

Electrical Components & Equipment (GICS) | Electrical Equipment (Citi) Asia Pacific | India

Crompton Greaves (CROM.BO)

Downgrade to Neutral: Recovery To Take Longer Than Expected

- Underperformance to continue; Cutting TP to Rs129; Downgrade to Neutral Crompton Greaves (CG) has underperformed the market by 24% YTD. Our earlier Buy rating was premised on two things: 1) Strong order inflows; 2) Expected rebound in margins post restructuring initiatives. Consolidated order inflows seem to have slowed (Q2 inflows +14%YoY vs. +59%YoY in Q1FY13, due to lower international orders) and a high base of H2FY12 order inflows will only make it tougher. Losses in international subs doubled in Q2FY13 vs. Q1FY13. Mgmt has cut FY13E guidance and has hinted at a "bumpy" couple of quarters ahead. We now believe margin recovery will likely take longer than previously expected and that CG will remain range bound unless mgmt starts delivering on its stated targets.
- Losses continue, restructuring charge related to employees yet to come CG reported Q2FY13 consol. PAT of Rs420mn, 55% below our estimates. Key pressure points were: 1) Continued losses in international power business – Rs800mn related to ongoing transfer of production from Belgium to Hungary; 2) Lower margins in consumer business (adverse currency, high ad spends). CG has completed consultations with the Belgian works council and will let go of 260 employees in December, related restructuring costs will be undertaken in Q3FY13E. Management cut FY13E guidance, with revenues now expected to grow at 8-9% YoY (12-14% earlier) and EBITDA margins to be ~5% (vs. 8-9% earlier).
- Cutting estimates sharply As we factor in losses in the international biz (FY13E) and lower margins in the consumer business, our earnings are cut 46% for FY13E, 20% for FY14E, and 11% for FY15E. Our TP is cut to Rs129 (from Rs152) on earnings cuts & roll-forward of PE multiple to 15x Mar-14E (vs. 15x Dec-13E).
- Why not a Sell? There are some positives: 1) Domestic power systems has seen good order inflows (+47% QoQ); 2) Consumer business has seen m/s gains in fans segment; 3) Margins have expanded QoQ in domestic industrial systems biz. We could get more constructive if order inflow accelerates, profitability improves, and mgmt starts to deliver on its targets. L&T is our top pick in the industrials space.

| Year to | Net Profit | Diluted EPS | EPS growth | P/E | P/B | ROE | Yield |
|---------|------------|-------------|------------|------|-----|------|-------|
| 31 Mar | (RsM) | (Rs) | (%) | (x) | (x) | (%) | (%) |
| 2011A | 9,268 | 14.45 | 12.4 | 8.5 | 2.4 | 32.1 | 1.8 |
| 2012A | 3,736 | 5.82 | -59.7 | 21.1 | 2.2 | 10.9 | 0.8 |
| 2013E | 2,857 | 4.45 | -23.5 | 27.6 | 2.2 | 7.9 | 1.1 |
| 2014E | 5,518 | 8.60 | 93.1 | 14.3 | 1.9 | 14.2 | 0.9 |
| 2015E | 7,464 | 11.64 | 35.3 | 10.6 | 1.7 | 16.9 | 1.2 |

Company Update

Rating Change

Target Price Change

Estimate Change

| Neutral | 2 |
|-----------------------------|------------|
| from Buy | |
| Price (02 Nov 12) | Rs122.80 |
| Target price | Rs129.00 |
| from Rs152.00 | |
| Expected share price return | 5.0% |
| Expected dividend yield | 1.1% |
| Expected total return | 6.2% |
| Market Cap | Rs78,775M |
| | US\$1,464M |

Price Performance (RIC: CROM.BO, BB: CRG IN)



