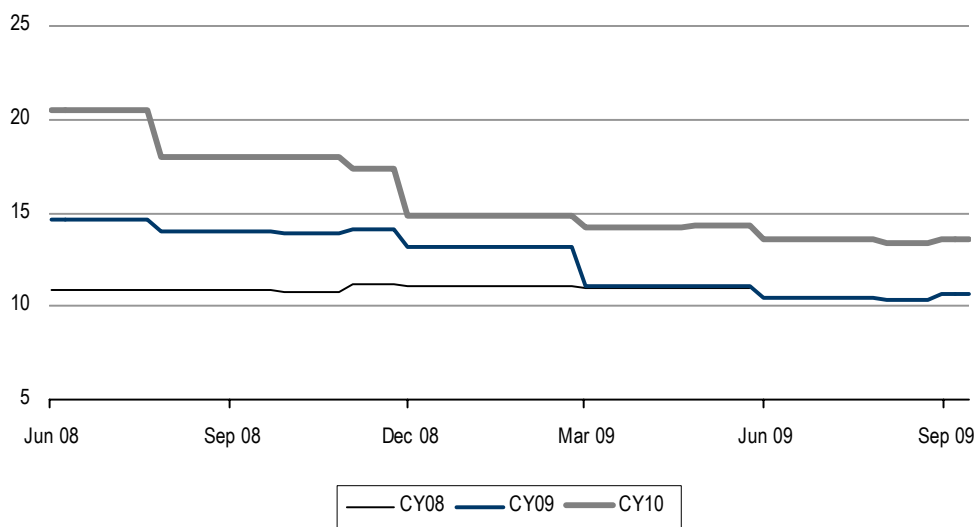
Source: Company data, Credit Suisse estimates

Scope for earnings downgrades

With earnings estimates have been witnessed sharp declines over the past year, an uncertain pricing environment and moderate inflows in the near term raise the risk of earnings estimates downgrades.

We see more scope for earnings downgrades

Figure 61: More downside risk to earnings estimates



Source: Company data, Credit Suisse estimates

Rich valuations unlikely to be sustained

Areva T&D is trading at the higher end of its historical bands and in line with sector multiples despite slower growth rates due to an anticipation of strong order inflows in the sector (margins were forgotten). We believe it is unlikely that Areva T&D will hold on to these rich valuations given slower growth rates and risk to earnings estimates.

The stock is trading at the high end of the historical valuation band

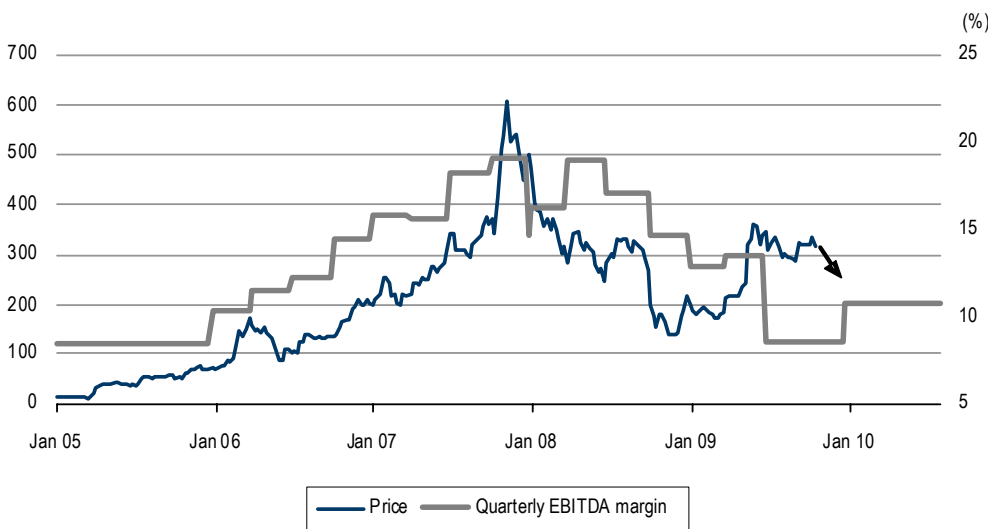
Figure 62: Areva T&D – trading at the higher end of the historical trading bands



Source: Company data, Credit Suisse estimates

We also note that Areva T&D in the past had tracked margin trends which dictate earnings growth. The current decline in margins is not yet captured in the stock price, in our view.

Figure 63: Expect declining margins to bring down the stock price further



Source: Company data, Credit Suisse estimates

Impact of the sale of Areva T&D on the stock

We see some risks emerging from the potential change in ownership at Areva T&D. Risks could emerge from a potential supply chain disruption as the new owner may want to use its own sourcing bases. Investors should also note that a change in management may also disrupt the company’s focus from the core business. A potential open offer could though help support the stock, in our view.

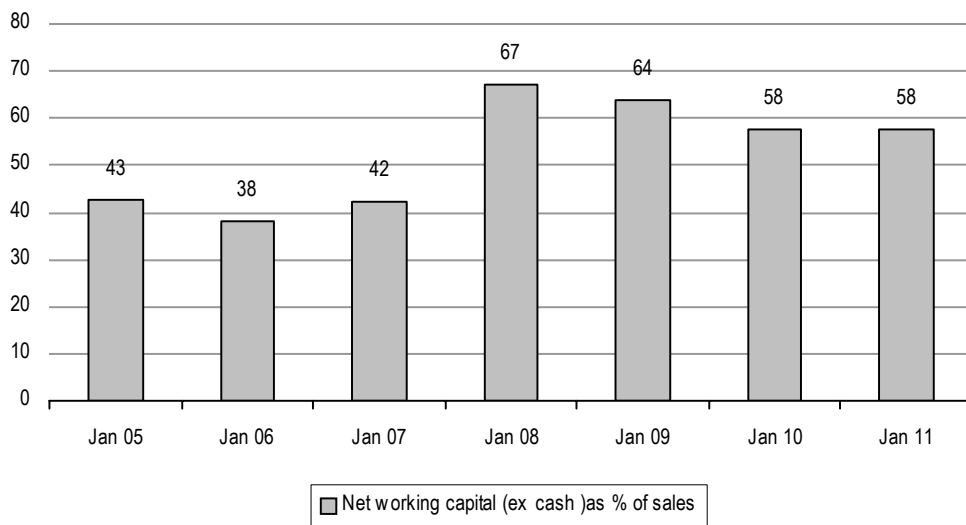
Recap: AREVA SA has put its T&D arm up for sale, in order to generate cash flows to expand its presence in the nuclear business. The first stage (non-binding bids) has seen some bidders (Toshiba, Alstom-Schneider and GE). Post an agreement on social plan, industrial capex outlay and the minimum reserve price, the shortlisted bidders will be asked to send binding offers (by November 2009). The entire process might be completed

by December this year. There is though the possibility that in case the above conditions are not fulfilled Areva might go in for an IPO of its T&D division.

Working capital trends

Areva T&D has more intensive working capital requirements compared with peers', driven by a higher gearing to state utility projects where receivable days are typically extended. We expect rising private sector demand to change the mix over the years and thereby improving working capital days.

Figure 64: Working capital intensive business

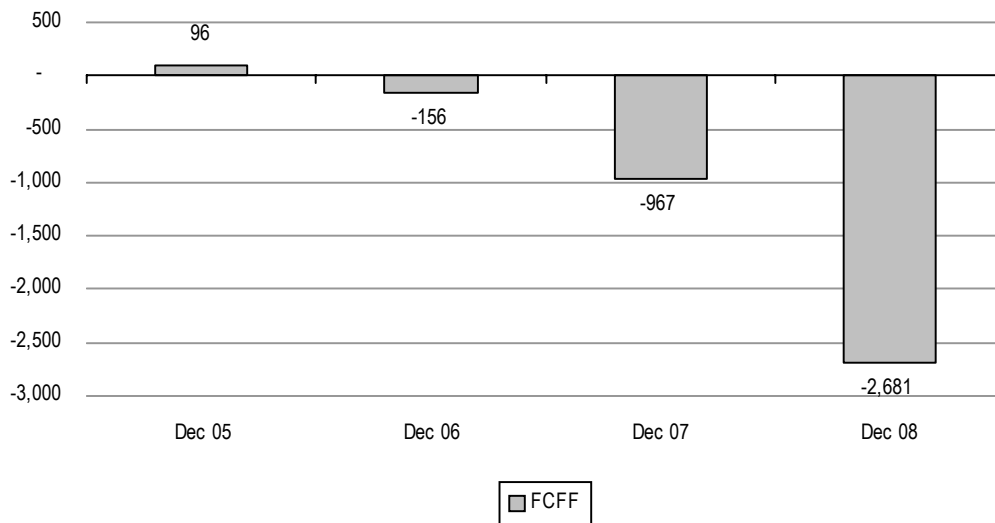


Source: Company data, Credit Suisse estimates

Free cash flow

Free cash flow generation for Areva T&D has been weak as it was dictated largely by the investments in setting up domestic manufacturing capacities critical for future growth.

Figure 65: FCF trends



Source: Company data, Credit Suisse estimates

Initiate with an UNDERPERFORM rating

We initiate Areva T&D with an UNDERPERFORM rating and a target price of Rs206 based on 22x CY11E EPS (historical trading band of 10x-30x).

Investment risks

Key risks to target price and rating: We believe that the sale of Areva T&D business is the critical risk factor, as an open offer post the sale could support the stock price.

A change in import content regulations for high voltage from the current 50% to zero could in fact reduce margin pressures.

A front-ended order inflow next year could lead to higher-than-expected earnings.

Financials

Figure 66: Income statement

Year-end 31 Dec (Rs mn)	2004	2005	2006	2007	2008	2009	2010	2011
Net sales	7747	8695	16058	20063	26412	33775	38316	45039
Materials exp	5211	6135	10851	12671	17141	23399	26345	30980
Staff cost	795	685	1163	1532	2091	2834	3196	3756
SG&A	1197	1186	1946	2285	2928	3642	4315	5059
Expenditure	7203	8006	13960	16488	22557	29994	33856	39795
OBITDA	543	689	2098	3575	3855	3781	4460	5244
OBITDA margin (%)	7	8	13	18	15	11	12	12
Depreciation	126	96	187	231	340	489	505	591
EBIT	417	593	1911	3343	3515	3292	3955	4652
EBIT margin (%)	5	7	12	17	13	10	10	10
Other income	85	56	151	178	142	-47	-187	-182
Interest	7	1	44	85	302	500	375	375
Exceptional items								
PBT	348	594	1991	3432	3355	2745	3392	4095
Total taxation	136	231	719	1269	1196	948	1153	1459
Reported PAT	212	363	1370	2163	2263	1797	2239	2636
Adjusted PAT	212	363	1273	2163	2160	1797	2239	2636
Dividend	70	100	287	430	430	359	448	527
Dividend tax	10	14	49	73	73	61	76	90
EPS – adjusted	1	2	5	9	9	8	9	11

Source: Company data, Credit Suisse estimates

Figure 67: Balance sheet

Year-end 31 Dec (Rs mn)	2004	2005	2006	2007	2008	2009	2010	2011
Share capital	399	399	478	478	478	478	478	478
Reserves and surplus	1453	1710	3340	5015	6772	8149	9864	11883
Total shareholders equity	1852	2109	3818	5493	7250	8627	10342	12361
Secured loans	16	0	0	0	0	0	0	0
Unsecured loans	0	100	33	1012	4692	4692	4692	4692
Total loans	16	100	33	1012	4692	4692	4692	4692
Total sources of funds	1868	2209	3851	6506	11942	13319	15034	17053
Application of funds								
Adjusted gross block	1921	2015	2726	3571	4062	11575	13075	14575
Less: depreciation	1501	1545	1709	1880	2104	2594	3099	3690
Net block	420	470	1017	1707	1971	8982	9976	10885
Capital WIP	67	181	100	586	4500	500	500	500
Total fixed assets	488	651	1117	2293	6470	9482	10476	11385
Investments	97	97	97	0	0	0	0	0
Deferred tax assets net	109	137	251	283	387	387	387	387
Inventory	1193	1858	2386	2729	3862	4939	5603	6586
Debtors	2827	4020	6237	10286	11889	15204	17248	20274
Cash and bank	271	415	525	230	451	-1875	-1870	-1820
Loans and advances	515	658	1046	1347	2816	3601	4085	4802
Total current assets	4806	6950	10194	14591	21601	24571	28131	33445
Current liabilities	3369	5223	7110	9561	15405	19699	22348	26269
Provisions	262	402	697	1101	1111	1421	1612	1895
CL&P	3631	5625	7807	10662	16516	21120	23960	28164
Net current assets	1175	1325	2387	3930	5085	3450	4171	5281
Total application of funds	1868	2211	3851	6506	11942	13319	15034	17053

Source: Company data, Credit Suisse estimates

Figure 68: Cash flow statement

Year-end 31 December (Rs mn)	2004	2005	2006	2007	2008	2009	2010	2011
PBT	594	2089	3432	3470	2745	3392	4095	4095
Depreciation	96	187	231	340	489	505	591	591
Others	221	102	264	839	547	562	557	557
Operating profit before WC chg	910	2377	3927	4650	3781	4460	5244	5244
Debtors	-1468	-2171	-4448	-5815	-4219	-2891	-4281	-4281
Inventory	-665	-580	-343	-1133	-1077	-664	-983	-983
Trade and other payables	1802	1309	2407	5362	4604	2840	4204	4204
Operating cash flow	579	937	1543	3064	3090	3744	4184	4184
Taxation	-227	-716	-1135	-1521	-948	-1153	-1459	-1459
Cash flow from operating activities	352	220	408	1543	2142	2591	2725	2725
Change in fixed assets	-253	-369	-1374	-4217	-3500	-1500	-1500	-1500
Change in investments	-1	414	97	118	0	0	0	0
Others	39	61	14	3	-47	-187	-182	-182
Cash flow from investing activities	-215	106	-1263	-4096	-3547	-1687	-1682	-1682
Change in equity	0	0	0	0	0	0	0	0
Change in loans	84	-157	979	3543	0	0	0	0
Dividend paid and tax thereon	-79	-112	-332	-500	-421	-524	-617	-617
Others	-1	-36	-91	-272	-500	-375	-375	-375
Cash flow from financing activities	4	-305	556	2771	-920	-899	-992	-992
Net change in cash and cash equiv.	142	21	-298	217	-2325	4	51	51
Opening balance of cash and equiv.	270	412	522	223	451	-1875	-1870	-1870
Closing balance of cash and equiv.	412	522	223	441	-1875	-1870	-1820	-1820

