

July 20, 2006

FOR PRIVATE CIRCULATION

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Stock details

BSE code	: 500049
Market cap (Rs bn)	: 84.0
Free float (%)	: 24%
52-wk Hi/Lo (Rs)	: 1472/677
Avg. daily volume	: 195000
Shares o/s (mn)	: 80

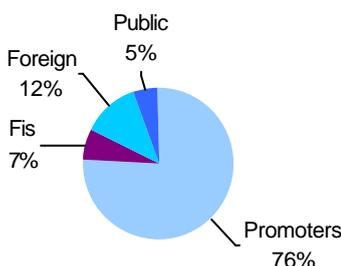
Summary table

(Rs mn)	FY06	FY07E	FY08E
Sales	35,608	41,248	48,676
Growth (%)	11.8	15.8	18.0
EBITDA	8,424	9,807	11,324
EBITDA margin (%)	23.7	23.8	23.3
Net profit	5,812	6,595	7,719
Net cash (debt)	15,961	21,142	26,842
EPS (Rs)	72.6	82.4	96.5
Growth (%)	30.2	13.5	17.1
CEPS	82.4	92.9	107.7
DPS (Rs)	12.8	12.8	12.8
RoE (%)	32.0%	28.3%	26.2%
RoCE (%)	47.7%	43.3%	40.0%
EV/Sales (x)	1.8	1.4	1.1
EV/EBITDA (x)	7.6	6.0	4.7
P/E (x)	13.8	12.2	10.4
P/Cash Earnings	12.2	10.8	9.3
P/BV (x)	4.1	3.2	2.5

	Q1FY06	Q2FY06	Q3FY06	Q4FY06
Sales (Rs mn)	4,791	8,288	6,772	15,757
EPS (Rs)	7.1	18.3	12.1	35.1

Source: Company & Kotak Securities - Private Client Research

Shareholding pattern



One-year performance (Rel to sensx)



Source: Capitaline

Bharat Electronics

Price: Rs.1,002
 Target Price: Rs.1,304

Recommendation: BUY

Bharat Electronics is the prime manufacturer of defense and communications systems in India. As the premier defense electronics company, BEL is set to continue to benefit from the government's desire towards greater indigenization of defense supplies. BEL also boasts of a strong R&D base, which has enabled it to develop products and also achieve indigenization. The company has, on a consistent basis, been reporting high levels of operating profitability and also has an enviable track record of profit growth. The return on equity is also healthy at 32%. While the defense business continues to be the core focus, the company has also endeavored to diversify its revenue base by utilizing its expertise to develop products for civilian purposes. The order backlog is healthy at Rs. 66 bn, resulting in visibility of 22 months of revenues. Valuations are attractive at 12.2x and 10.4x FY07E and FY08E earnings, respectively. Our DCF value works out to Rs.1,304. We recommend a BUY.

Key investment arguments

- ❑ **Play on growing defense needs:** BEL is the prime defense electronics company for the Government of India. As compared to a marginal hike in budget capital expenditure in 2005-06, the Finance Minister has hiked the capital expenditure for 2006-07 by 9%. Robust economic growth also augurs well for BEL in terms of increase in spending on defence modernization.
- ❑ **Tapping new markets:** While BEL remains a company focused on the defense sector, it is using its competencies to expand its presence in the civilian electronics and overseas markets. The company primarily exports electro-mechanical sub-systems, satellite radio and communication equipment. The company is targeting a significant ramp-up in exports to US\$24 mn in FY07 from US\$12.5 mn in FY06. In the civilian sector, BEL bagged a Rs. 5.0-bn contract for the supply, integration, annual maintenance and facility management of the Convergent Billing System for MTNL in March 2006.
- ❑ **High margin business:** BEL has, over the years, been able to expand its operating margins on the back of higher employee productivity and greater indigenization. Operating margins have expanded from 18.3% in FY04 to 23.7% in FY06.
- ❑ **Significant free cash generation:** BEL's business is not fixed asset intensive. Moreover, it has been enjoying negative working capital for the last two years. BEL gets substantial advances from the government to fund its working capital. As a result, the cash generation is robust. According to our estimate, BEL has cash worth Rs. 200 per share, equivalent to 20% of its current price.

