## **Deutsche Bank**



25 August 2010

## **Exide Industries Ltd**

Exchange: NSI Bloomberg: EXID IN

# Well charged, initiating with a

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## A dual play on automotive demand and power deficit; initiating with a Buy

Our investment thesis is premised on three key drivers: 1) robust domestic demand for new vehicles, 2) rising market share in the after-market by replacing unorganised players, and 3) strong demand for power back-up applications. Exide's dominance in the OEM segment (77% share) and strong distribution network (2x nearest competitor) should support a revenue CAGR (FY10-13E) of 22%. Pricing power and an increase in captive lead sourcing should ensure profitability remains above the historical average. Buy with target price of Rs 180.

## Large share of unorganised after-market offers room for long-term growth

Exide is India's largest battery manufacturer. Its strong and expanding distribution network should help the company increase its market share in the replacement segment by taking share from unorganised players (40-45% currently). Moreover, its well-entrenched leadership in the OEM segment should enable it to benefit from robust new vehicle sales. We expect demand for new vehicles to grow at a CAGR (FY10-13E) of 13-18%. In the industrial segment, we believe the demand for power back-up solutions should remain healthy as the demand-supply gap for power is unlikely to diminish in the medium term.

#### Pricing power and captive sourcing of lead to aid profitability

In the past, Exide's profitability was closely linked to global lead price volatility. Over the past few years, the company has capitalised on its leadership position by increasing prices to offset lead price movements. In addition, the acquisition of captive smelting capacity (45% of requirements) is aiding these efforts. In our view, these measures should ensure that the company's EBITDA margin remains in the range of 21-22% vs. a long-term average of 16-17%.

## 3-year EPS CAGR (FY10-13E) of 18%, core business trading at 14x FY12E EPS

We value Exide on a sum-of-the parts basis (SOTP) at Rs180/share, consisting of 1) DCF-based valuation of Rs160/share (implied P/E of 18x FY12E) for the core battery business, and 2) Rs20/share for its 50% stake in the life insurance joint venture. Risks include a loss of market share in the replacement segment and higher-than-anticipated investments in the life insurance business. (See pg. 5-8.)

Forecasts and ratios					
Year End Mar 31	2009A	2010A	2011E	2012E	2013E
Sales (INRm)	33,930.2	37,940.0	47,212.5	57,730.1	68,709.2
EBITDA (INRm)	5,455.0	8,894.5	10,386.8	12,412.0	14,291.5
Reported NPAT (INRm)	2,843.9	5,371.2	6,385.7	7,633.0	8,813.5
Reported EPS FD (INR)	3.55	6.32	7.51	8.98	10.37
DB EPS FD (INR)	3.53	6.32	7.51	8.98	10.37
DB EPS growth (%)	16.6	78.9	18.9	19.5	15.5
PER (x)	16.3	14.4	19.8	16.6	14.4
EV/EBITDA (x)	7.7	7.3	10.9	8.8	7.2
Yield (net) (%)	1.0	1.1	0.8	0.9	1.0
Source: Deutsche Bank estimates, com	pany data				

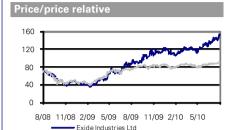
DB EPS is fully diluted and excludes non-recurring items; 2 Multiples and yields calculations use average historical prices for past years and spot prices for current and future years, except P/B which uses the year end close

## Deutsche Bank AG/Hong Kong

All prices are those current at the end of the previous trading session unless otherwise indicated. Prices are sourced from local exchanges via Reuters, Bloomberg and other vendors. Data is sourced from Deutsche Bank and subject companies. Deutsche Bank does and seeks to do business with companies covered in its research reports. Thus, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. DISCLOSURES AND ANALYST CERTIFICATIONS ARE LOCATED IN APPENDIX 1. MICA(P) 007/05/2010

## **Coverage Change**

Buy	
Price at 25 Aug 2010 (INR)	148.80
Price target - 12mth (INR)	180.00
52-week range (INR)	152.90 - 86.10
BSE 30	18,312



	BSE 30 (Rebased	i)	
Performance (%	) 1m	3m	12m
Absolute	11 1	34.2	7/1 3

14.3

16.7

Ahs

BSE 30

Stock data	
Market cap (INRm)	126,480
Market cap (USDm)	2,695
Shares outstanding (m)	850.0
Major shareholders	Chloride Eastern Ltd (46%)
Free float (%)	54
Avg daily value traded (L	JSDm) <b>3.6</b>