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See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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| CROM.BO: Fiscal year end | | | | | | Price: Rs122.80; TP: R | | | | | |
|------------------------------|---------|---------|---------------|----------|----------|----------------------------|--------|--------|--------|-------------|-------|
| Profit & Loss (Rsm) | 2011 | 2012 | 2013E | 2014E | | Valuation ratios | 2011 | 2012 | 2013E | 2014E | 2015 |
| Sales revenue | 100,051 | 112,486 | 123,880 | 147,203 | 160,838 | PE (x) | 8.5 | 21.1 | 27.6 | 14.3 | 10 |
| Cost of sales | -76,791 | -93,702 | -105,918 | -122,914 | -132,209 | PB (x) | 2.4 | 2.2 | 2.2 | 1.9 | 1. |
| Gross profit | 23,260 | 18,784 | 17,963 | 24,288 | 28,629 | EV/EBITDA (x) | 5.7 | 9.9 | 13.4 | 8.3 | 6 |
| Gross Margin (%) | 23.2 | 16.7 | 14.5 | 16.5 | 17.8 | FCF yield (%) | -1.8 | -3.0 | -3.9 | 3.1 | 10 |
| EBITDA (Adj) | 13,438 | 8,036 | 6,194 | 10,304 | 13,350 | Dividend yield (%) | 1.8 | 0.8 | 1.1 | 0.9 | 1 |
| EBITDA Margin (Adj) (%) | 13.4 | 7.1 | 5.0 | 7.0 | | Payout ratio (%) | 15 | 16 | 31 | 13 | 1 |
| Depreciation | -1,936 | -2,600 | -2,099 | -2,123 | | ROE (%) | 30.8 | 10.9 | 7.9 | 14.2 | 16 |
| Amortisation | 0 | 0 | 0 | 0 | 0 | Cashflow (Rsm) | 2011 | 2012 | 2013E | 2014E | 2015 |
| EBIT (Adj) | 11,502 | 5,437 | 4,095 | 8,181 | | EBITDA | 13,438 | 8,036 | 6,194 | 10,304 | 13,35 |
| EBIT Margin (Adj) (%) | 11.5 | 4.8 | 3.3 | 5.6 | | Working capital | -4,771 | -2,239 | -4,111 | -661 | 2,79 |
| Net interest | -209 | -417 | -520 | -674 | | Other | -2,504 | -2,374 | -1,177 | -2,663 | -3,58 |
| Associates | 80 | 53 | 23 | 23 | | Operating cashflow | 6,162 | 3,423 | 906 | 6,980 | 12,56 |
| Non-op/Except | 999 | 478 | 650 | 690 | | Capex | -7,593 | -5,758 | -4,007 | -4,500 | -4,50 |
| Pre-tax profit | 12,372 | 5,551 | 4,248 | 8,220 | | Net acq/disposals | -7,595 | -5,750 | -4,007 | -4,500 0 | -4,50 |
| | | | | | | | | | | 0 | |
| Tax | -3,100 | -1,821 | -1,394 | -2,705 | -3,664 | | -899 | -1,037 | 0 | | 4 50 |
| Extraord./Min.Int./Pref.div. | -385 | 7 | 3 | 3 | | Investing cashflow | -8,492 | -6,795 | -4,007 | -4,500 | -4,50 |
| Reported net profit | 8,887 | 3,736 | 2,857 | 5,518 | | Dividends paid | -1,645 | -694 | -1,051 | -839 | -1,13 |
| Net Margin (%) | 8.9 | 3.3 | 2.3 | 3.7 | | Financing cashflow | -1,375 | 5,363 | 5,338 | -758 | -1,13 |