Valuation

- ❑ According to our forecast, earnings are expected to grow at 15% CAGR between FY06-08. The company enjoys high return ratios with ROCE of 47% and ROE of 32% in FY06. The business has high operating margins and is not capital intensive resulting in robust cash generation. Valuations are attractive at 12.2x and 10.4x FY07 and FY08 earnings, respectively. Our DCF value works out to Rs.1,304. We recommend a BUY.

Background

Bharat Electronics (BEL), the public sector giant, is one of the largest manufacturers of radars, wireless communications systems and other technical equipment for the defense forces in the country. It was incorporated in 1954 at Bangalore as wholly owned by the Government of India, till disinvestment took place in 1991-92. Currently, it has nine manufacturing units located at Bangalore, Chennai, Hyderabad, Machilipatnam, Pune, Talaja, Panchkula, Ghaziabad and Kotdwara. Its corporate office is at Bangalore.

Business Profile

While the focus area for BEL continues to be defense, over the years it has entered into the civilian electronics market as well.

Product profile

Division	Products
Military	
Military Communications	HF/VHF Comm tech
Land-based radars	3D/Low flying radar/surveillance radar
Naval Systems	Air&Surface warnings radar
Opto-electronics	Binoculars/laser range finder
Electronic Warfare	Airborne ESM systems
Civil	
Telecom	Rural auto exchange/Digital switching systems
Sound and vision broadcasting	transmitters
Solar photovoltaic systems	solar cells/lighting systems
Electronic components	semiconductor devices
Niche products	Electronic voting machine/Digital set top boxes

Source: Company

Revenue (Rs mn)

	FY03	FY04	FY05	FY06
Civil	5,241	6,245	4,000	5,000
Defence	19,715	20,906	27,853	30,608
Total	24,956	27,151	31,853	35,608
% share of defense	79.0	77.0	87.4	86.0

Source: Company

Share of defense continues to be dominant in the revenue mix of BEL

India's Budget expenditure

Defence expenditure has grown at 15% CAGR over last 11 years

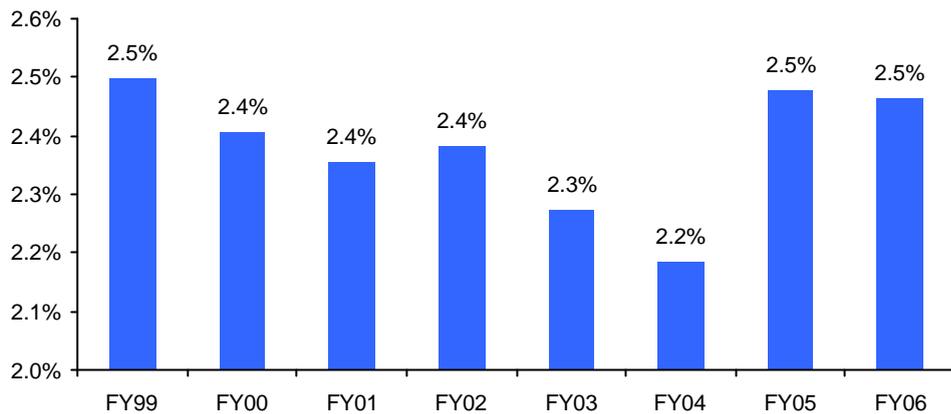
India's defense expenditure has been growing consistently and should continue to grow at a steady pace. National security being of critical importance to the nation, defence expenditure has continued to move at a steady pace of 15% CAGR over the last eleven years.

In terms of defense expenditure to GDP, the ratio has ranged in a narrow band of 2.2-2.5%. Acceleration in GDP should enable the company to provide a thrust to modernization of defense infrastructure.

So far as expenditure on modernization is concerned, the Navy has been getting the maximum allocation followed by Air Force and Army.

Defence expenses / GDP

Defence expenditure to GDP ratio has stayed at 2.5% over the last two years



Source: www.indiabudget.nic.in

The declining trend in defense expenditure to GDP ratio has reversed in FY05 as the government seeks to drive its efforts at modernization of the Indian armed forces.