1.0

Key indicators (FY1)	
ROE (%)	25.7
Net debt/equity (%)	-16.6
Book value/share (INR)	32.31
Price/book (x)	4.6
Net interest cover (x)	172.4
Operating profit margin (%)	20.1



Model updated:24 August 2010	
Running the numbers	
Asia	
India	
Automobiles & Components	

## **Exide Industries Ltd**

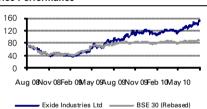
Reuters: EXID.NS Bloomberg: EXID IN

Buy	
Price (25 Aug 10)	INR 148.80
Target price	INR 180.00
52-week Range	INR 86.10 - 152.90
Market Cap (m)	INRm 126,480
	USDm 2,695

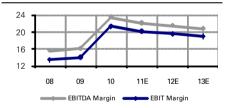
### **Company Profile**

The Company is a leading battery producer in India and one of the largest power storage producers in South Asia. The Company supplies batteries to the automotive, industrial, infrastructure development, information technology and defence sectors in India.

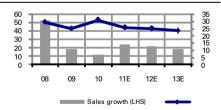
### **Price Performance**



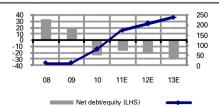
## Margin Trends



## **Growth & Profitability**



## Solvency



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Exide Industries Ltd				Deuts	cne Bar	ık 느
Fiscal year end 31-Mar	2008	2009	2010	2011E	2012E	2013E
Financial Summary						
DB EPS (INR)	3.03	3.53	6.32	7.51	8.98	10.37
Reported EPS (INR)	3.13	3.55	6.32	7.51	8.98	10.37
DPS (INR) BVPS (INR)	0.40 12.8	0.60 15.6	0.96 26.1	1.13 32.3	1.35 39.7	1.56 48.3
Weighted average shares (m) Average market cap (INRm)	800 48,147	800 45,970	850 77,291	850 126,480	850 126,480	850 126,480
Enterprise value (INRm)	46,445	42,122	64,808	112,871	108,897	103,335
Valuation Metrics						
P/E (DB) (x)	19.9	16.3	14.4	19.8	16.6	14.4
P/E (Reported) (x)	19.3	16.2	14.4	19.8	16.6	14.4
P/BV (x)	5.23	2.65	4.75	4.61	3.75	3.08
FCF Yield (%)	0.0	5.9	5.6	1.8	4.2	5.6
Dividend Yield (%)	0.7	1.0	1.1	8.0	0.9	1.0
EV/Sales (x)	1.6	1.2	1.7	2.4	1.9	1.5
EV/EBITDA (x)	10.4	7.7	7.3	10.9	8.8	7.2
EV/EBIT (x)	12.0	8.8	8.0	11.9	9.6	7.9
Income Statement (INPm)						
Income Statement (INRm) Sales revenue	28.561	33,930	37,940	47,213	57,730	68,709
Gross profit	4,460	5,455	8,894	10,387	12,412	14,292
EBITDA	4,460	5,455	8,894	10,387	12,412	14,292
Depreciation	599	679	807	907	1,117	1,273
Amortisation EBIT	0 <b>3,861</b>	0 <b>4,776</b>	0 <b>8,088</b>	0 <b>9,480</b>	0 <b>11,295</b>	0 <b>13,019</b>
Net interest income(expense)	-421	-479	-103	-55	-55	-55
Associates/affiliates	0	0	0	0	0	0
Exceptionals/extraordinaries	77	18	0	0	0	0
Other pre-tax income/(expense)	279	40	121	250	325	390
Profit before tax Income tax expense	<b>3,795</b> 1,294	<b>4,354</b> 1,510	<b>8,106</b> 2,735	<b>9,675</b> 3,290	<b>11,565</b> 3,932	<b>13,354</b> 4,540
Minorities	0	0	0	0,200	0,002	0
Other post-tax income/(expense)	0	0	0	0	0	0
Net profit	2,501	2,844	5,371	6,386	7,633	8,813
DB adjustments (including dilution)  DB Net profit	-77 <b>2,424</b>	-18 <b>2,826</b>	0 <b>5,371</b>	0 <b>6,386</b>	0 <b>7,633</b>	0 <b>8,813</b>
Cash Flow (INRm)						
Cash flow from operations	1,668	4,247	5,410	6,247	7,814	9,109
Net Capex	-1,649	-1,515	-1,098	-4,000	-2,500	-2,000
Free cash flow	20	2,732	4,312	2,247	5,314	7,109
Equity raised/(bought back) Dividends paid	1,486 -374	0 -561	5,299 -952	0 -1,121	0 -1,340	0 -1,547
Net inc/(dec) in borrowings	251	-326	-2,272	-1,121	-1,340	-1,547
Other investing/financing cash flows	-1,403	-946	-933	-2,000	-1,250	-1,250
Net cash flow	-21	899	5,454	-874	2,724	4,312
Change in working capital	-1,388	808	-945	-1,046	-937	-978
Balance Sheet (INRm)						
Cash and other liquid assets	17	890	6,320	5,446	8,171	12,483
Tangible fixed assets	6,018	6,853	7,144	10,238	11,621	12,348
Goodwill/intangible assets	0	0	0	0	0	0
Associates/investments Other assets	5,183 8,748	6,129 7,082	7,062 9,089	9,062 11,695	10,312 14,300	11,562 17,020
Total assets	19,965	20,954	29,616	36,441	44,404	53,413
Interest bearing debt	3,498	3,172	900	900	900	900
Other liabilities	6,204	5,278	6,519	8,079	9,748	11,490
Total liabilities	9,702	8,450	7,419	8,979	10,648	12,390
Shareholders' equity Minorities	10,264 0	12,504 0	22,198 0	27,463 0	33,756 0	41,023 0
Total shareholders' equity	10,264	12,504	22,198	27,463	33,756	41,023
Net debt	3,481	2,282	-5,420	-4,547	-7,271	-11,583
Key Company Metrics						
Sales growth (%)	52.6	18.8	11.8	24.4	22.3	19.0
DB EPS growth (%)	42.3	16.6	78.9	18.9	19.5	15.5
EBITDA Margin (%)	15.6	16.1	23.4	22.0	21.5	20.8
EBIT Margin (%) Payout ratio (%)	13.5 12.8	14.1 16.9	21.3 15.3	20.1 15.0	19.6 15.0	18.9 15.0
ROE (%)	29.5	25.0	31.0	25.7	24.9	23.6
Capex/sales (%)	5.8	4.5	2.9	8.5	4.3	2.9
Capex/depreciation (x)	2.8	2.2	1.4	4.4	2.2	1.6