Source: Company data, Credit Suisse estimates

Figure 69: Key ratios

Year-end 31 December (Rs mn)	2005	2006	2007	2008	2009	2010	2011
Order inflows	15282	24180	29343	41030	43475	50569	61569
YoY (%)	0	58	21	40	6	16	22
Order backlog	12236	18771	27465	40950	45522	57775	74306
YoY (%)	87	53	46	49	11	27	29
Valuation							
Share Price (Rs)	279	279	279	279	279	279	279
Shares Outstanding (mn)	199	239	239	239	239	239	239
Market Cap (Rs mn)	63820	76513	76513	76513	76513	76513	76513
Net Debt (Rs mn)	-315	-491	782	4241	6567	6562	6512
EV (Rs mn)	63505	76022	77295	80755	83080	83076	83025
Net Debt /Equity (x)	-0.15	-0.13	0.14	0.58	0.76	0.63	0.53
Gross Debt/ Equity (x)	0.05	0.01	0.18	0.65	0.54	0.45	0.38
EPS (Rs)	1.8	5.3	9.0	9.0	7.5	9.4	11.0
EPS Growth %	0.7	1.9	0.7	0.0	-0.2	0.2	0.2
CEPS (Rs)	2	6	10	10	9	11	13
DPS (Rs)	1	1	2	2	2	2	2
BV (x)	11	16	23	30	36	43	52
P/E (x)	152	52	31	31	37	29	25
P/CEPS (x)	131	47	29	28	31	26	22
Yield (%)	0%	0%	1%	1%	1%	1%	1%
P/BV (x)	26.1	17.3	12.0	9.1	7.6	6.4	5.3
EV/EBITDA (x)	79.5	31.2	18.7	18.2	19.2	16.3	13.8
EV/Sales (x)	6.3	4.1	3.3	2.7	2.1	1.9	1.6
RoCE (%)	16	34	34	20	16	16	17
RoE (%)	17	36	39	31	21	22	21
EBIT Margin (%)	7	12	17	13	10	10	10
Sales Turnover (%)	3.9	4.2	3.1	2.2	2.5	2.5	2.6
Leverage (%)	1.0	1.0	1.2	1.6	1.5	1.5	1.4
Net Interest Burden (%)	0	2	3	9	15	9	8
Tax Burden (%)	39	36	37	36	36	36	36
OBITDA Margin (%)	8	13	18	15	11	12	12
EBIT(inc other income) Margin (%)	7	12	17	13	10	10	10
PBT Margin (%)	7	12	17	13	8	9	9
PAT Margin (%)	4	8	11	8	5	6	6

Source: Company data, Credit Suisse estimates

ABB Ltd.

(ABB.BO / ABB IN)

Rating	UNDERPERFORM* [V]
Price (04 Nov 09, Rs)	729.50
Target price (Rs)	(from 495.02) 603.82 ¹
Chg to TP (%)	-17.2
Market cap. (Rs mn)	154,587 (US\$ 3,295)
Enterprise value (Rs mn)	153,226
Number of shares (mn)	211.91
Free float (%)	47.89
52-week price range	817.00 - 351.95

*Stock ratings are relative to the relevant country benchmark.

¹Target price is for 12 months.

[V] = Stock considered volatile (see Disclosure Appendix).

Research Analysts**Venugopal Garre**

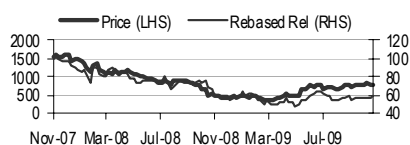
91 22 6777 3872

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Fundamentals have not yet troughed

- **We maintain UNDERPERFORM rating on ABB India** with a revised target price of Rs603.8 (from Rs495, CY09E, 24x P/E).
- **Distressing margins:** ABB's margins in the power systems business at 1.2% (down from the 10-12% band two years ago) highlight the problems that the company is facing. At such margins there is limited room for bringing down pricing further to improve order inflows. The market share hence is at risk, in our view. Another concern is that the margin trend going ahead may be much weaker given that orders won over past six months have been under an extremely weak pricing environment. The positives, though, can stem from the automation sector where we expect some uptick for orders and margins, as high cost inventory has largely been flushed out. Overall, we are building for a modest recovery in order inflows and earnings growth next year driven largely by the base effect but consensus numbers seem too optimistic, in our view.
- **Negative noises on the pricing environment,** limited news flow on order wins, weak earnings and continued earnings downgrades should ensure underperformance.
- **Do not chase such steep valuations:** In case a recovery emerges, will one still want to own a stock trading at 30x forward numbers? While the previous valuations could be used as a precedence to justify more upside (peak multiple was 48x), we believe the forward earnings CAGR will be much weaker than the past, in that phase one had the benefit of a low base of margins. With margins still hovering around peak levels, apart from a quarter or two of sharp earnings upticks, earnings growth will mimic order intake, suggesting lower earnings growth ahead. It is probably a lack of investible stocks in the capital goods sector that still forces investors to chase such steep valuations.

Share price performance



The price relative chart measures performance against the BOMBAY SE 30 SHARE SENSITIVE index which closed at 15912.13 on 04/11/09

On 04/11/09 the spot exchange rate was Rs46.91/US\$1

Performance Over	1M	3M	12M
Absolute (%)	-7.7	2.6	29.3
Relative (%)	-0.6	2.1	-13.6

Financial and valuation metrics

Year	12/08A	12/09E	12/10E	12/11E
Revenue (Rs mn)	68,370.4	68,675.8	81,805.3	94,568.6
EBITDA (Rs mn)	7,657.4	6,920.1	8,468.0	9,472.4
EBIT (Rs mn)	6,552.7	6,428.8	7,857.9	8,761.9
Net income (Rs mn)	5,473.9	4,258.1	5,331.4	6,002.5
EPS (CS adj., Rs)	25.83	20.09	25.16	28.33
Change from previous EPS (%)	n.a.	-14.8	-8.5	-15.4
Consensus EPS	n.a.	22.98	28.64	33.60
EPS growth (%)	11.3	-22.2	25.2	12.6
P/E (x)	28.2	36.3	29.0	25.8
Dividend yield (%)	0.34	0.26	0.33	0.37
EV/EBITDA (x)	19.7	22.1	17.7	15.5
P/B (x)	7.3	6.2	5.2	4.4
ROE	21.8	16.0	17.0	16.0
Net debt/equity (%)	net cash	net cash	net cash	net cash

Source: Company data, Thomson Financial Datastream, Credit Suisse estimates.

Financial summary

Figure 70: Financial summary

Year-end 31 December (Rs mn)	2004	2005	2006	2007	2008	2009	2010	2011
Order inflow	25878	37645	56236	76682	80541	79389	93412	112720
Order backlog	13356	21032	33723	50260	61618	72331	83938	102089
Execution (net sales to opening order book) (%)	211	222	203	176	136	111	113	113
Income statement								
Net sales	22602	29631	42740	59303	68370	68676	81805	94569
Expenditure	20473	26449	37973	52057	60713	61756	73337	85096
Operating profits	2129	3182	4767	7246	7657	6920	8468	9472
PBT	2365	3395	5232	7565	8332	6545	8052	9066
PAT – reported	1505	2187	3403	4917	5474	4258	5331	6003
Adjusted PAT	1505	2187	3403	4917	5474	4258	5331	6003
EPS – reported	36	52	16	23	26	20	25	28
EPS – adjusted	7	10	16	23	26	20	25	28
Balance sheet								
Share capital	424	424	424	424	424	424	424	424
Reserves and surplus	6823	8617	11535	15840	20766	24541	29267	34588
Loan funds	15	27	16	6	0	0	0	0
Deferred tax liability	132	84	165	128	38	38	38	38
Total sources of funds	7394	9153	12139	16397	21228	25003	29729	35050
Net fixed assets + CWIP	1949	2651	3318	4579	6833	7848	7738	7527
Investments	1070	872	774	705	611	611	611	611
Net current assets	4375	5630	8048	11114	13783	16544	21380	26912
Total application of funds	7394	9153	12139	16397	21228	25003	29729	35050
Cash flow statement								
Post tax operating cash before working capital	1654	2188	3437	4920	6681	4889	6035	6807
Changes in working capital	63	-1416	-984	-2245	-6484	-4844	-1775	-2640
Cash flow from operating activities	1716	772	2453	2676	197	45	4260	4168
Change in fixed assets	-492	-893	-900	-1470	-2639	-1500	-500	-500
Others	-201	355	306	331	392	128	144	199
Cash flow from investing activities	-693	-538	-594	-1139	-2247	-1372	-356	-301
Cash flow from financing activities	-386	-392	-405	-573	-896	-756	-842	-975
Change in cash	637	-158	1455	964	-2946	-2083	3062	2892
Opening cash and equivalents	3530	4168	4010	5464	6429	3482	1399	4460
Closing cash and equivalents	4168	4010	5464	6429	3482	1399	4460	7352
Key ratios (%)								
ROE (year-end)	21	24	28	30	26	17	18	17
ROCE (average)	18	23	28	32	25	18	19	18
Net debt to equity	-57	-44	-46	-39	-16	-6	-15	-21
Growth (%)								
Order inflow	52	45	49	36	5	-1	18	21
Order book	25	57	60	49	23	17	16	22
Net sales	54	31	44	39	15	0	19	16
Adjusted PAT	49	45	56	44	11	-22	25	13
Margins (%)								
OBITDA	9.4	10.7	11.2	12.2	11.2	10.1	10.4	10.0
OPM	8.4	9.8	10.4	11.5	10.5	9.3	9.6	9.2
PAT margins	6.7	7.4	8.0	8.3	8.0	6.2	6.5	6.3

Source: Company data, Credit Suisse estimates

Worst is not behind us

Our cautious view on ABB India is based on: 1) our expectation of a moderation in order inflow growth led by slower industrial capex and market share losses in power orders, 2) slower earnings growth and scope for significant consensus downgrades 3) working capital issues led by the large product business and an increase in the cost of funding, and 4) margin declines due to price wars and high-priced product inventory. While several of these factors have already played out and we expect improvements on the working capital front, margin trends may continue to surprise on the downside, in our view.

Margin pressures will continue

Margin trends distressing

While margins on power products and process automation have been holding up well, it has largely been margins of power systems and automation products that have witnessed sharp decelerations.

ABB makes only 1.2% EBIT margin in the power systems business comprising about 25-30% of sales, highlighting the ongoing price war in the systems business. This also suggests that there is not much room for ABB to bring down prices, i.e. order losses going forward and secondly the current order backlog may have been won at even worse margins. The decline in process automation margins is another sign of concern as the order intake is expected to remain muted in the segment for another three to four quarters.

For automation products, margin declines in 1Q/2Q were led largely by the sale of high priced inventory and pricing actions (which in fact helped orders). We expect flushing out of channel inventories and building up of lower priced ones to lead to a natural expansion in YoY margins for the segment.

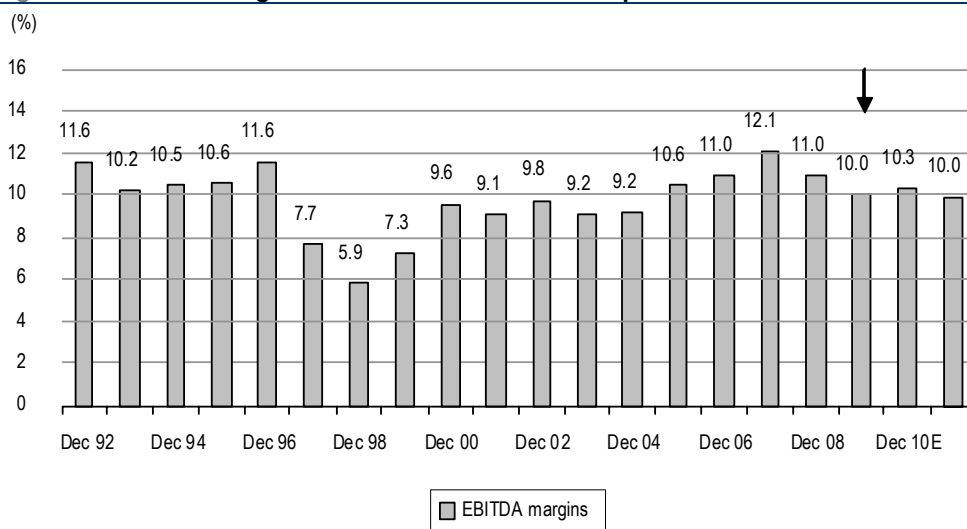
Power product margins have been holding up well over the last few quarters, and we expect margins to decline in this segment given the ongoing price decline.