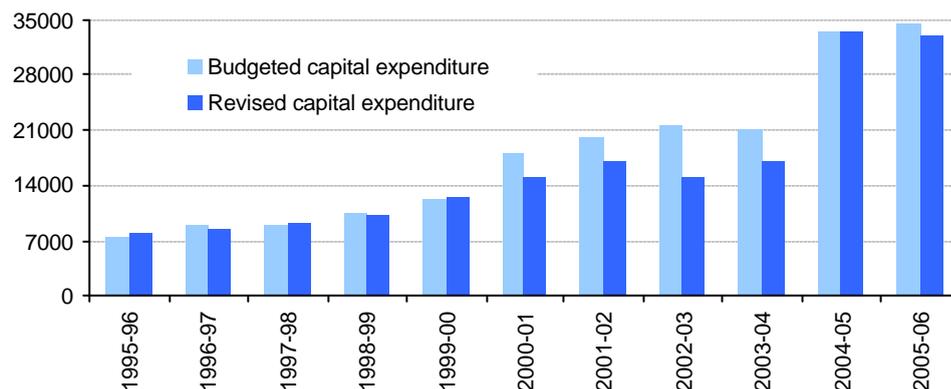
Revised capital expenditure is now catching up with budgeted capital expenditure

Capital expenditure tends to get delayed due to bureaucracy

A peculiarity of the defense expenditure is the total mismatch between the life of the defense budget, which varies between nine and 10 months and the acquisition process, which takes a minimum of two to three years to come to a decision. As a consequence, large amounts allocated for capital acquisitions either lapse or bunch up together. Much of this shortfall in actual budget expenditure could be attributed to bureaucratic delays that have been holding up the purchase of major deals.

Every case of acquisition has to be steered through a system, which consists of four distinct layers of bureaucracy, the Service HQs, the Ministry of Defense, the Ministry of Defense (Finance) and finally the Ministry of Finance. Often, several issues remain unresolved and every file takes weeks, if not months, to move. One financial year is simply not enough for most of the cases to be cleared.

Budgeted and revised capital expenditure



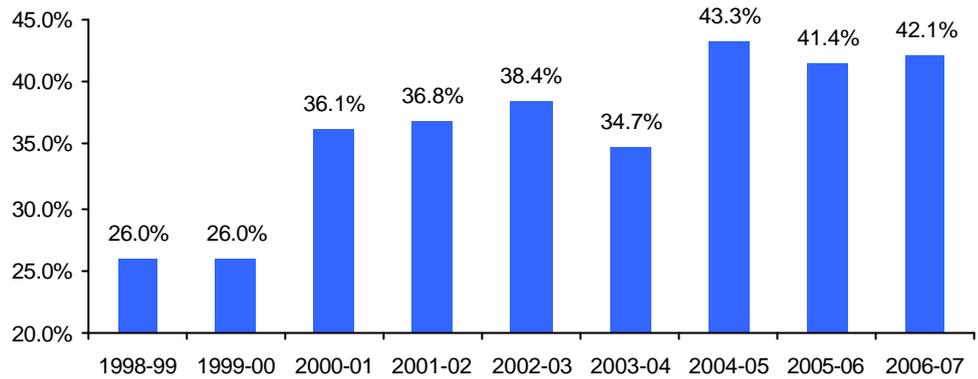
Source: www.indiabudget.nic.in

Capital expenditure component within the budget expenditure is increasing

Defense expenditure can be divided into revenue expenditure and capital expenditure. The revenue expenditure typically accounts for over 55% of the budget expenditure and mainly goes towards the upkeep of the armed forces. The capital expenditure portion is aimed at modernization of the defense forces.

Over the years, especially post-Kargil, the need for defense modernization has been strongly felt. This has resulted in an increasing share of capital expenditure in the overall budget expenditure.

Capital expenditure / Budget expenditure



Source: www.indiabudget.nic.in

Growing exports

The company achieved exports of US\$13.58 mn during 2005-06, a rise of 9% against last year's figure of US\$12.5 mn. Precision electro mechanical sub-systems and parts to general electric medical systems (GEMS) and 'Build to print' contract manufacture of satellite radios for the US market formed a major portion of exports. Among the major markets were the US, the UK, Singapore, Hong Kong, and Botswana. During the current financial year, the company has an export target of approximately US\$24 mn.

To ramp up its presence in the exports market the company is participating in international defense expositions.