| Core NPAT | 9,268 | 3,736 | 2,857 | 5,518 | | Net change in cash | -3,704 | 1,992 | 2,237 | 1,722 | 6,92 |
| Per share data | 2011 | 2012 | 2013E | 2014E | | Free cashflow to s/holders | -1,430 | -2,335 | -3,101 | 2,480 | 8,06 |
| Reported EPS (Rs) | 13.85 | 5.82 | 4.45 | 8.60 | 11.64 | | | | | | |
| Core EPS (Rs) | 14.45 | 5.82 | 4.45 | 8.60 | 11.64 | | | | | | |
| DPS (Rs) | 2.20 | 0.92 | 1.40 | 1.12 | 1.51 | | | | | | |
| CFPS (Rs) | 9.61 | 5.34 | 1.41 | 10.88 | 19.59 | | | | | | |
| FCFPS (Rs) | -2.23 | -3.64 | -4.83 | 3.87 | 12.57 | | | | | | |
| BVPS (Rs) | 51.05 | 56.29 | 56.79 | 64.08 | 73.95 | | | | | | |
| Wtd avg ord shares (m) | 641 | 641 | 641 | 641 | 641 | | | | | | |
| Wtd avg diluted shares (m) | 641 | 641 | 641 | 641 | 641 | | | | | | |
| Growth rates | 2011 | 2012 | 2013E | 2014E | 2015E | | | | | | |
| Sales revenue (%) | 9.5 | 12.4 | 10.1 | 18.8 | 9.3 | | | | | | |
| EBIT (Adj) (%) | 2.5 | -52.7 | -24.7 | 99.8 | 35.0 | | | | | | |
| Core NPAT (%) | 12.4 | -59.7 | -23.5 | 93.1 | 35.3 | | | | | | |
| Core EPS (%) | 12.4 | -59.7 | -23.5 | 93.1 | 35.3 | | | | | | |
| Balance Sheet (Rsm) | 2011 | 2012 | 2013E | 2014E | 2015E | | | | | | |
| Cash & cash equiv. | 2,984 | 4,976 | 7,212 | 8,934 | 15,864 | | | | | | |
| Accounts receivables | 25,427 | 31,433 | 33,524 | 39,836 | 43,526 | | | | | | |
| Inventory | 12,316 | 12,233 | 18,192 | 19,963 | 17,370 | | | | | | |
| Net fixed & other tangibles | 20,501 | 24,444 | 26,353 | 28,729 | 30,927 | | | | | | |
| Goodwill & intangibles | 0 | 0 | 20,000 | 0 | 00,021 | | | | | | |
| Financial & other assets | 11,516 | 14,567 | 14,456 | 14,187 | 14,616 | | | | | | |
| Total assets | 72,744 | 87,652 | 99,737 | 111,650 | 122,304 | | | | | | |
| | | | | | | | | | | | |
| Accounts payable | 17,457 | 19,143 | 21,840 | 25,589 | 27,840 | | | | | | |
| Short-term debt | 0 | 837 | 1,819 | 1,900 | 1,900 | | | | | | |
| Long-term debt | 4,651 | 9,562 | 16,456 | 16,456 | 16,456 | | | | | | |
| Provisions & other liab | 17,732 | 21,843 | 23,037 | 26,441 | 28,514 | | | | | | |
| Total liabilities | 39,840 | 51,386 | 63,152 | 70,386 | 74,710 | | | | | | |
| Shareholders' equity | 32,747 | 36,109 | 36,428 | 41,107 | 47,437 | | | | | | |
| Minority interests | 157 | 157 | 157 | 157 | 157 | | | | | | |
| Total equity | 32,904 | 36,266 | 36,585 | 41,263 | 47,593 | | | | | | |
| Net debt | 1,667 | 5,423 | 11,062 | 9,422 | 2,492 | | | | | | |
| Net debt to equity (%) | 5.1 | 15.0 | 30.2 | 22.8 | 5.2 | | | | | | |