Figure 71: Margin trends

(%)	2Q05	3Q05	4Q05	1Q06	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09	3Q09
Power products	9	13	17	9	8	11	16	9	13	11	17	13	12	9	16	13	14	12
Power systems	7	8	10	8	7	10	15	9	9	10	13	9	6	10	9	6	2.9	1.2
Automation products	11	13	16	11	13	10	15	11	12	14	15	10	15	7	18	7	6	13
Process automation	11	10	13	8	14	11	10	9	13	13	14	14	11	12	16	13	10	7

Source: Company data, Credit Suisse estimates

Figure 72: EBITDA margins will remain weak: more scope for downside

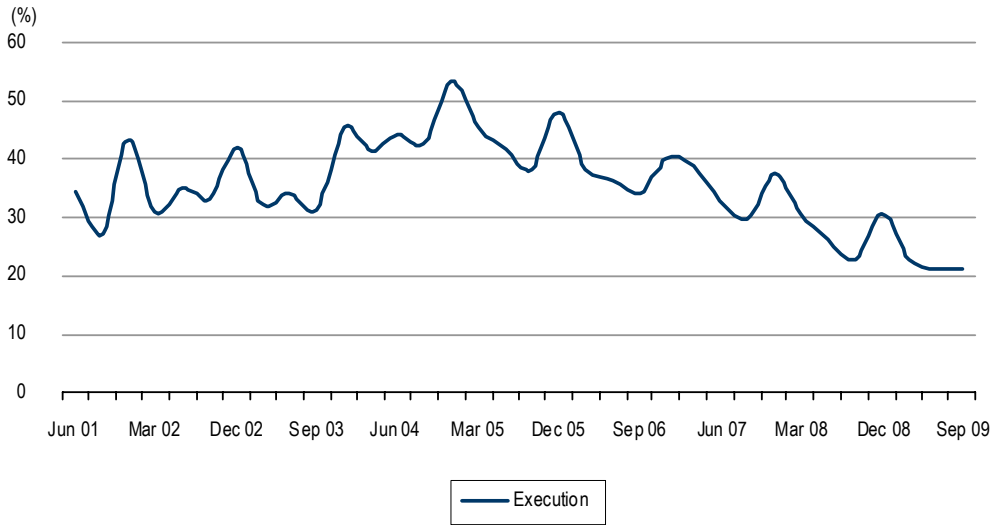


Source: Company data, Credit Suisse estimates

Execution cycles have extended

Execution cycles for ABB have extended sharply over the past two years led by an increasing mix of the systems business and accentuated by slower product business growth. While we see less room for further declines in execution cycles, an improvement can be expected only much later in CY10 when product orders may start witnessing a rebound in growth.

Figure 73: Execution may have troughed



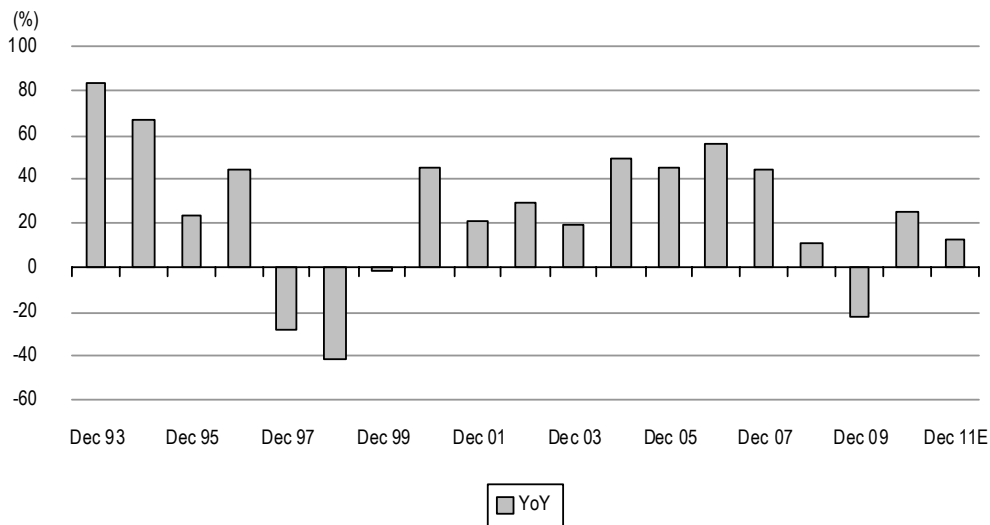
Source: Company data, Credit Suisse estimates

Earnings growth to track below consensus

While we expect earnings growth to improve next year – it is largely driven by the base effect and the earnings CAGR over CY08-11E is a modest 3%.

Expect a modest earnings CAGR of 3% over CY08-11

Figure 74: Earnings growth to recover



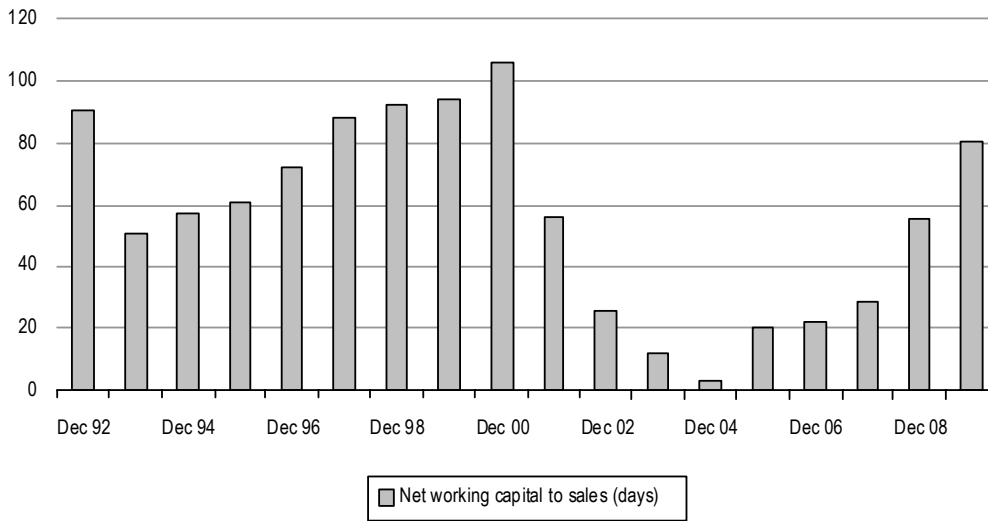
Source: Company data, Credit Suisse estimates

Working capital metrics could improve

Working capital days for ABB have increased drastically over the past few quarters led by rises in inventory levels and receivable days largely at the product end. Anecdotal evidence as well as historical trends suggests that working capital requirements may have

peaked in the current year and should ease off by next year. Furthermore, a decline in interest rates would lower interest costs.

Figure 75: Working capital requirements may ease

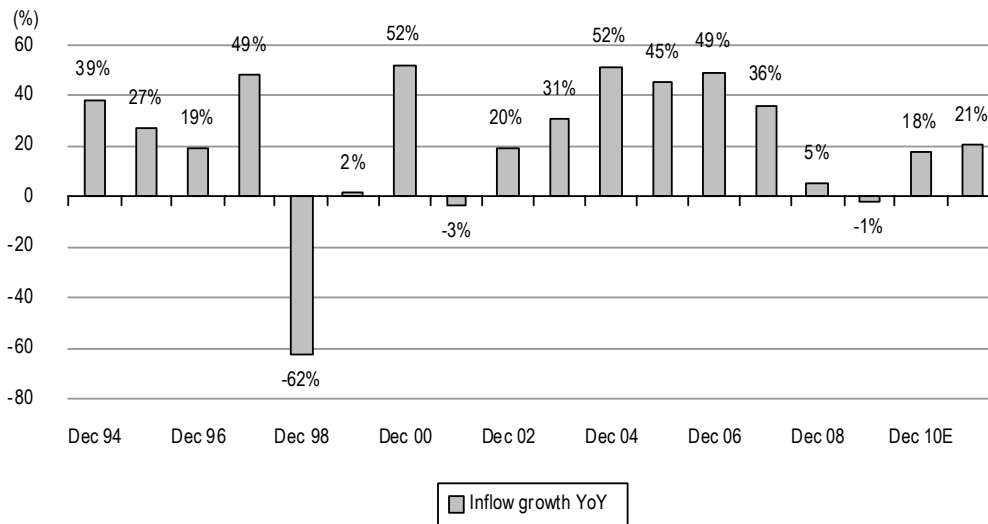


Source: Company data, Credit Suisse estimates

Order inflow growth slower than in the past

After two weak years of order inflows, we expect a rebound in order inflow growth starting 2H CY11; however, the order inflow CAGR at 12% (CY08-11E) is sharply lower than the 30% growth achieved over the past three years suggesting that overall growth for ABB may be much slower than that in the past.

Figure 76: Inflow growth



Source: Company data, Credit Suisse estimates

Figure 77: Recent order inflows

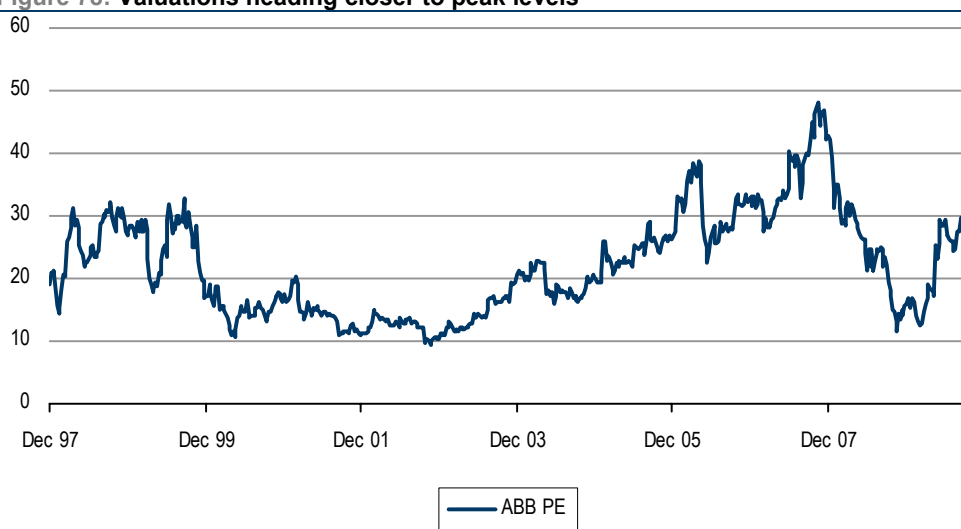
Date	Rs mn	Utility name	Comments
25 Aug	1,283	PGCIL	400-kV GIS substation to strengthen the power transmission network in the country's western grid. The substation will be located in Navsari, in the western Indian state of Gujarat
14 Jul	1,410	MSETCL	The 220 kV and 132 kV substations will be located in the Nashik, Amravati and Nagpur zones of the western Indian state of Maharashtra, and are an integral part of MSETCL's efforts to reduce transmission and distribution losses. The order was won in the second quarter, and the project is scheduled for completion in 2010
01 Jul	1,654	PTC -Uttarakhand	Design, supply, install and commission of the substations, rated at 132 kV (kilovolts), 220 kV and 400 kV, respectively, as well as transformers and other major power equipment
24 Jun	2,220	Tata Projects Limited	Integrated electrical balance of plant (eBoP) solution, including transformers, switchgear and protection equipment, as well as a 400-KV turnkey substation to facilitate power transmission
29 Jun	550	Kolkatta Airport	Electrical infrastructure for modernisation of Kolkata airport
29 Apr	1,270	NTPC	Mauda Super TPP and Tapovan Vishnugad HydroElectric Power Project.ABB will design, supply, erect and commission transformers
28 Apr	4,250	ABB India	ABB is responsible for the design, supply, installation and commissioning of 765/400 kV substations at Agra (Uttar Pradesh), Wardha (Maharashtra), Bilaspur and Seoni (both Madhya Pradesh), and of a 400/220 kV substation at Palakkad (Kerala). The projects are expected to be completed by mid-2011.

Source: Company data, Credit Suisse estimates

Rich valuations price in a recovery

At the forward P/E of 28.5x (conesus estimate), ABB India is trading at the higher end of its historical trading bands and is rich on absolute valuation. However, the stock has underperformed Siemens since June 2009. We expect this underperformance to reverse as earnings growth for Siemens may be relatively slower due to difficult YoY compares, in our view.

Figure 78: Valuations heading closer to peak levels



Source: I/B/E/S

Earnings downgrade risk remains

We have downgraded our earnings estimates for ABB thrice this year and are still surprised by the downside. Post the September quarter results, we have now again revised down our earnings estimates by 8.5% to 15% for CY09-11.

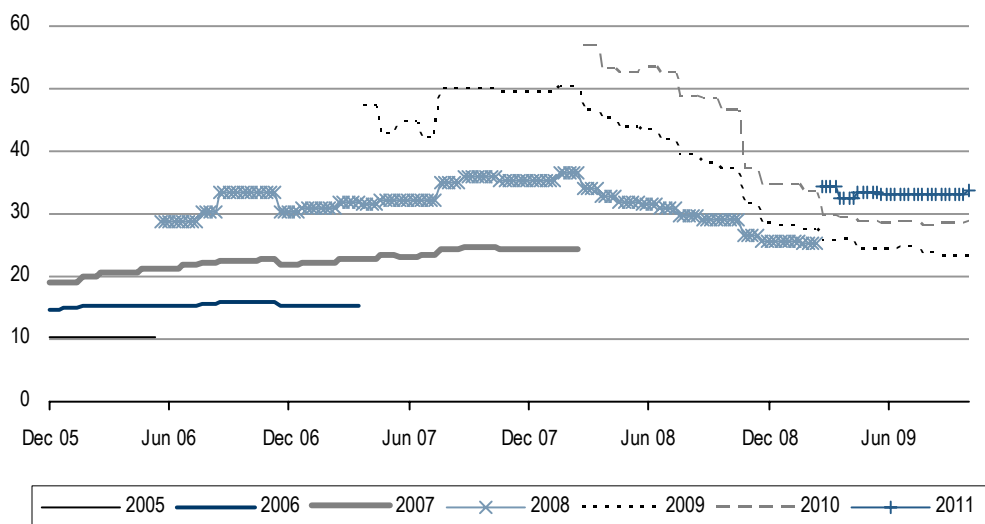
Figure 79: Another round of earnings revisions

(Rs mn)	December 2009E	December 2010E	December 2011E
Revenues			
Current	72649	78611	95520
Previous	68676	81805	94569
Change (%)	-5.5	4.1	-1.0
Current	4999	5825	7099
Previous	4258	5331	6003
Change (%)	-14.8	-8.5	-15.4

Source: Company data, Credit Suisse estimates

Consensus earnings estimates for FY11 still appear too steep, in our view, as they embed a sharp increase in YoY margins which is unlikely next year. ABB will have to either give up more margins to win orders or compromise on the order intake numbers.