Making inroads into the civilian electronics market

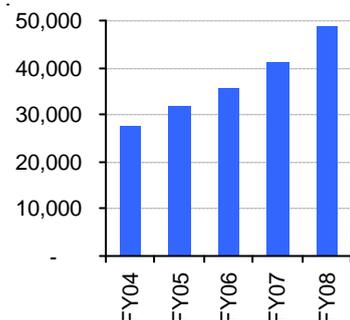
In the civilian sector, the company has been aggressive in the telecom equipment market. It won a Rs.5 bn order from MTNL for the supply, integration, annual maintenance and facility management of the Convergent Billing System for MTNL in March 2006. MTNL proposes to replace the existing billing system with a new state-of-the-art call data record (CDR) based convergent billing system in Delhi and Mumbai for 3.5 mn customers, which is likely to be expanded to 4.5 mn.

Other orders in civilian segment in FY06 include

- A Rs. 1.25-bn order for CDMA network for the army.
- A VSAT network order in Nigeria worth \$1 mn
- Supplied solar lighting systems to villages in Tamil Nadu, Rajasthan and West Bengal
- A new version of the electronic voting machine (EVM) with additional features during the current year to meet the specific requirements of the Election Commission. The Election Commission is expected to replace the present EVMs with the new version of the EVMs over a period of time

Earnings Outlook

Revenues (Rs mn)



Source: Company, Kotak Securities - Private Client Research

Revenue growth of 17% CAGR between FY06-08

BEL's revenues are derived from order inflows, which in turn have a correlation with budgeted capital expenditure on defense. For 2006-07, budgeted capital expenditure on defense has been raised by 9% as against 2.7% in 2005-06. This should drive order inflows for the company.

After witnessing a decline of 2.7% in FY05, order inflows have grown 65% in FY06. Order backlog is up 8% to Rs. 66 bn, equivalent to 22 months of sales.

The management is targeting a turnover of Rs. 50 bn by FY08 from Rs. 35.6 bn in FY06.

Turnover

Rs mn	FY01	FY02	FY03	FY04	FY05	FY06
Order inflows	19,993	31,210	53,083	25,354	24,660	40,608
Order backlog	29,950	41,313	69,440	67,398	61,000	66,000

Source: Company

Margins likely to remain stable

BEL is the prime supplier of defense electronic components to the armed forces. Also, given that the business is tech-intensive, private sector competition is very limited. BEL has been able to enjoy very healthy margins.

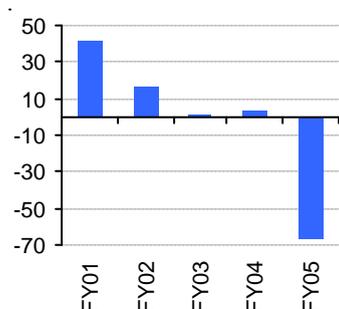
The manufacturing is not very raw material intensive. Being a PSU, its employee costs are the second major cost head. Employee cost to sales is 12% in FY06 (on the higher side as compared to peers in the private sector manufacturing). BEL's operating margins have been on an increasing trend aided by higher employee productivity as employee costs to sales has been coming down over the years.

Cost structure

	FY04	FY05	FY06	FY07E	FY08E
Raw material costs to sales (%)	44	45	43	45	46
Employee costs to sales (%)	16	15	12	11	11
Misc costs to sales (%)	24	24	21	21	21

Source: Company, Kotak Securities - Private Client Research

Net working capital (days)



Source: Company

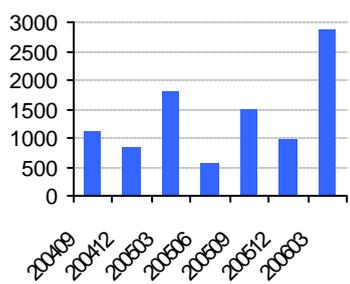
Working capital is cash accretive

BEL has a relatively high inventory turnover and debtors of 131 and 86 days of sales, respectively. However, this is more than compensated by the advances given by the defense ministry for mobilizing resources for projects. As a result, net working capital has been negative.

Quarterly earnings extremely volatile

Given that the defense ministry is the company's largest customer, the procurement of defense supplies gathers pace only towards the end of the fiscal year, which makes the fourth quarter very substantial in terms of revenue booking.