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Crompton Greaves Q2FY13 results

- Consolidated PAT was 55% below our estimates CG reported Q2FY13 consolidated revenues of Rs29.2bn, up 8%YoY but 5% below our estimates. Consolidated EBITDA was 22% below estimates as margins were ~100bps lower than expected. The company is no longer amortizing goodwill, choosing to test if for impairment instead (as was the case in Q1FY13)) the net profit would have been lower at Rs232mn had it not done this.
- India business Revenues at Rs16.7bn were 4% below our estimates. Margins of 8.8% were almost 70bps below estimates. Revenues were below estimates across all businesses. Consumer business margins declined by 177bpsYoY and were 350bps below estimates due to currency fluctuations and higher advertising expense.
- International business Revenues at Rs12bn were flat YoY, but were ~7% below our expectations. International subsidiaries reported a higher than expected loss of Rs696mn vs. our expectations of Rs324mn. Higher than expected interest cost and depreciation also hurt earnings. The key reason for the loss was ~Rs800mn of costs related to the ongoing restructuring (not related to employee expense).

Figure 1. Crompton Greaves Results

| RsM | Cor | nsolidated | | S | Standalone | | | International | | | |
|---|----------|------------|----------|----------|------------|----------|----------|---------------|----------|--|--|
| PROFIT AND LOSS ACCOUNT | 2QFY12 | 2QFY13A | 2QFY13E | 2QFY12 | 2QFY13A | 2QFY13E | 2QFY12 | 2QFY13A | 2QFY13E | | |
| Net Sales / Income from Operations | 27,055 | 29,242 | 30,906 | 14,515 | 16,702 | 17,369 | 12,541 | 12,540 | 13,536 | | |
| % Growth | 13% | 8% | 14% | 0% | 15% | | 31.6% | 0.0% | 7.9% | | |
| Material Cost | (18,201) | (19,714) | (21,072) | (10,493) | (12,224) | (12,853) | (7,708) | (7,490) | (8,219) | | |
| % of Sales | 67% | 67% | 68% | 72% | 73% | 74% | 60% | 60% | 61% | | |
| % Growth YoY | 24% | 8% | 16% | 6% | 16% | 22% | 61% | -3% | 7% | | |
| Staff Expenses | (3,574) | (4,420) | (4,562) | (892) | (1,010) | (1,042) | (2,682) | (3,410) | (3,519) | | |
| % of Sales | 13% | 15% | 15% | 6.3% | 6% | 6.0% | 21% | 27% | 26% | | |
| % Growth YoY | 16% | 24% | 28% | 20% | 13% | 17% | 14% | 27% | 31% | | |
| Other Expenses | (3,021) | (3,743) | (3,516) | (1,516) | (1,999) | (1,824) | (1,504) | (1,745) | (1,692) | | |
| % of Sales | 11.2% | 12.8% | 11.4% | 10% | 12.0% | 11% | 12% | 14% | 13% | | |
| % Growth YoY | 4% | 24% | 16% | -2% | 32% | 20% | 9% | 16% | 12% | | |
| Total expenditure | (24,796) | (27,877) | (29,149) | (12,901) | (15,232) | (15,719) | (11,895) | (12,645) | (13,430) | | |
| EBITDA | 2,260 | 1,365 | 1,756 | 1,614 | 1,470 | 1,650 | 646 | (105) | 106 | | |
| EBITDA Margin % | 8.4% | 4.7% | 5.7% | 11.1% | 8.8% | 9.5% | 5% | -1% | 1% | | |
| Depreciation, Obsolescence, Amortisation and Impairment | (726) | (544) | (475) | (267) | (175) | (175) | (459) | (369) | (300) | | |
| EBIT | 1,534 | 820 | 1,281 | 1,347 | 1,295 | 1,475 | 187 | (475) | (194) | | |
| EBIT Margin % | 6% | 3% | 4% | 9% | 8% | 8% | 1% | -4% | -1% | | |
| Interest and Commitment Charges | (102) | (190) | (120) | (1) | 59 | 20 | (102) | (249) | (140) | | |
| Other Income | 215 | 208 | 190 | 168 | 147 | 180 | 47 | 61 | 10 | | |
| PBT | 1,646 | 838 | 1,351 | 1,515 | 1,501 | 1,675 | 132 | (663) | (324) | | |
| Tax | (463) | (414) | (419) | (391) | (384) | (419) | (72) | (30) | | | |
| Tax rate % | 28% | 49% | 31% | 26% | 26% | 25% | 55% | -4% | | | |
| PAT before Extraordinary Item | 1,183 | 424.7 | 932 | 1,123 | 1,117 | 1,256 | 60 | (692) | (324) | | |
| Minority Interest | 1 | (10) | 0 | | | | 1 | (10) | | | |
| Share of profit / loss of Associate Companies | (18) | 5 | 0 | | | | (18) | 5 | | | |
| Recurring PAT | 1,167 | 420 | 932 | 1,123 | 1,117 | 1,256 | 43 | (696) | (324) | | |
| Extraordinary Item | | | | | | | 0 | Ó | . , | | |
| Reported PAT | 1,167 | 420 | 932 | 1,123 | 1,117 | 1,256 | 43 | (696) | (324) | | |
| Source: Company Data; Citi Research Estimates | | | | | | | | | | | |