33.9

9.2

18.2

10.0

-24.4

78.6

Source: Company data, Deutsche Bank estimates

Net debt/equity (%)

Net interest cover (x)

-21.5

205.4

-28.2

236.7

-16.6

172.4



## **Investment thesis**

## **Outlook**

We initiate coverage of Exide Industries with a Buy recommendation, underpinned by our expectation of sustained growth in demand for automotive and industrial batteries. Exide's strong distribution should help it to gain market share in the automotive replacement market while its leadership position with the OEMs should enable it to capitalize on the robust demand for new vehicle sales. The continuing power deficit within India should ensure strong demand for power back-up solutions. We believe these factors should drive revenue and EPS CAGRs (FY10-13E) of 22% and 18%, respectively.

## **Valuation**

We value Exide Industries on a sum-of-the-parts (SOTP) basis at Rs180/share, comprised of 1) Rs160/share for the core battery business based on DCF, and 2) Rs20/share for its 50% stake in the life insurance joint venture. The company generates free cash flow and hence we favour the discounting of future cash flow as our preferred method of valuing the company's battery business. For the life insurance business, our assumptions (new business margins, new business multiples, etc.) are in line with the ones used by the Indian Financials team for valuing other life insurance companies in India.

## **Risks**

Risks include a slowdown in overall automotive demand and loss of market share in the replacement market. Higher-than-expected investment in the life insurance or other unrelated businesses could also be potential risks to our estimates and recommendation.

## **Investment summary**

## Our Buy recommendation is premised on:

- Largest and expanding sales and distribution network in the automotive after-market;
- Dominant market share (77%) with OEMs enabling it to capitalize on new vehicles sales;
- Continuing power deficit scenario should sustain growth for power back-up solutions;
- Free cash flow and a net cash balance sheet should provide comfort to investors.

### Three-year EPS CAGR (FY10-13E) of 18%; pricing power to offset input cost pressures

Exide's revenue breakdown is: Auto OEM (16%); Auto after-market (45%) and Industrial (37%). Rising share in auto after-market, robust new vehicles sales and demand for power back-up solutions should drive revenue CAGR (FY10-13E) of 22%. We forecast EBITDA margins to remain in the range of 21-22% vs. a historical average of 16-17%. We have factored a downtrend in margins from current level (23.4%) which is a historic peak. Exide should be able to substantially offset the impact of higher lead prices through price increases and higher sourcing from the company's captive lead smelters. Deutsche Bank forecasts a 25% increase in lead prices in 2011.