Quarterly net profit (Rs mn)



Source: Company

Attractive Return on Equity

BEL's high return on equity is primarily on account of high operating margins and high asset turnover.

Dupont analysis

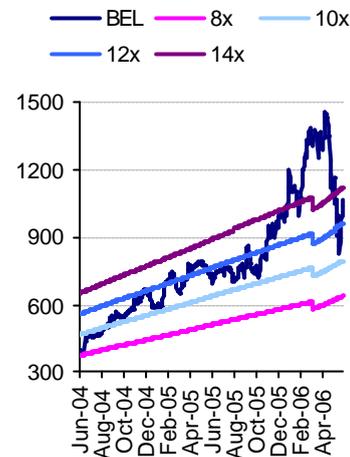
	FY05	FY06	FY07E	FY08E
Net profit margin (%)	14.8	16.3	16.0	15.9
Asset turnover (x)	2.2	1.9	1.8	1.7
Financial leverage (x)	1.0	1.0	1.0	1.0
RoE (%)	33.7	32.0	28.3	26.2

Source: Company, Kotak Securities - Private Client Research

Strong free cash generation

BEL has a high margin business. At the same time, it is not fixed asset intensive. Also, working capital is negative. As a result, the company's free cash flow is very robust. Moreover, the company is debt free. Considering these factors, we see dividend payout increasing in the future.

PE band



Source: Company, Kotak Securities - Private Client Research

Assumptions

Terminal growth (%)	4.00
Beta (x)	1.12
Risk Free Rate (%)	7.0
Market Risk Premium (%)	7.0
Cost of Equity (%)	14.8
Cost of Debt (%)	8.0
Equity	80,160
WACC (%)	14.82

FCF valuation per share (Rs mn)

PV of FCF	88,390
Net debt	15,961
Shareholders' Value	104,350
Value per share (Rs)	1,304

Source: Kotak Securities - Private Client Research

Valuation

At the current price, BEL is trading at 12.2x and 10.4x FY06 and FY07 earnings, respectively. On an EV/EBITDA basis, the stock is trading at forward 6x.

BEL has a strong balance sheet and a very profitable business. Moreover, it will continue to remain the preferred supplier of defense electronics in the medium-term. Upsides in earnings in future could come from breakthroughs in the domestic and exports markets. The company's earnings growth profile is largely non-cyclical. Revenue visibility of 22 months is another positive in favor of BEL.

Despite the technology-intensive nature of the business, BEL has traded at a discount to the peers in the engineering sector. We believe this is primarily due to the relatively moderate earnings growth outlook and lack of adequate disclosure (understandable since the company is in defense products).

We have also examined the company's forward PE trading range to get a clue about the valuation pattern. BEL has traded in a PE band of 10-14x.

We have valued the company on a DCF basis. Accordingly, our price target works out to Rs 1304 per share, achievable over a two-year horizon. Our DCF price values the stock at 13.5x FY08 earnings. We recommend a **BUY**.

FCF

Rs mn	2008E	2009E	2010E	2011E	2012E
PAT	7,719	8,624	9,372	10,312	11,354
Depreciation	900	950	1,017	1,088	1,151
Int	166	45	45	45	45
Capex	(1,000)	(790)	(1,054)	(1,140)	(997)
NWC change	(896)	(869)	(191)	(210)	(231)
FCFF	6,890	7,960	9,189	10,095	11,323
Discounted Value	6,001	6,038	6,070	5,808	5,674

Source: Kotak Securities - Private Client Research

The following grid below gives a sensitivity analysis based on various scenarios.