Figure 80: Earnings downgrade risk remains



Source: Company data, Credit Suisse estimates

Maintain UNDERPERFORM

We maintain UNDERPERFORM with a revised target price of Rs603.8 (24x FY11E) as we roll forward the valuation base to FY11.

Figure 81: Multiples

	Maximum	Minimum	Average
Pre 2003	32	9	19
Post 2003	48	11	24

Source: Company data, Credit Suisse estimates

Financials

Figure 82: Income statement

Year-end 31 December (Rs mn)	2004	2005	2006	2007	2008	2009	2010	2011
Sales and services (net)	22602	29631	42740	59303	68370	68676	81805	94569
Cost of materials	16547	21311	31445	42920	50242	49167	58904	68293
Personnel expenses	1361	1784	2414	3061	4016	4393	4853	5648
Other expenses	2566	3354	4113	6076	7192	8201	9580	11155
EBITDA	2129	3182	4767	7246	7657	6920	8468	9472
EBITDA margin (%)	9	11	11	12	11	10	10	10
Other income	453	511	737	710	1304	383	431	597
D&A	206	234	267	327	367	486	610	711
Interest expenses	13	66	7	68	262	273	237	293
Exceptional items	0	0	0	0	0	0	0	0
PBT	2365	3395	5232	7565	8332	6545	8052	9066
Tax	860	1208	1829	2648	2858	2287	2721	3063
Reported PAT	1505	2187	3403	4917	5474	4258	5331	6003
Adjusted PAT	1505	2187	3403	4917	5474	4258	5331	6003

Source: Company data, Credit Suisse estimates

Figure 83: Balance sheet

Year-end 31 Dec. (Rs mn)	2004	2005	2006	2007	2008	2009	2010	2011
Share capital	424	424	424	424	424	424	424	424
Reserves and surplus	6823	8617	11535	15840	20766	24541	29267	34588
Shareholders funds	7247	9041	11958	16263	21190	24964	29691	35012
Total loans	15	27	16	6	0	0	0	0
Deferred tax liability	132	84	165	128	38	38	38	38
Total liabilities	7394	9153	12139	16397	21228	25003	29729	35050
Net block	1900	2267	3072	3519	5458	7648	7538	7327
CWIP	49	384	246	1059	1375	200	200	200
Investments	1070	872	774	705	611	611	611	611
Inventories	1683	2016	3547	4887	6427	7526	8965	10364
Inventory days	27	25	30	30	34	40	40	40
Sundry debtors	6263	10293	15703	24236	29759	31986	36980	42750
Debtor days	101	127	134	149	165	170	165	165
Cash and bank balances	4168	4010	5464	6429	3482	1399	4460	7352
Other current assets	887	2278	1474	2754	3813	3189	3798	4391
as % of sales	4	8	3	5	5	5	5	5
Loans and advances	1063	1275	1778	2802	3518	3245	3865	4468
as % of sales	5	4	4	5	5	5	5	5
Current liabilities	9279	13729	19363	29315	31619	30104	35860	41455
Days of sales	150	169	165	180	170	160	160	160
Provisions	410	512	556	678	1596	697	830	959
% of CL	4	4	3	2	2	2	2	2
Net current assets	4375	5630	8048	11114	13783	16544	21380	26912
Total assets	7394	9153	12139	16397	21228	25003	29729	35050

Source: Company data, Credit Suisse estimates

Figure 84: Cash flow statement

Year-end 31 December (Rs mn)	2004	2005	2006	2007	2008	2009	2010	2011
PBT	2365	3395	5232	7565	8332	6545	8052	9066
Depreciation/amortisation	204	231	265	324	367	486	610	711
Others	-126	-177	-213	-209	360	145	93	94
Operating profit be WC	2443	3449	5284	7679	9060	7176	8755	9871
Change in sundry debtors	-910	-4032	-5416	-8533	-5453	-2227	-4995	-5770
Change in inventories	-448	-333	-1531	-1340	-1539	-1100	-1439	-1399
Change in other current assets	-444	-188	813	-1264	-1194	624	-610	-593
Change in loans and advances	89	-1316	-400	-928	-1075	273	-620	-603
Change in current liabilities and provisions	1831	4453	5551	9820	2777	-2414	5889	5724
Others	-56	0	0	0	0	0	0	0
Change in working capital	63	-1416	-984	-2245	-6484	-4844	-1775	-2640
Direct taxes paid (net of refund)	-789	-1261	-1846	-2759	-2378	-2287	-2721	-3063
Net cash from operating activities	1716	772	2453	2676	197	45	4260	4168
Change in fixed assets	-492	-893	-900	-1470	-2639	-1500	-500	-500
Change in investments	13	198	98	69	117	0	0	0
Others	-214	157	208	262	275	128	144	199
Net cash from investing activities	-693	-538	-594	-1139	-2247	-1372	-356	-301
Change in shares	0	0	0	0	0	0	0	0
Change in loans	-86	12	-12	-10	-5	0	0	0
Others	-300	-404	-393	-563	-891	-756	-842	-975
Net cash from financing activities	-386	-392	-405	-573	-896	-756	-842	-975
Increase/decrease in cash and equiv.	637	-158	1455	964	-2946	-2083	3062	2892
Opening cash	3530	4168	4010	5464	6429	3482	1399	4460
Closing cash	4168	4010	5464	6429	3482	1399	4460	7352

Source: Company data, Credit Suisse estimates

Figure 85: Key ratios

Year-end 31 December (Rs mn)	2004	2005	2006	2007	2008	2009	2010	2011
Share price (Rs)	729	729	729	729	729	729	729	729
Shares outstanding (mn)	42	42	212	212	212	212	212	212
Market cap (Rs mn)	30896	30896	154481	154481	154481	154481	154481	154481
Net debt (Rs mn)	-4153	-3982	-5449	-6423	-3482	-1399	-4460	-7352
EV (Rs mn)	26744	26914	149032	148058	150999	153083	150021	147129
Net debt /equity (x) (%)	-57	-44	-46	-39	-16	-6	-15	-21
Gross debt/ equity (x) (%)	0	0	0	0	0	0	0	0
EPS (Rs)	7.1	10.3	16.1	23.2	25.8	20.1	25.2	28.3
EPS growth (%)	49	45	56	44	11	-22	25	13
CEPS (Rs)	40	57	17	25	28	22	28	32
DPS (Rs)	7	8	2	2	2	2	2	3
BV (x)	34	43	56	77	100	118	140	165
P/E (x)	103	71	45	31	28	36	29	26
P/CEPS (x)	18.1	12.8	42.1	29.5	26.4	32.6	26.0	23.0
Yield (%)	1	1	0.3	0.3	0.3	0.3	0.3	0.4
P/BV (x)	21	17	13	9	7	6	5	4
EV/EBITDA (x)	13	8	31	20	20	22	18	16
EV/Sales (x)	1	1	3	2	2	2	2	2
RoCE (%)	20	24	28	30	26	17	18	17
RoE (%)	16	20	24	27	22	16	17	16
EBIT margin (%)	8	10	10	12	10	9	10	9
Sales turnover (%)	3.1	3.3	3.6	3.7	3.3	2.8	2.8	2.7
Leverage (%)	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net interest burden (%)	142.8	44.4	620.8	101.6	27.8	23.6	33.2	29.9
Tax burden (%)	36.4	35.6	35.0	35.0	34.3	34.9	33.8	33.8
EBITDA margin (%)	9	11	11	12	11.0	10.0	10.3	10.0
EBIT margin (%)	8	10	10	12	10.5	9.3	9.6	9.2
PBT margin (%)	10	11	12	13	12.2	9.5	9.8	9.6
PAT margin (%)	7	7	8	8	7.9	6.2	6.5	6.3

Source: Company data, Credit Suisse estimates

Siemens India

(SIEM.BO / SIEM IN)

Rating	NEUTRAL* [V]
Price (04 Nov 09, Rs)	512.05
Target price (Rs)	(from 240.00) 484.36 ¹
Chg to TP (%)	-5.4
Market cap. (Rs mn)	172,643 (US\$ 3,680)
Enterprise value (Rs mn)	159,539
Number of shares (mn)	337.16
Free float (%)	38.84
52-week price range	594.70 - 187.65

*Stock ratings are relative to the relevant country benchmark.

¹Target price is for 12 months.

[V] = Stock considered volatile (see Disclosure Appendix).

Research Analysts

Venugopal Garre

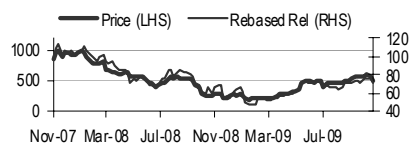
91 22 6777 3872

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Base effect catching up

- **We maintain our NEUTRAL rating on Siemens India, but revise our target price to Rs484 (22x FY11E) from Rs240, as we believe current valuations adequately capture the growth trajectory.**
- **Base effect catching up:** Our positive stance earlier this year was based on three simple factors: 1) low base effect will drive earnings growth, 2) lower exposure to the automation sector will drive order inflow outperformance, and 3) a negative working capital cycle and strong cash generation will cushion downside. Over the past year, Siemens has delivered more than we had anticipated both on orders and margins; however, margin expansion was due to the reversal of losses in some projects. We now believe there will be natural de-growth in earnings next year as YoY base compares become difficult and margins will decline.
- **Stay positive on results:** We expect Siemens to report strong 40% growth in earnings when it will report full-year numbers in November and articulate a positive view on the industrial cycle and optimism on power sector orders, which should help support the stock price.
- **Relative value; absolute valuations rich:** Siemens is relatively cheap than ABB and Areva T&D based on our forward estimates; however, absolute valuations are rich which make us retain our NEUTRAL rating. We roll forward the valuation base to FY11 and use mid-cycle multiples of 22x (10-40x range post 2003).

Share price performance



The price relative chart measures performance against the BOMBAY SE 30 SHARE SENSITIVE index which closed at 15912.13 on 04/11/09

On 04/11/09 the spot exchange rate was Rs47.74/US\$1

Performance Over	1M	3M	12M
Absolute (%)	-7.9	6.7	60.4
Relative (%)	-0.8	6.1	7.1

Financial and valuation metrics

Year	9/08A	9/09E	9/10E	9/11E
Revenue (Rs mn)	83,577.2	81,335.8	91,921.3	106,679.7
EBITDA (Rs mn)	7,790.6	10,927.2	10,991.7	12,751.6
EBIT (Rs mn)	7,153.3	10,203.6	10,193.0	11,826.5
Net income (Rs mn)	5,124.0	7,139.9	7,323.2	8,648.4
EPS (CS adj., Rs)	15.20	21.18	21.72	25.65
Change from previous EPS (%)	n.a.	18.6	7.6	5.1
Consensus EPS	n.a.	20.34	20.59	23.46
EPS growth (%)	-5.7	39.3	2.6	18.1
P/E (x)	33.7	24.2	23.6	20.0
Dividend yield (%)	0.7	1.3	0.8	1.0
EV/EBITDA (x)	21.0	14.6	14.0	11.5
P/B (x)	8.3	5.8	4.9	4.1
ROE	24.8	24.2	20.7	20.4
Net debt/equity (%)	net cash	net cash	net cash	net cash

Source: Company data, Thomson Financial Datastream, Credit Suisse estimates.

Financial summary

Figure 86: Financial summary

Year-end 30 September (Rs mn)	2003	2004	2005	2006	2007	2008	2009	2010	2011
Order inflow	16754	30142	41233	82026	95720	87722	85968	102817	131606
Order backlog	9023	20440	38139	75258	94074	98338	100392	108325	129813
Execution (net sales to opening order book) (%)	9	202	137	119	103	89	83	92	98
Income statement (Rs mn)									
Net sales	14946	18249	27966	45397	77660	83577	81336	91921	106680
Expenditure	13277	16379	25140	41356	70245	75787	70409	80930	93928
Operating profits	1669	1870	2826	4041	7415	7791	10927	10992	12752
PBT	1968	2299	3631	5055	8744	8938	15230	11136	13151
PAT – reported	1394	1531	2544	3659	5968	5954	11042	7323	8648
Adjusted PAT	1394	1514	2548	3602	5433	5124	7140	7323	8648
EPS – reported	4.2	4.6	7.7	10.7	17.7	17.7	32.8	21.7	25.7
EPS – adjusted	4.2	4.6	7.7	10.7	16.1	15.2	21.2	21.7	25.7
Balance sheet (Rs mn)									
Share capital	331	331	331	337	337	674	674	674	674
Reserves and surplus	4579	5730	7476	10534	15572	20017	28864	34732	41661
Loan funds	31	29	26	20	15	11	11	11	11
Total sources of funds	4941	6090	7833	10891	15924	20701	29549	35417	42346
Net fixed assets + CWIP	1820	1929	2338	4163	5570	6442	8218	8419	8494
Investments	899	1215	3303	4640	4676	5236	4274	4274	4274
Net current assets	2069	2798	2042	1812	5405	8113	16146	21812	28667
Deferred tax assets and others	154	148	150	277	273	910	910	910	910
Total application of funds	4941	6090	7833	10891	15924	20701	29549	35417	42346
Cash flow statement (Rs mn)									
Post tax operating cash before working capital	1280	1192	1588	2065	3454	4330	11222	7295	8365
Changes in working capital	-635	861	535	5679	-7459	1243	-4049	-396	322
Cash flow from operating activities	645	2053	2124	7744	-4005	5574	7173	6899	8687
Change in fixed assets	-41	-335	-362	-1836	-1780	-1657	-2500	-1000	-1000
Others	203	308	-857	-969	1763	1549	1506	827	1209
Cash flow from investing activities	162	-27	-1218	-2805	-17	-108	-994	-173	209
Cash flow from financing activities	-248	-301	-360	-399	-736	-971	-2195	-1456	-1719
Change in cash	558	1725	545	4539	-4758	4495	3984	5270	7177
Opening cash and equivalents	2027	2585	4310	4855	9394	4636	9131	13115	18385
Closing cash and equivalents	2585	4310	4855	9394	4636	9131	13115	18385	25562
Key ratios (%)									
<i>Valuation, Balance sheet based</i>									
ROE (year end)	28	25	33	33	34	25	24	21	20
ROCE (average)	28	25	33	33	34	25	24	21	20
Net debt to equity	-52	-71	-62	-86	-29	-44	-44	-52	-60
Growth (%)									
Order inflow	45	80	37	99	17	-8	-2	20	28
Order book	28	127	87	97	25	5	2	8	20
Net sales	13	22	53	62	71	8	-3	13	16
Adjusted PAT	61	9	68	41	51	-6	39	3	18
Margins									
Operating margins	11.2	10.2	10.1	8.9	9.5	9.3	13.4	12.0	12.0
EBITDA margins (including other income)	11.2	10.2	10.1	8.9	9.5	9.3	13.4	12.0	12.0
PAT margins	9.3	8.3	9.1	7.9	7.0	6.1	8.8	8.0	8.1