Figure 1: Exide – price increases offset input cost pressures										
	FY05	FY06	FY07	FY08	FY09	FY10	FY11E	FY12E	FY13E	Comments
Revenue/battery (Rs)	842	958	1,106	1,587	1,776	1,732	1,806	1,853	1,907	During FY05-10, realisations
Material cost/battery (Rs)	503	562	668	1,053	1,194	1,014	1,080	1,117	1,163	improved by Rs 891/battery vs a Rs 512/battery increase
EBITDA/battery (Rs)	121	151	176	248	285	406	397	398	397	in RM costs.

Source: Company data, Deutsche Bank

## Thrust on expanding distribution network to aid increase in market share

With 38,500 retail outlets, Exide has the widest distribution reach in the automotive aftermarket. This results in stable revenue growth and ample pricing power. The company has also introduced new initiatives (see page 9), to expand its penetration in the semi-urban and rural markets, to capture market share from unorganized players.

## Exide represents a high-quality proxy to Indian auto sector growth

We forecast domestic demand for passenger vehicles, two-wheelers and commercial vehicles to grow at CAGR (FY10-13E) of 18%, 15% and 13%, respectively. Moreover, India is fast becoming a global small-car hub, underpinning even higher production growth. We believe Exide's enviable market position in relation to the OEMs (77% share) should enable it to gain from the growth in overall automobile production.

### Power deficit situation should buoy demand for industrial batteries

Our Indian Utilities team believes that the power demand-supply gap in India is unlikely to diminish before FY15E, despite the addition of about 100GW of new supply over FY10-15E. Demand for such batteries is driven by the need for power back-up (home and commercial), which is unlikely to slow down given the continuing power deficit.

#### Robust balance sheet strengthens investment case

Exide turned net cash (R5.4bn free cash as of March 2010) subsequent to an equity issue of Rs5.4bn (c \$120m) in January 2010. The company generated free cash flow of Rs5.2bn post capex and investments over FY09 and FY10 and we forecast further cash generation of Rs10bn over FY11-13E. Apart from providing comfort to investors, the strong balance sheet also means that the company's expansion plans for capacity and distribution should not face funding constraints.

## Valuation and risks

## Target price and valuation methodology

We derive a target price of Rs180/share for Exide, based on a sum-of-the-parts (SOTP) methodology. After FY05, Exide ceased to be pure battery company, given its investment in ING Vysya Life Insurance Company. Hence, we value the core battery business and the insurance business separately to arrive at our target price for the company.

We value the standalone business of battery manufacturing at Rs160/share based on DCF and the company's 50% stake in ING Vysya Life Insurance at Rs20/share.

DCF is our primary valuation methodology for Indian automotive stocks. The battery industry as a whole, as well as the company individually, is at a stage that provides a fair degree of predictability in operating cash flow and capex. The company generates free cash flow and we favour discounting future cash flow as our preferred method of valuing the company.

#### DCF assumptions and sensitivity

We have used a 15-year timeframe for our DCF forecasts, with revenue growth trending down over our forecast period from 24% in FY11E to 8% by 2025. We expect capex/sales to stabilise at around 5% and EBIT margin to trend down to 17.9%, from 20.1% in FY11E. Our assumptions are: a risk-free rate of 8.1%, risk premium of 5.3%, beta of 0.8 and a terminal growth rate of 4%. Our terminal growth rate is in line with the expected long-term growth rate of households in India. Our resultant WACC is 12.3%.

Assumptions								
WACC	12.3%							
Terminal growth rate of cash flow	4%							
Terminal value	324,734			Terminal growth rate				
PV of terminal value	56,691			2.0%	4.0%	6.0%	8.0%	
Enterprise value	130,405		11.3%	167	186	221	298	
TV as % of Total	43%	ပ္ပ	11.8%	156	172	200	257	
Net debt	(5,420)	MACC —	12.3%	146	160	183	226	
Equity value	135,826	_ > -	12.8%	137	149	168	202	
Equity Value per share (Rs)	160		13.3%	129	139	155	182	

## Our implied target multiple for the core business is at a modest premium to Exide's domestic peers

Our DCF value of Rs160/share implies a P/E of 21x FY11E and 18xFY12E EPS. We have used valuations of companies in the auto ancillary space to compare against our target multiple for Exide. The closest peer, Amara Raja, is in the same business as Exide – though on a much smaller scale. We estimate that Exide commands a share of 50-55% of the organised battery market in India. Hence, a better comparison would be in relation to a broader group comprised of the larger auto ancillary companies in India. Within the domestic ancillary peer group, we believe Bharat Forge, Bosch Ltd, Motherson Sumi and Cummins India are the relevant comparables as they are similarly placed within their product niches. Exide's normalised EPS CAGR (FY09-13E) of 33% and ROE of 25% are comparable to these companies. Our implied target P/E multiple of 18x is in line with their multiples.