Figure 2. Crompton Greaves Segment Results

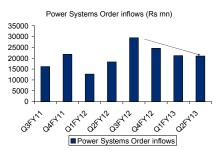
| RsM | Consolidate | d | Standalone | • | Internationa | al |
|------------------------------------|-------------|---------|------------|---------|--------------|---------|
| SEGMENT REPORTING | 2QFY12 | 2QFY13A | 2QFY12 | 2QFY13A | 2QFY12 | 2QFY13A |
| Segment Revenues | | | | | | |
| Power System | 17,611 | 17,819 | 5,988 | 6,236 | 11,623 | 11,583 |
| Industrial Systems | 4,655 | 4,816 | 3,766 | 3,892 | 890 | 924 |
| Consumer Products | 4,801 | 5,844 | 4,801 | 5,844 | 0 | C |
| Others *** | 58 | 945 | 30 | 912 | 28 | 33 |
| Less: Inter-Segment Revenue | (71) | (182) | (71) | (182) | 0 | C |
| Net Sales / Income from Operations | 27,055 | 29,242 | 14,515 | 16,702 | 12,541 | 12,540 |
| Segment Results | | | | | | |
| Power System | 934 | 100 | 672 | 617 | 263 | (517) |
| Industrial Systems | 558 | 703 | 591 | 601 | (33) | 102 |
| Consumer Products | 543 | 557 | 543 | 557 | 0 | 0 |
| Others | 7 | 66 | 3 | 65 | 4 | 2 |
| Total | 2,041 | 1,426 | 1,808 | 1,840 | 233 | (414) |
| Less: Interest | (102) | (190) | (1) | 59 | (102) | (249) |
| Un-allocables | (293) | (398) | (293) | (398) | 0 | C |
| РВТ | 1,646 | 839 | 1,515 | 1,501 | 132 | (663) |
| Revenue Growth % | | | | | | |
| Power System | 12% | 1% | -7% | 4% | 24% | 0% |
| Industrial Systems | 29% | 3% | 9% | 3% | 443% | 4% |
| Consumer Products | 4% | 22% | 4% | 22% | | |
| EBIT Margins % | | | | | | |
| Power System | 5% | 1% | 11.2% | 10% | -1% | -4% |
| Industrial Systems | 12% | 15% | 15.7% | 15% | -40% | 11% |
| Consumer Products | 11% | 10% | 11.3% | 10% | | |

Source: Company Data, Citi Research

Note – Power distribution systems business has been classified under "others" from Q2FY13 onwards

Business Update

Figure 3. Power Systems Consol OI



Source: Company Data, Citi Research

Domestic Power Systems

- Q2 Results While revenues were ~5% below estimates, margins came in-line with Citi estimates (the company transferred Power Distribution business to "Others" segment, we have added back those revenues to compare with our estimates). Order inflow Domestic Power Systems reported order inflows of Rs8.8bn up 47% QoQ.
- Outlook The company is bidding for PGCIL orders. It received a 765kV reactor order from PGCIL worth Rs810mn which will be reflected in Q3FY13 order book.

International Power Systems

- Q2 Results While revenues were largely flat YoY, the segment reported EBIT loss of Rs517mn in the quarter. Order inflow momentum seems to have slowed a bit – International Power Systems orders were Rs12bn in the quarter, down 20% QoQ.
- Reasons for the loss Management highlighted that they were in a transition period at the moment where production was being transferred from Belgium to new plant in Hungary. This has led to increased costs of ~Rs800mn in the quarter. CG also highlighted that there was an inventory buildup of almost Rs3bn due to the transfer of projects.
- Update on restructuring CG is expanding capacity at the Hungary plant from 7500MVA to 15000MVA by March 2013 (current capacity 9000MVA). The company is transferring the production from the high cost Belgium plant to the under expansion Hungary plant. CG has completed the discussions with the Belgian Works Council and will let go 260 employees who will leave the company by December 2012. The company has not provided for the restructuring cost and will do so in Q3FY13. CG expects a 15% drop in production costs due to the shift of production.
- Outlook CG is seeing a lot of traction in distribution transformers and instrument transformers. While the demand environment remains tough for power transformers, prices have been stable. CG sees opportunities in Latin America, South East Asia and Europe.