Sensitivity analysis

Terminal Growth	WACC (%)		
	13.8	14.8	15.8
3.0	1,322	1,259	1,200
4.0	1,372	1,304	1,243
5.0	1,432	1,360	1,294

Source: Kotak Securities - Private Client Research

Profit and loss statement (Rs mn)				
(Year-end March)	FY05	FY06	FY07E	FY08E
Revenues	31,853	35,608	41,248	48,676
% change yoy	16.3	11.8	15.8	18.0
EBITDA	6,747	8,424	9,807	11,324
% change yoy	34.4	24.9	16.4	15.5
Depreciation	715	778	837	900
EBIT	6,032	7,646	8,969	10,424
% change yoy	37.2	26.7	17.3	16.2
Interest and finance charges	91	273	250	250
Other Income	1,183	1,108	1,183	1,417
Earnings Before Tax	7,124	8,481	9,902	11,590
% change yoy	35.8	19.0	16.8	17.1
Provisions and amortisations	(265)	-	-	-
Tax	2,396	2,669	3,307	3,871
as % of EBT	33.6	31.5	33.4	33.4
Net Income adj	4,463	5,812	6,595	7,719
% change yoy	41.2	30.2	13.5	17.1
Preference dividend	0.0	0.0	0.0	0.0
Adj Net inc. for eqty holders	4,463	5,812	6,595	7,719
Shares outstanding (m)	80.0	80.0	80.0	80.0
EPS (Rs)	55.8	72.6	82.4	96.5
DPS (Rs)	12.8	12.8	12.8	12.8
CEPS	68.0	82.4	92.9	107.7

Cash flow statement (Rs mn)				
(Year-end March)	FY05	FY06	FY07E	FY08E
PBDIT	6,747	8,424	9,807	11,324
Tax and adjustments	(3,283)	(2,669)	(3,307)	(3,871)
Cash flow from operations	3,464	5,755	6,500	7,453
Net Change in WC	(3,781)	(1,984)	(227)	(896)
Net Cash from Operations (317)	3,771	6,272	6,557	
Capital Expenditure	(883)	(626)	(1,000)	(1,000)
Cash from investing	1,183	1,108	1,183	1,417
Net Cash from Investing 299	481	183	417	
Interest paid	(91)	(273)	(250)	(250)
Issue of Shares	-	-	-	-
Dividends Paid	(902)	(1,024)	(1,024)	(1,024)
Debt Raised	(176)	(153)	-	-
Net cash from financing (1,169)	(1,450)	(1,274)	(1,274)	
Net change in cash	(1,187)	2,802	5,181	5,700
Free cash flow	(1,200)	3,145	5,272	5,557
Cash at end	1,200	4,003	21,142	26,842

Source: Company, Kotak Securities - Private Client Research

Balance sheet (Rs mn)				
(Year-end March)	FY05	FY06	FY07E	FY08E
Cash and cash equivalents	13,158	15,961	21,142	26,842
Accounts receivable	6,991	8,390	9,606	11,336
Stocks	10,650	12,780	14,804	17,470
Loans and Advances	7,420	8,500	10,200	12,240
Current Assets	38,219	45,631	55,751	67,887
LT investments	123	123	123	123
Net fixed assets	3,193	3,415	3,578	3,677
Deferred tax assets	1,170	1,170	1,170	1,170
CWIP	474	100	100	100
Total Assets	43,178	50,439	60,722	72,958
Payables	20,116	21,950	25,427	29,339
Others	7,013	7,805	9,041	10,669
Current liabilities	27,130	29,755	34,468	40,008
LT debt	153	-	-	-
Other liabilities				
(deferred tax+minority int)	132	132	132	132
Equity & reserves	15,764	20,552	26,122	32,818
Total Liabilities	43,178	50,439	60,722	72,958

Ratio analysis				
(Year-end March)	FY05	FY06	FY07E	FY08E
EBITDA margin (%)	21.2	23.7	23.8	23.3
EBIT margin (%)	18.9	21.5	21.7	21.4
Net profit margin (%)	14.0	16.3	16.0	15.9
Adjusted EPS growth (%)	41.2	30.2	13.5	17.1
Receivables (days)	80.1	86.0	85.0	85.0
Inventory (days)	122.0	131.0	131.0	131.0
Sales / Net Fixed Assets (x)	10.0	10.4	11.5	13.2
ROE (%)	33.7	32.0	28.3	26.2
ROCE (%)	50.1	47.7	43.3	40.0
EV/ Sales	2.1	1.8	1.4	1.1
EV/EBITDA	10.0	7.6	6.0	4.7
Price to earnings (x)	17.0	13.8	12.2	10.4
Price to book value (x)	5.4	4.1	3.2	2.5
Price to cash earnings (x)	14.7	12.2	10.8	9.3

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