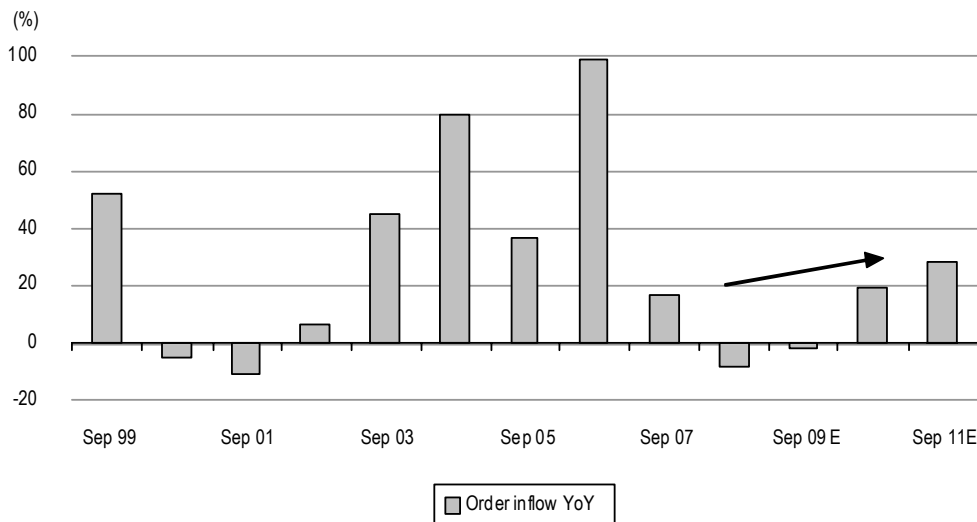
Source: Company data, Credit Suisse estimates

Order inflows to recover

After two weak years for order inflows, we expect order inflows for Siemens to improve starting 2H FY10 (ending September) led by a return of industrial orders and an acceleration in private sector spending on transmission equipment.

After two weak years, expect a recovery in order inflows

Figure 87: Order inflows to rebound from a low base



Source: Company data, Credit Suisse estimates

Figure 88: Some large order wins in September 2009

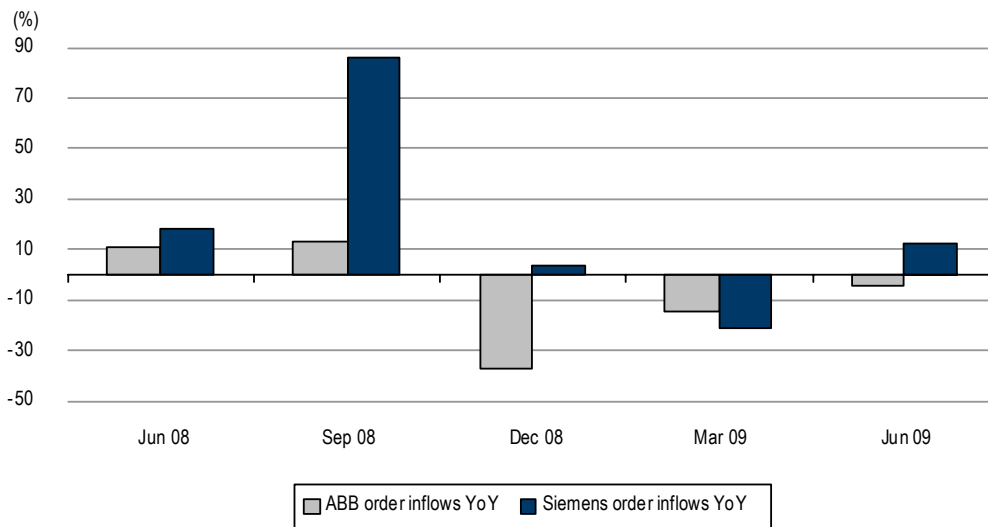
Sep-09 Year	Client	Order value	Order Details	Execution period
3-Nov-08	Polysius AG	N.M.	Provide complete electrics for the Ohorongu Cement Plant in Namibia. The plant is scheduled to be commissioned by December 2010	December 2010
11-Nov-08	SAIL	1756	Expansion and modernisation of the Bokaro Steel Plant at Bokaro, Jharkhand	By 2011-12
12-Feb-09	SAIL	2120	To provide extra high voltage power distribution package at Rourkela Steel Plant, Orissa	22 months
11-Apr-09	Adani Power	7200	Install a bipolar 500 kv HVDC transmission system of 2,500 MW capacity	22-28 months
22-Jun-09	Vedanta	1120	High voltage power distribution systems for second phase of expansion of Jharasguda smelter plant at Orissa. This will increase the capacity of smelter plant from 0.5 mt pa to 1.75 mt pa. Scope of work includes design, engineering, supply of 33 KV and 11 KV electrical distribution systems	18 months
22-Jul-09	PGCIL	1090	Two orders from PGCIL to construct and upgrade their 400 kV Bachau and 400kV Maithon substations. The scope of work for these projects, which are scheduled to be commissioned in the next 12 to 24 months, include designing, engineering, supply and commissioning of substations on a turnkey basis.	14 months
08-Oct-09	Ezdan International Housing Project, Qatar	4030	Designing, engineering, installation and commissioning of substations and associated electrical network.	15 months
30-Sep-09	PGCIL	3600	Won two orders from PGCIL for turnkey 765 kV substation each at Gaya in Bihar and Ranchi in Jharkhand.	27 months

Source: Company data, Credit Suisse estimates

Order inflows outperform ABB India

Except for the March 2009 quarter, order inflows for Siemens have outperformed ABB India.

Figure 89: Order inflows outperform ABB India



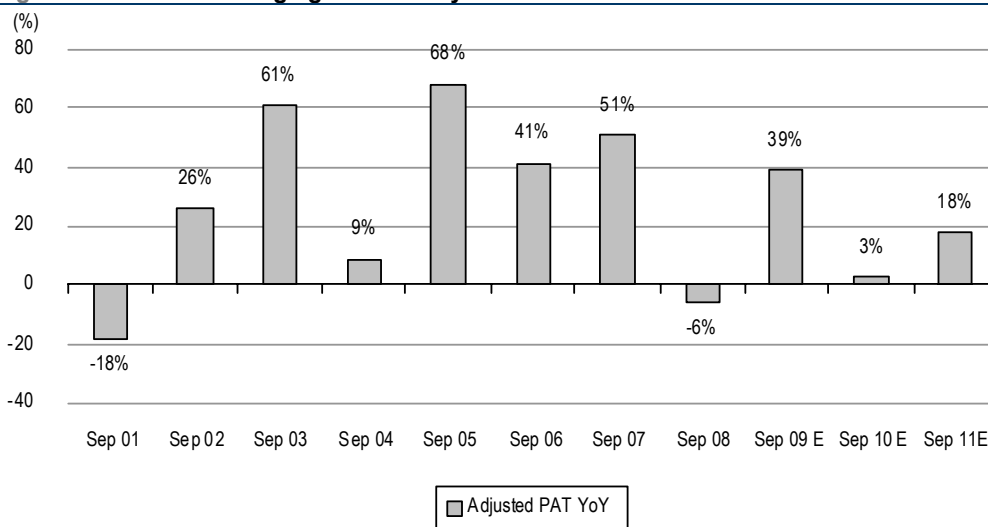
Source: Company data, Credit Suisse estimates

Slower earnings growth; base effect catching up

Earlier this year, we were of the view that a low base effect will drive earnings growth for Siemens while a lower exposure to the automation sector will drive order inflow outperformance relative to ABB. A performance review for the past few quarters suggests that Siemens witnessed a strong margin expansion in FY09, driven largely by the base effect, the reversal of costs provisions incurred in the previous years (Qatar transmission project) and lower cost of production due to capacity expansion in India.

A high base effect and peaking margins will bring down earnings growth next year

Figure 90: Slower earnings growth next year

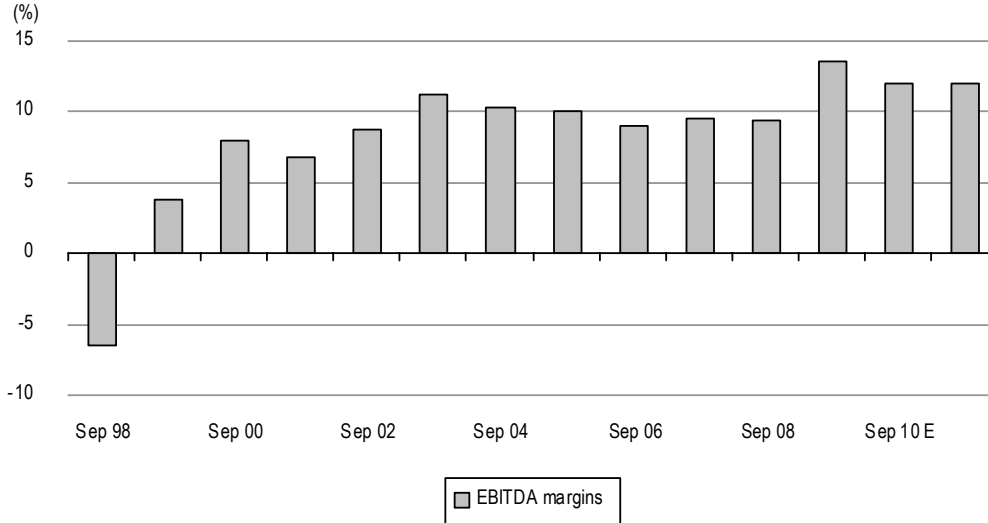


Source: Company data, Credit Suisse estimates

Less room for margin expansion

For year September-2010, we expect margins to decline sharply led by difficult YoY compares and price competition at the high voltage segment. Further, there are no significant project specific issues that will buoy earnings. A declining margin trajectory implies pressure on earnings growth next year, in our view.

Figure 91: Limited room for further margin expansion

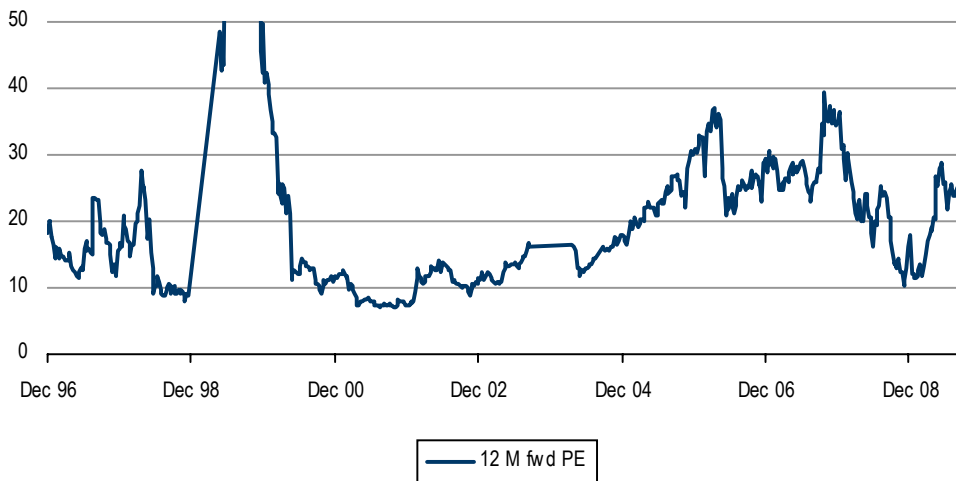


Source: Company data, Credit Suisse estimates

Stock should now move in line with the market

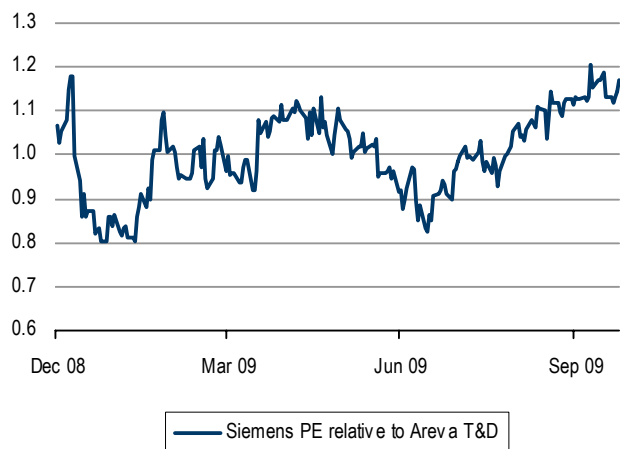
Siemens is now trading at the higher end of its historical valuation bands despite a slower forward earnings CAGR (19% from Sep08-11 versus 26% from Sep05-08). Furthermore, the recent outperformance captures the strong order inflow and margin trajectory for Siemens India relative to ABB India and Areva T&D, in our view. We expect declining margins and subsequent slower earnings growth to lead to a reversal of the recent outperformance.