Domestic Industrial Systems

- Q2 Results Revenues grew 3% YoY but were 2% below estimates. Margins surprised in the quarter at 15.4% in Q2 vs. our est. of 12.5% due to a change in sales mix CG sold a higher % of HT motors and drives in the quarter.
- Seeing some traction, but macro still remains weak CG mentioned that the industrial capex in India is still sluggish and it isn't seeing any broad-based pickup in momentum. Some of CG's clients who had pushed back deliveries (esp of HT motors) in Q1FY13 had confirmed and taken the delivery of them in Q2FY13.
- Targeting exports CG is targeting exports to combat slowdown in the Indian market. It recently received an export order to supply motors to Ethiopia.

Consumer Products

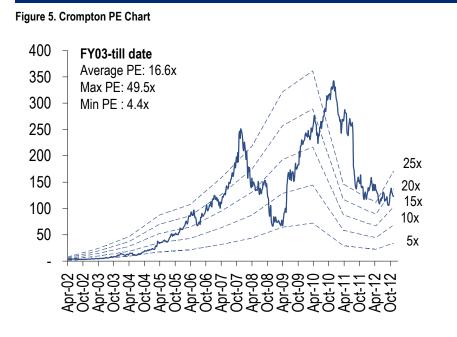
- Q2 results Revenues grew by 22% YoY, but were 2% below expectations. Margins declined by 178bps YoY and were ~347bps below expectations. The company cited adverse currency impact and higher ad spends as reasons for the same.
- Outlook CG has expanded market share in Fans segment to 23.5% in Q2FY13, from 22.5% in Q1FY13. It has strengthened the sales network – has added ~180 distributors and over 3900 retailers during the quarter. CG has launched premium products in all segments.

Cutting Estimates

- We cut earnings estimates sharply by 46% for FY13E, 20% for FY14E, and 11% for FY15E as we factor in the following:
 - Continued losses in the international businesses (in FY13E) and a slower margin recovery than earlier;
 - Lower margins in the domestic consumer business.

Figure 4. Crompton Greaves – Estimate Changes

| RsM | FY13E | FY14E | FY15E |
|------------------------|---------|---------|---------|
| Sales Old | 128,778 | 147,505 | 162,426 |
| Sales New | 123,880 | 147,203 | 160,838 |
| Change % | -4% | 0% | -1% |
| EBITDA Margins Old % | 7.3% | 8.1% | 9% |
| EBITDA Margins New % | 5.0% | 7.0% | 8.3% |
| Change (bps) | (229) | (109) | (59) |
| Recurring PAT Old | 5,332 | 6,902 | 8,433 |
| Recurring PAT New | 2,857 | 5,518 | 7,464 |
| Change % | -46% | -20% | -11% |
| Recurring EPS Old (Rs) | 8.3 | 10.8 | 13.1 |
| Recurring EPS New (Rs) | 4.5 | 8.6 | 11.6 |
| Change % | -46% | -20% | -11% |



Source: Citi Research

Crompton Greaves

Company description

Crompton Greaves (CG), part of the US\$4bn Avantha Group, has three key businesses – Power Systems (65% of consolidated sales), Consumer Products (20%), and Industrial Systems (15%). Since 2005, CG has embarked on a globalization strategy to transform itself from a products company to an end-to-end solutions provider. CG is present in over 14 manufacturing and design locations in India, across Gujarat, Maharashtra, Goa, Madhya Pradesh and Karnataka, and has more than 8,700 employees worldwide.

Investment strategy

We have a Neutral rating on CG with a target price of Rs129. While it is a strong global T&D player with multiple levers for long-term earnings growth, consolidated order inflows seem to have slowed (due to lower international orders) and a high base of H2FY12 order inflows will only make it tougher. Losses in international subs also increased significantly in 2QFY13. We believe margin rebound is some way off and that CG will remain range-bound unless mgmt starts delivering on its stated targets of improving profitability.