Figure 92: Trading at the higher end of the historical trading band



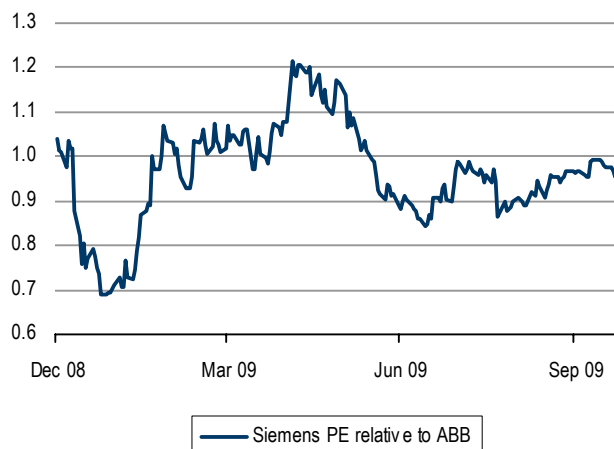
Source: Company data, Credit Suisse estimates

Figure 93: Siemens P/E relative to Areva T&D



Source: I/B/E/S

Figure 94: Siemens forward P/E relative to ABB India



Source: I/B/E/S

Maintain NEUTRAL rating

We maintain our NEUTRAL rating on Siemens India.

Figure 95: Historical trading multiples

	Maximum	Minium	Average
Pre 2003	245.6	7.0	23.1
Post 2003	37.8	10.4	22.3

Source: I/B/E/S

Financials

Figure 96: Income statement

Year-end 30 Sept. (Rs mn)	2004	2005	2006	2007	2008	2009E	2010E	2011E
Net sales	17613	27097	44695	76778	82504	80889	91464	106149
Other operating income	636	869	702	882	1074	447	457	531
Raw material exp	12721	20105	34639	62667	67972	60351	69484	81070
Staff cost	1652	2206	2829	4045	4476	5169	5586	6489
Other expenses	2007	2829	3888	3534	3339	4889	5860	6369
OBITDA	1870	2826	4041	7415	7791	10927	10992	12752
Operating margin (%)	10	10	9	10	9	13	12	12
EBIT	1641	2535	3599	6923	7153	10204	10193	11827
EBIT margin (%)	9	9	8	9	9	13	11	11
Depreciation and amortisation	228	291	442	492	637	724	799	925
Interest income net	132	215	367	445	472	544	827	1209
Other income	526	881	1089	593	67	2377	116	116
Other extraordinary items	0	0	0	783	1246	2106	0	0
PBT	2299	3631	5055	8744	8938	15230	11136	13151
PBT margin (%)	13	13	11	11	11	19	12	12
Tax	785	1084	1454	2777	2984	4188	3812	4502
PAT	1514	2548	3602	5968	5954	11042	7323	8648
PAT margin								
Adjusted PAT	1514	2548	3602	5433	5124	7140	7323	8648
Adjusted PAT margin (%)	9	9	8	7	6	9	8	8

Source: Company data, Credit Suisse estimates

Figure 97: Balance sheet

Year-end 30 Sept. (Rs mn)	2004	2005	2006	2007	2008	2009E	2010E	2011E
Share capital	331	331	337	337	674	674	674	674
Reserves and surplus	5730	7476	10534	15572	20017	28864	34732	41661
Shareholders' funds	6062	7808	10871	15909	20691	29538	35406	42336
Total debt	29	26	20	15	11	11	11	11
Capital employed	6090	7833	10891	15924	20701	29549	35417	42346
Net fixed Assets	1867	1970	2621	4637	5572	7348	7549	7624
Capital WIP	62	368	1542	933	870	870	870	870
Investments	1215	3303	4640	4676	5236	4274	4274	4274
Deferred tax and others	148	150	277	273	910	910	910	910
Cash and bank balance	4310	4855	9394	4636	9131	13115	18385	25562
Receivables	4173	7320	11098	22243	34328	34350	38841	45077
Receivable days	86	99	91	106	152	155	155	155
Inventories	1698	3284	4842	7491	7621	8421	9522	10179
Inventory days	35	44	40	36	34	38	38	35
Loans & advances	1802	1809	4164	6618	6173	7280	8232	9553
as % of sales	10	7	9	9	7	9	9	9
Others	0	2	4	0	0	0	0	0
Current liabilities	7363	12759	24275	30299	41868	39890	45106	52347
CL days	153	172	198	144	185	180	180	180
Provisions	1821	2469	3415	5283	7272	7130	8062	9356
Provisions as % of CL	38	33	28	25	32	32	32	32
Net current assets	-1511	-2813	-7583	768	-1018	3031	3428	3105
Total assets	6090	7833	10891	15924	20701	29549	35417	42346

Source: Company data, Credit Suisse estimates

Figure 98: Cash flow statement

Year-end 30 Sept. (Rs mn)	2004	2005	2006	2007	2008	2009E	2010E	2011E
PBT	2299	3631	5055	8742	8918	15230	11136	13151
Depreciation	242	292	465	492	637	724	799	925
Others	-830	-993	-1736	-3105	-1255	-544	-827	-1209
Operating cash before WC	1710	2930	3784	6129	8300	15410	11107	12867
Change in receivables	-665	-2087	-4941	-12905	-10569	-1129	-5442	-7558
Change in inventories	-464	-1364	-1426	-2720	-396	-800	-1101	-656
Change in CL & provisions	1990	3986	12047	8166	12208	-2120	6147	8536
Change in working capital	861	535	5679	-7459	1243	-4049	-396	322
Restructuring cost	0	0	0	0	0	0	0	0
Tax paid	-518	-1342	-1720	-2675	-3970	-4188	-3812	-4502
Cash flow from operations	2053	2124	7744	-4005	5574	7173	6899	8687
Discontinued operations	0	158	353	81	-105	0	0	0
Change in fixed assets	-335	-362	-1836	-1780	-1657	-2500	-1000	-1000
Change in investments	-364	-2467	-1337	223	-467	962	0	0
Others								
Cash flow from investing	-27	-1218	-2805	-17	-108	-994	-173	209
Discontinued operations	0	-6	-19	-469	-42	0	0	0
Increasing/(decreasing) in debt	-2	-3	-8	-5	-5	0	0	0
Issue of share capital	0	0	0	0	0	0	0	0
Others								
Cash flow from financing	-301	-360	-399	-736	-971	-2195	-1456	-1719
Opening cash balance	2585	4310	4855	9394	4636	9131	13115	18385
Increase/(decrease) during the year	1725	545	4539	-4758	4495	3984	5270	7177
Closing balance	4310	4855	9394	4636	9131	13115	18385	25562

Source: Company data, Credit Suisse estimates

Figure 99: Key ratios

Year-end 30 September (Rs mn)	2004	2005	2006	2007	2008	2009E	2010E	2011E
Total order inflows	30142	41233	82026	95720	87722	85968	102817	131606
Inflow growth YoY (%)	80	37	99	17	-8	-2	20	28
Order backlog	20440	38139	75258	94074	98338	100392	108325	129813
Backlog growth YoY (%)	208	140	125	106	91	85	95	102
Share price (Rs)	512	512	512	512	512	512	512	512
Shares outstanding (mn)	331	331	337	337	337	337	337	337
Market cap (Rs mn)	169669	169669	172626	172626	172626	172626	172626	172626
Net debt (Rs mn)	-4281	-4829	-9374	-4621	-9120	-13104	-18374	-25551
EV (Rs mn)	165388	164839	163252	168005	163506	159522	154252	147075
Net debt/equity (x)	-0.7	-0.6	-0.9	-0.3	-0.4	-0.4	-0.5	-0.6
Gross debt/equity (x)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EPS (Rs)	4.57	7.69	10.68	16.11	15.20	21.18	21.72	25.65
EPS growth %	9%	68%	39%	51%	-6%	39%	3%	18%
CEPS (Rs)	5.0	8.3	11.6	17.1	16.5	22.7	23.3	27.5
DPS (Rs)	1.0	1.7	2.2	2.8	3.5	6.5	4.3	5.1
BV (x)	18.3	23.6	32.2	47.2	61.4	87.6	105.0	125.6
Valuations								
P/E (x)	112.1	66.6	47.9	31.8	33.7	24.2	23.6	20.0
P/CEPS (x)	102.0	61.7	44.1	29.9	31.1	22.5	22.0	18.6
Yield (%)	0%	0%	0%	1%	1%	1%	1%	1%
P/BV (x)	28.0	21.7	15.9	10.9	8.3	5.8	4.9	4.1
EV/EBITDA (x)	88.5	58.3	40.4	22.7	21.0	14.6	14.0	11.5
EV/Sales (x)	9.4	6.1	3.7	2.2	2.0	2.0	1.7	1.4
Returns								
RoCE (%)	25	33	33	34	25	24	21	20
RoE (%)	25	33	33	34	25	24	21	20
EBIT(incl. other income and interest income) margin (%)	13	13	11	10	9	16	12	12
Sales turnover (%)	2.9	3.5	4.1	4.8	4.0	2.7	2.6	2.5
Leverage (%)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Net interest burden (%)	0	0	0	0	0	0	0	0
Tax burden (%)	34	30	29	32	33	27	34	34
Margins								
OBITDA margin (%)	9	9	8	9	9	13	11	11
OBIT margin (%)	9	9	8	9	9	13	11	11
PBT margin (%)	13	13	11	11	11	19	12	12
Adjusted PAT margin (%)	8	9	8	7	6	9	8	8

Source: Company data, Credit Suisse estimates

Appendix I: Supply chain conversations

Hyosung India (Not listed)

We recently met Hyosung's management in Delhi to understand its plans and strategies for Indian market. Hyosung has a representative office in India and operates in the power T&D segment (765 KV), steel trading and had revenues of US\$166 mn from India last year.

Presence in 765 KV and GIS: Hyosung has presence only in the 765 KV segment and the GIS market. Management has no plans to cater to the mid-low voltage segment as it sees limited cost advantages over domestic peers and believes that the market is already overcrowded. No import content regulations in the mid-low voltage segment and well established distribution channels for domestic competitors provide entry barriers for imports, in our view.

Demand for 765 KV: Management expects an order of 100/120, 765 KV transformers from Power Grid in FY10. It sees an opportunity emerging from the three UMTF lines with an aggregate value of US\$0.5 bn.

Opportunity in GIS: Hyosung was very optimistic on demand for GIS substations in India. Hyosung is currently involved with five GIS projects (two for Delhi Transco's, two for Power Grid, and one for NTPC (Vallur TPS). Management believes one 220 KV bay could cost US\$700,000 and the minimum requirement is typically 10 bays. While GIS is costly, the advantages are lower land requirement (one-fifths of land required), lower operating and maintenance costs. Apart from Hyosung, ABB, Siemens, Areva T&D and Crompton have capabilities of implementing GIS substations.

Market share: In FY09 there were 44 transformers ordered by Power Grid of which 34 were delivered by Hyosung and 10 by Crompton. Of the 37 transformers that have been ordered till date, 27 have been won by Hyosung. Management said even TBEA (China) is very active in India.

More room for price cuts? Cost is not the key factor. Management believes prices are already too high in India and it is largely transfer pricing of imported content that makes margins in MNCs' Indian operations appear low. There is still enough room for prices to come down in India and management expects pricing pressures to intensify over the medium term.

Cost advantage is clearly not a key factor and it is largely already high prices/margins in India that are now getting rationalised. In terms of scale, Hyosung has an aggregate of over 100,000 MVA capacity (60,000 MVA in Korea, 17,000 MVA in Pittsburgh US and 20,000 MVA in China). Capacity in Korea is, in fact, being increased to cater to rising demand in India. While the scale gives cost advantages, Hyosung sources components from Power Grid-approved vendors in India and then ship the final product from Korea. Even transformer oil, which increases the weight of the product while shipping, is sourced locally and filled in India.

Strong relationship with L&T: L&T does substation EPC work and purchases transformers from Hyosung and as such Hyosung outsources civil work to L&T. Management believes L&T has strong EPC capabilities and as such is supported at times by engineers from Korea.

Regulations: Hyosung does not have any plans to set up domestic manufacturing capacity in India. However, there could be a likely 50% reservation for companies incorporated in India which will favour companies like Crompton Greaves, Siemens, ABB and Areva T&D.

Jyoti Structures (JYS IN, Rs136, NOT RATED)

Order momentum: Management has an order visibility of Rs41 bn, of which Rs15 bn is from Power Grid and Haryana, Rs16 bn from NTPC, Chattisgarh, Delhi Transco and MSETCL, and two BOOT projects (Rajasthan and Haryana) account for the rest. In terms of international orders, JYS is targeting Botswana, South Africa, Tunisia, Kuwait and Dubai.

Management indicated that over Rs20 bn worth of PGCIL orders are awaiting awards and while the technical bids for these projects have already been opened, the price bids may be opened over the next one to two months.

Transmission BOOT projects: Tenders for the BOOT project in Rajasthan would be submitted in November and Haryana in December. JYS is bidding on its own in Rajasthan while for Haryana there will be a partner. JYS highlights that D/E for the project is around 70:30 and for the Rajasthan project equity required is Rs1.2-1.3 bn. The time given for the financial closure is about six months. The earlier bid by PFC (Power Finance Corporation) was won by Sterlite while there are two more bids (Talcher Augmentation Transmission System, North Karanpura Transmission System) tendered by PFC/REC that yet to be awarded. The total size of these three bids is Rs56 bn.

Guidance: JYS expects margins in the range of 11-11.5% (versus 14% last year) and expects revenues to exceed Rs21 bn. The current order backlog is about Rs39 bn.

Kalpataru Power Transmission (KPP IN, Rs923, NOT RATED)

Management, while optimistic on ordering activity, believes competitive intensity in the transmission sector has increased and there are over 13-15 active bidders now. Competition should impact pricing and margins.

According to management, there are *several PGCIL tenders currently under bid*; however, a change in the tendering process by PGCIL has led to some delays in awards. Earlier there was single-stage bidding but now there are two stages – technical bids and price bids. Post the technical bid evaluation, the price bids are opened.

For state transmission and distribution companies, management is of the view that overall order sizes should be similar to that of Power Grid given the historical underinvestment.

Management believes to achieve the current plan period targets, most of the ordering will have to be get completed by CY11 indicating a likely acceleration in order inflows. If we were to analyse PGCIL ordering activity, we note that in the current plan period about Rs20-25bn worth orders have already been placed.

Kalpataru has over Rs55 bn of order backlog and is L1 in several projects which are yet to be awarded. Management hopes to maintain 20-25% growth in revenues this year.

EMCO (EMCO IN, Rs78.5, NOT RATED)

EMCO operates in the 400 kV and below operating segments. It said while prices have declined YoY, a large part of declines (13-14% drop) is led by a drop in commodity prices. Management, however, pointed out that margins on this order backlog are lower than that in the past year. We, however, did not sense any major pricing pressures as management indicated that competition from imports has not been significant in this segment. Management hopes to attain 10% revenue growth this year and maintain margins at the EBITDA level of about 13%.

The order momentum will though remain strong, as per management, as several tenders are awaiting awards, where it is L1 in some. The current order backlog is Rs16 bn (versus Rs13 bn last year). The order intake in the current quarter is Rs3 bn. In terms of order book backlog, management said transformers comprise 34%, projects 64% and meters

2%. The transformer order backlog in terms of MVA is 11,600 versus 12,700 earlier. Over 70% of orders are from government.

In terms of growth plans, EMCO intends to expand transmission line manufacturing capacity from 45,000 tonnes per annum (tpa) to 100,000 tpa. It has plans to enter the 765 kV segment. It wants to add switchgears to the product offering, apart from looking at solutions and export markets in the meters business. Management intends to start bidding for BOP projects (electrical, mechanical and civil). While EMCO bids alone for the projects, it ties up with equipment vendors whenever necessary.

In the coal mining business about US\$18 mn has already been spent and US\$2 mn more is required. The overall reserve of coal is 105 mt. Details on costs and potential revenues were not shared.

The current debt is about Rs3.5 bn and cash is Rs0.4 bn with 1H capex at Rs0.14 bn. The Rs1.7 bn of proceeds from the sale of the generation business has been utilised in working capital and in growth initiatives as cash remained flat QoQ. Recall that EMCO has sold its generation project to GMR Energy for Rs1.7 bn compared with the cost of Rs0.42 bn. The sale was a value unlocking opportunity, according to management, and as such the team for generation projects has been retained. Management intends to continue to pursue any good opportunities in the generation sector.

KEC International (KECI IN, Rs554, NOT RATED)

A large number of tenders are currently under bid (worth Rs50-60 bn for Power Grid and about similar levels for the state electricity boards). With crude oil prices having stabilised, management has been receiving a number of tender enquiries from the Middle East.

On competition, management sees more players for bids but had passed through seen several such competitive cycles in the past and some competitors had exited the market.

Appendix II: T&D 101

Regional grids (operated by Power Grid), state grids (operated by state transmission companies) and the distribution network (state distribution companies) form the three-tier structure of T&D system in India. PGCIL (Power Grid Corporation of India) owns and operates many inter-regional transmission lines (part of the national grid) which enable the transfer of power from one region to the other.

The transmission system in India operates at the following voltage levels: extra high voltage: high voltage direct current (HVDC), 765 kV, 400 kV, 220 kV and 132 kV; high tension: 66 kV, 33 kV, 11 kV; and low tension: 6.6 kV, 3.3kV, 1.1 kV and 220 V.

The regional grids facilitate transfer of power between neighbouring states. There are five regional grids in India:

North: Delhi, Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttaranchal and Uttar Pradesh

West: Dadra and Nagar Haveli, Daman and Diu, Chhattisgarh, Goa, Gujarat, Madhya Pradesh and Maharashtra

South: Andhra Pradesh, Karnataka, Kerala, Pondicherry and Tamil Nadu

East: Bihar, Jharkhand, Orissa, Sikkim and West Bengal

Northeast: Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura

The regional grids are being gradually integrated to form a national grid which will enable more optimal utilisation of generation capacity. The national grid is expected to link most of the regions with each other, in our view.

Transmission grids

The difference in power capacities and consumptions in different regions results in surplus power in one region and deficit in another. Attempts are being made to integrate the regional grids gradually to form a national grid so as to enable more optimal utilisation of the generating capacity. For example, the eastern and the northeastern regions have surplus power of 18 GW and 3.5 GW, part of which can be transmitted to the western and northern regions, which have a deficit.

Certain states in North East, especially Arunachal Pradesh, have a hydroelectric potential of around 50 GW and more than 95% of this potential capacity is yet to be developed. From the regional perspective, development of these capacities may not be cost effective unless there is a strong national grid that will enable transmission of power to other deficit regions.

The national grid is expected to have a total inter-regional transmission capacity of 37 GW and is expected to be fully operational by around 2012.

Figure 100: Planned inter-regional transfer capacity by 2012 (MW)

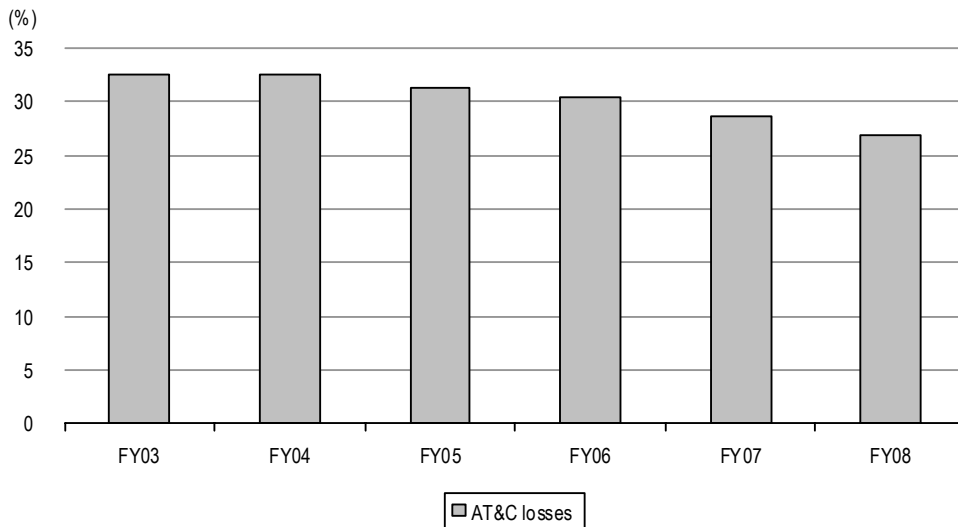
	Requirement	Planned transfer capacity (2012)
North (import)	10,770	11,500
West (import)	6,117	9,500
South (import)	3,011	3,600
East (export)	18,247	19,350
North East (export)	3,535	5,250

Source: Company data, Credit Suisse estimates

Distribution reforms

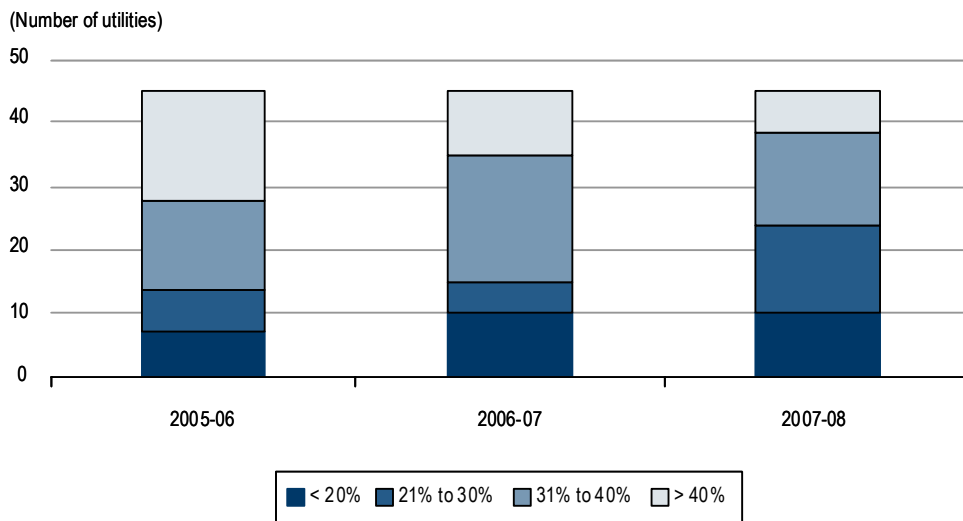
The average aggregate technical and commercial (AT&C) loss, which declined from 32.5% in 2003-04 to approximately 27% in 2007-08, is still much higher than the target of 15% (the international average). An investment of more than Rs500 bn has been planned by the central government under the APDRP (Accelerated Power Development and Reform Programme) scheme to bring down the losses further.

Figure 101: AT&C losses in India



Source: Company data, Credit Suisse estimates

Figure 102: Distribution losses



Source: Company data, Credit Suisse estimates

T&D losses can be classified into two main categories:

Technical losses: Technical losses are those that occur when electricity passes through the T&D equipment and gets converted into heat and magnetic energy. Transmission at low voltages, in fact, results in a higher loss compared with transmission at high voltages. Bulk power transmission at high voltage results in an estimated loss of 4-5% of transmitted energy, while distribution of power at low voltage levels leads to a loss of 15-18%. While we understand that these losses cannot be eliminated, they can be reduced through better design of systems

Commercial losses: Commercial losses occur largely due to non-billing and pilferage of power.

Reasons for high T&D losses in India

There are several reasons for such high T&D losses in India and some of them are listed below.

Low voltage distribution lines: The ratio of lengths of low tension (LT) to high tension (HT) lines has increased significantly over the past several years

Numerous transformation stages: There are five to six transformation stages in the Indian T&D network, largely due to the proliferation of low-voltage consumption. The use of low capacity and inefficient transformers results in higher losses.

Improper load management: Transmission lines should be loaded up to 50-60% of their capacity but in India they are generally loaded to over 90% of their capacity and hence a small disturbance in the section can cause a cascading grid failure.

Calculations suggest that a reduction in T&D losses by 1 p.p. is equivalent to power generated from a 600 MW plant.

APDRP

The poor financial performance of the SEBs and the subsequent lack of investments in the distribution infrastructure led to a significant amount of distribution losses largely due to: 1) unmetered supply and thefts, 2) high HT/LT ratios, and 3) a lack of accountability at the feeder level. In order to reform the distribution sector, the government has decided to embark on APDRP, a programme meant to incentivise the reduction in AT&C losses, bring about commercial viability, reduce outages and interruption and increase customer satisfaction. The outlay for the project was Rs400 bn in the 10th plan.

The APDRP was not very successful hence the central government sponsored the Rs500 bn Restructured Accelerated Power Development and Reform Programme (R-APDRP) for reforms in power distribution. It was envisaged that over Rs100 bn out of total Rs500 bn would be used for the collection of baseline data, IT-based application of energy auditing and metering of distribution transformers while the remaining amount is to be spent on renovation, modernisation and strengthening of the distribution infrastructure.

At the end of FY09, projects worth Rs19.5 bn had been sanctioned in 598 towns in 25 distribution companies under the R-APDRP.(source: Powerline)

RGGVY

RGGVY was launched in 2005 with the aim of electrifying all villages in India and also to provide free electricity to those below the poverty line. This scheme aims to electrify 115,000 unelectrified villages and provide free connections to 23.4 mn subscribers who are below the poverty line.

Power ministry statistics suggest that about 53 projects worth over Rs262 bn were sanctioned as of May 2009. Around 52% of the rural electrification targets have been met with electrification of 61,360 previously unelectrified villages. At the end of FY08-09, around 700 new 33 kV substations with an aggregate capacity of 3,090 MVA had been added and around 940 substations of 33 kV level with an aggregate capacity of 2,826 MVA had been augmented under the programme. Over 554,130 distribution transformers with a total capacity of 9,138 MVA had also been added. (Source: power line)

Technological advances

The national grid requires strengthening and improvement of regional grids and their integration through extra high voltage (EHV) and high voltage direct current (HVDC)

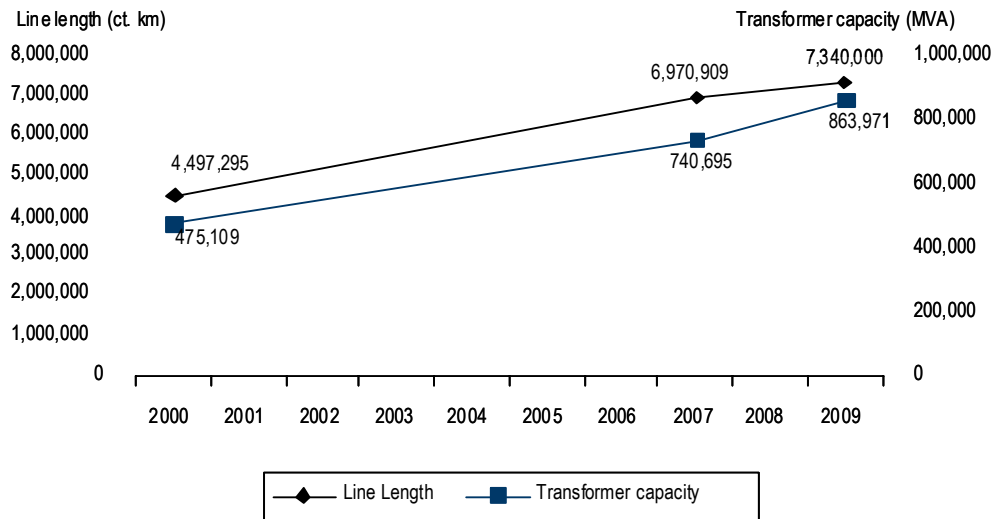
transmission lines. The objective is that greater amount of electrical power should be transferred at a higher voltage in order to reduce the T&D power losses.

Synchronisation of frequencies is required to integrate regional grids. This was not possible in India due to variations in frequency and voltages. HVDC transmission is the most viable option in integrating the grids through asynchronous links. In direct current (DC) transmission, power is converted from alternating current (AC) to DC by a rectifier, and transmitted. It is converted back into AC by an inverter at the receiving end and is synchronised to the frequency of the receiving grid. Losses in DC transmission are lower than in AC transmission, but the initial investment in a HVDC set up is more than in an AC transmission system. The cost of DC conductors is less than AC conductors, while the cost of HVDC terminals is higher than the AC terminals. HVDC transmission is economical for distances of over 600 kms (for 500 MW). (Source: Powerline).