Valuation

Our target price of Rs129 is based on a P/E multiple of 15x Mar-14E EPS, a discount to the stock's historical trading average, which we believe is justified given the current pressures faced by the business. We use P/E to value all other industrial stocks in our coverage.

Risks

Key downside risks to our investment thesis and target price on CG include: 1) Deterioration in the Indian T&D market; 2) Slowdown in execution/delivery; 3) Delay in recovery in Europe/Global T&D capex; 4) Delay in revival in the industrial capex cycle/consumer spending; 5) Hardening of raw-material prices; 6) Rupee appreciation; and 7) Inability of new management to restore confidence. Key upside risks include: 1) Improvement in the Indian T&D market; 2) Improvement in execution/delivery; 3) Recovery in Europe/Global T&D capex; 4) Revival in the industrial capex cycle/consumer spending; 5) Softening of raw-material prices; and 6) Delivery on stated goals.

Larsen & Toubro

(LART.BO; Rs1,674.90; 1)

Valuation

Our Rs1,855 target price is based on sum-of-the-parts (SOTP). We use 15.5x Mar14E earnings for the parent (Rs1460), well supported by EPS growth of 15% and average RoEs of 19%. We also believe that the parent's numbers do not capture the value inherent in subsidiaries, which we value at Rs395, with L&T Infotech at Rs108 (10x Mar14E EPS, in line with second-tier peers), L&T IDPL at Rs103 and L&T Finance Holdings at Rs112.

Risks

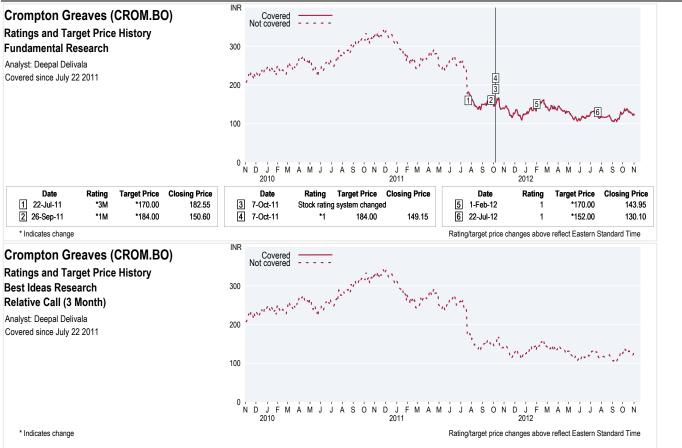
Downside risks include: 1) attracting and retaining talent; 2) the E&C and electrical equipment businesses are sensitive to economic variables; 3) competitive pressures; and 4) L&T needs to keep abreast with technology trends to sustain valuations and earnings. These risks could impede the stock from reaching our target price.

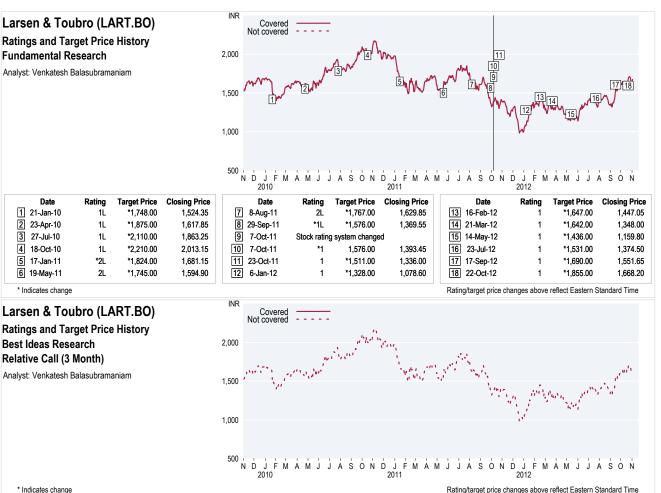
Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

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|---|-------|------------|------|-----------------|------|------|
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47%

50%

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50%

47%

45%

59%

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