Plans for expansion of T&D system

In March 2009, the T&D network was estimated to be 7.34 mn ct. km and the total transformer capacity (step-up and step-down transformers at extra high tension and high tension levels) was estimated to be 863,971 MVA.

Figure 103: India T&D capacity



Source: Company data, Credit Suisse estimates

Objectives for the Eleventh and Twelfth five-year plans for the capacity additions for the T&D system are as below:

The interregional transfer capacity is also targeted to be increased from the current 20,800 MW to 37,700 MW by 2012 and to 58,700 MW by 2015.

The table below shows the targets for the transmission sector for the Eleventh plan:

Figure 104: Transmission sector targets for the Eleventh plan

		March 2007	March 2012
Transmission line		Installed capacity	XI plan target
765 kV	Ct km	1,704	7,132
HVDC +/- 500 kV	Ct km	5,872	11,078
HVDC 200 kV Monopole	Ct km	162	162
400 kV	Ct km	75,722	125,000
230/220 kV	Ct km	114,629	150,000
Total transmission line	Ct km	198,089	293,372
Substations			
HVDC BTB	MW	3,000	3,000
HVDC Bipole + Monopole	MW	5,200	11,200
Total HVDC terminal capacity	MW	8,200	14,200
765 kV	MVA	2,000	53,000
400 kV	MVA	92,942	145,000
230/220 kV	MVA	156,497	230,000
Total AC sub-station capacity	MVA	251,439	428,000

Source: Planning commission

At the distribution level, transmission capacity of: 1) 3.25 mn ct km in the Eleventh five-year plan and 4.25 mn ct km in the Twelfth five-year plan, additional transformation capacity of 214,000 MVA in the Eleventh five-year plan and 270,000 MVA in the Twelfth five-year plan are required.

Figure 105: Distribution sector targets

Addition	Mar-06	11 th five-year plan	12 th five-year plan
Lines (ct km)			
Installed capacity			
66kV overhead	47,231	23,335	30,546
33IV overhead	309,000	113,936	149,142
6.6/11/22kV overhead	2,000,000	1,036,396	1,356,638
LT	4,064,516	2,080,106	2,722,857
Total	6,420,747	3,253,773	4,259,183
Transformation capacity			
Power transformer		86,000	108,000
Distribution transformer		128,000	162,000
Total		214,000	270,000

Source: Planning commission

Investments

Investment growth in the transmission and distribution sector should largely mimic that of generation given the need for the evacuation of power from new generation capacity. While global norms call for T&D investments to be 1x generation, a lack of core focus in this sector has led to under spending in India. According to the Central Electricity Authority (CEA), in 2007-08, of the Rs600 cr, power companies spent 70% on generation, 23% on transmission and only 7% on distribution.

The main reasons often cited for inadequate investments in transmission are as follows:

- Focus on rural electrification which requires higher investment in low-voltage distribution lines
- Emphasis on capacity additions in the generation sector
- Proliferation of low-tension (LT) lines

Though the need for higher investments in transmission and distribution has been acknowledged for some time now, the actual implementation is slow, especially at the state level. At the central level, PGCIL has been working on the national grid project and

also on strengthening and improving the inter-state and inter-regional networks. PGCIL has spent Rs147 bn in the first two years and plans to spend Rs550 bn in the plan period.

The state transmission and distribution companies made an investment of Rs68 bn and Rs43 bn, respectively, during 2007-08 (similar amounts next year).

In August 2008, the Planning Commission revised its Eleventh five-year plan investment estimates from Rs7,253 bn to Rs6625 bn indicating that the estimated investment in T&D during the plan period has come down from Rs3,191 bn to Rs2,890 bn (including R-APDRP and RGGVY).

In terms of investment, the transmission sector requires ~Rs1,400 bn in the Eleventh five-year plan (national grid Rs380 bn, of which PGCIL accounts for Rs280 bn). At the distribution level too, more than Rs150 bn of investment is required to augment the planned capacity.

Private investments in transmission

The central government allowed private investments in the transmission sector as early as 1998 and once either of PGCIL or state transmission utilities (STUs, SEBs, etc.) have identified transmission projects for private companies can be invited to implement these projects. The private investment would be made through an Independent Private Transmission Company (IPTC) or on a joint venture basis.

Seven transmission projects involving private investments worth over Rs50 bn are expected to come up during the Eleventh five-year plan period. There are 14 other projects that are to be awarded through tariff-based competitive bidding to the private sector. These projects would require an investment of around Rs200 bn. These projects are expected to be completed in the Twelfth five-year plan period (source: Powerline).

Analysis of capacity

The capacities and production for various transformer manufacturers in 2007-08 are shown below:

Figure 106: Transformer manufacturing Capacity

MVA	2007-08	2010/11
ABB	16875	16875
Areva T&D	16000	25000
BHEL	20500	40000
Siemens India	15000	15000
Crompton Greaves in India	24500	25000
Transformers and rectifiers	7500	7500
EMCO	15000	20000
Vijai Electricals	12500	12500
Voltamp	7000	13000
Indotech	7400	7400
Bharat Bijlee	8000	8000
IMP Power	3600	3600
Unorganised	7694	7694
Domestic capacity	161569	201569

Source: Company data, Credit Suisse estimates

Companies Mentioned (Price as of 11 Feb 09)

- ABB Ltd. (ABB.BO, Rs765.00, UNDERPERFORM [V], TP Rs603.8)
- Areva T&D India Ltd (AREV.NS, Rs279.65, UNDERPERFORM, TP Rs206)
- Bharat Bijilee (BIJL IN, Rs910, NOT RATED)
- Bharat Heavy Electricals (BHEL.BO, Rs2214.60, OUTPERFORM, TP Rs2523.87)
- Crompton Greaves Ltd (CROM.BO, Rs382.50, OUTPERFORM [V], TP Rs480)
- EMCO (EMCO IN, Rs78.5, NOT RATED)
- Indotech (INDT IN, Rs268, NOT RATED)
- Kalpataru power (KPP IN, 923, NOT RATED)
- KEC international (KECI IN, Rs554, NOT RATED)
- Siemens India (SIEM.BO, Rs509.00, NEUTRAL [V], TP Rs484.36)
- Transformers and rectifiers (TRIL IN, Rs308, NOT RATED)
- Voltamp (VAMP IN, Rs740, NOT RATED)

Disclosure Appendix

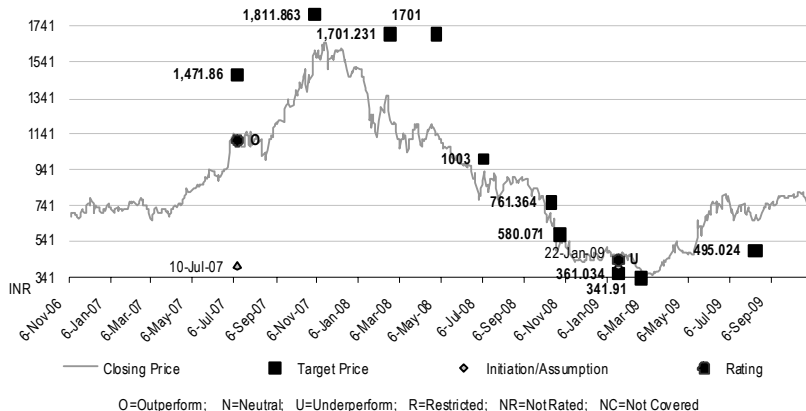
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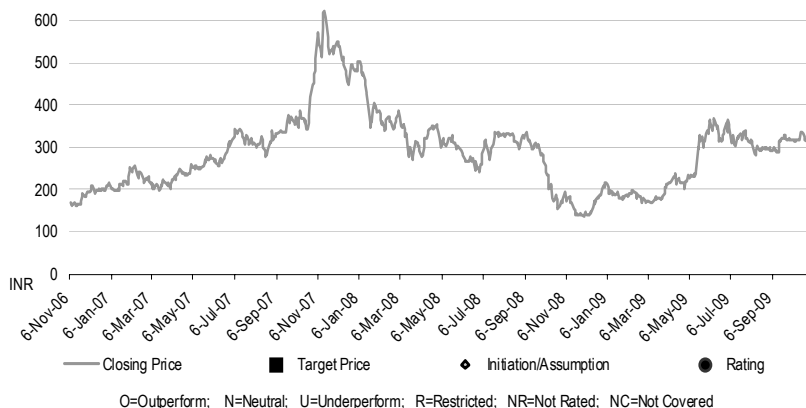
3-Year Price, Target Price and Rating Change History Chart for ABB.BO

ABB.BO Date	Closing Price (INR)	Target Price (INR)	Initiation/ Rating Assumption
10-Jul-07	1,106.1	1,471.86	O X
2-Nov-07	1,600.5	1,811.863	
20-Feb-08	1270	1,701.231	
28-Apr-08	1,151.65	1701	
7-Jul-08	859.4	1003	
15-Oct-08	650.15	761.364	
27-Oct-08	500.4	580.071	
22-Jan-09	440.05	361.034	U X
24-Feb-09	386.5	341.91	
11-Aug-09	658.5	495.024	



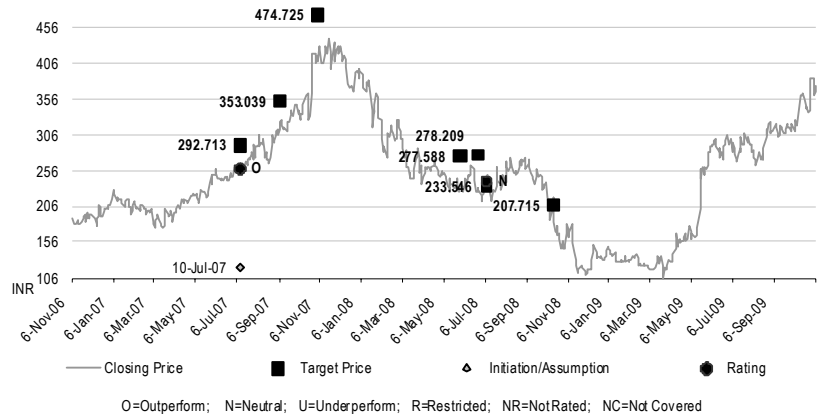
3-Year Price, Target Price and Rating Change History Chart for AREV.NS

AREV.NS Date	Closing Price	Target Price	Initiation/ Rating Assumption
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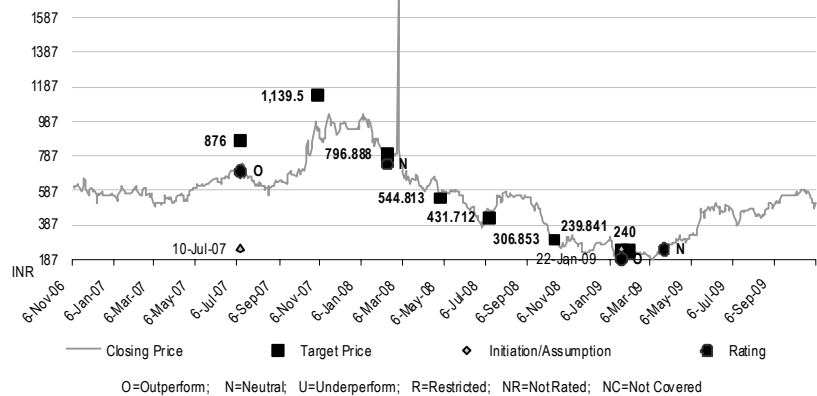
3-Year Price, Target Price and Rating Change History Chart for CROM.BO

CROM.BO	Closing Price	Target Price	Initiation/
Date	(INR)	(INR)	Rating Assumption
10-Jul-07	259.45	292.713	O X
7-Sep-07	322.6	353.039	
2-Nov-07	410	474.725	
29-May-08	226.85	277.588	
24-Jun-08	224.45	278.209	
7-Jul-08	242	233.546	N
15-Oct-08	191.65	207.715	



3-Year Price, Target Price and Rating Change History Chart for SIEM.BO

SIEM.BO	Closing Price	Target Price	Initiation/
Date	(INR)	(INR)	Rating Assumption
10-Jul-07	701.45	876	O X
2-Nov-07	952.1	1,139.5	
12-Feb-08	741.525	796.888	N
29-Apr-08	575.25	544.813	
11-Jul-08	469.05	431.712	
15-Oct-08	303.05	306.853	
22-Jan-09	196.25	239.841	O X
2-Feb-09	201.2	240	
26-Mar-09	248.8		N



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Price Target: (12 months) for (ABB.BO)

Method: Our Rs603.8 target price for ABB Ltd is based on a price to earnings multiple of 24x CY10E earnings per share. We use mid cycle multiples given our view on the cycle.

Risks: Potential risks to our Rs603.8 target price for ABB Ltd is an improvement in macro led by government spending on the power T&D sector or an improving demand environment led by enabling policies.

Price Target: (12 months) for (AREV.NS)

Method: Our target price of Rs206 is based on 22x CY11E. We use mid cycle multiples. The stock has traded in a range of 10-30x in the past few years

Risks: Risk to target price of Rs206 is a potential open offer post sale of Areva T&D business globally as that could support stock price. An earlier than expected industrial recovery and a change in import content clauses can help margins to trough leading to risk of earnings upgrades

Price Target: (12 months) for (CROM.BO)

Method: Our Rs 480 target price for Crompton Greaves Ltd is based on 20x FY11 earnings at a 10-15% discount to target multiples for peers to capture any risk of diversification

Risks: Potential risks to our Rs 480 target price for Crompton Greaves are the following: 1) Rising commodity prices especially copper and CRGO prices. 2) The company has successfully demonstrated meeting integration challenges with Pauwels, we believe this should be repeated with Ganz and Microsol as well. However, any slippages in this intergration could lead to potential de-rating of the stock.

Price Target: (12 months) for (SIEM.BO)

Method: Our Rs 484 target price for Siemens India Ltd is based on a 22X PE FY2010. We use mid cycle multiples for the stock

Risks: Potential risks to our Rs 484 target price for Siemens India are: 1) Delays in execution could result in lower profitability, leading to lower valuations 2) Slowdown in infrastructure spend persisting for more periods than anticipated.

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