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Figure 3: Exide – valuation comparables										
Company	FY12E P/E	FY12E ROE	EPS CAGR (FY09-13E)	Market Cap (USD m)						
India peers		_	_							
Exide	18	25.0%	31.0%	2785						
Amara Raja Batteries	8.2	24.90%	32.2%	350						
Bharat Forge (Buy, CMP Rs 353)	20.8	17.40%	23.9%	1,777						
Bosch Ltd	19.5	21.30%	14.30%	4,016						
Motherson Sumi	14.7	29.20%	30.7%	1,471						
Cummins India	18.5	32.10%	21.7%	2,946						
Global peers										
Johnson Controls USA (Buy, CMP USD 26.87)	11.1	16.20%	5.5%	18,320						
GS Yuasa Corp	20.2	8.40%	24.9%	2,474						
Exide Technologies	6.3	NA	26.0%	342						

Source: Bloomberg Finance LP, Deutsche Bank, The P/E for Exide is our implied valuation multiple

## Premium to historical levels justified due to improved metrics

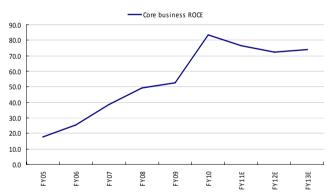
Our target multiple is also at a premium to Exide's historical average valuation range. We believe this is reasonable given the structural improvement in its profitability and ROCE over the past five years. The average EBITDA margins for Exide over FY05-09 were in the range of 16-17% vs. 21-22% expected over FY11-13E. Similarly, core ROCE of the business has improved from 35-50% to 70-75% (see Figure 5). Additionally, the company is now a net cash company, with a minimal funding gap going forward.

Figure 4: Exide - rolling 1-year forward P/E



Source: Bloomberg Finance LP, Deutsche Bank

Figure 5: Exide – ROCE has trended upwards



Source: Company data, Deutsche Bank

#### Stake in life insurance business valued at Rs20/share

Exide has a 50% stake in ING Vysya Life Insurance Company Limited (IVL), a joint venture with ING Group, Netherlands. ING is a significant player in the global life insurance industry. Under the terms of the joint venture agreement, the company may not divest its stake in IVL until October 2010. Management commentary has indicated that the company intends to continue investing in this business and has no plans of selling out in the medium term. We value the business of IVL at Rs34bn in consultation with our India Financials team. Our valuation assumptions (see Figure 7) are in line with the ones used by the Financials team for valuing other life insurance companies in India.

IVL began its operations in September 2001 and currently services more than one million customers. It has a 2% market share among the private players in India. IVL offers a variety of insurance products, including term insurance, traditional endowments, unit-linked and

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retirement plans, among others. The company distributes its products through multiple channels including tied agents and in-house sales personnel based in more than 250 offices across India as well as through its bancassurance partner, ING Vysya Bank Ltd.

Figure 6: ING Vysya Life Insurance – business metrics and forecasts									
	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011E	FY2012E
Annualised premium equivalent (APE, Rs m)	712	2,722	2,601	4,428	6,654	6,559	6,284	5,655	5,655
YoY growth (%)		282.4%	-4.5%	70.3%	50.3%	-1.4%	-4.2%	-10.0%	0.0%
Cumulative capital invested (Rs m)				7,140	9,388	10,640	12,515	15,515	17,515
Incremental capital invested (Rs m)				2,000	2,248	1,252	1,875	3,000	2,500

Source: Company data, Deutsche Bank

Figure 7: Valuation of Exide's stake in ING Vysya Life Insurance	ce (Rs m)
New business margin (FY12E)	15%
APE (FY12E)	5,655
New business achieved profit (FY12E)	848
New business achieved multiple (x)	15
New business value (Rs m)	12,724
Cumulative capital invested (FY12E)	17,515
Premium for embedded value	20%
Embedded value (Rs m)	21,018
Appraisal value [ New business value + Embedded value ] (Rs m)	33,742
Exide stake	50%
Value to Exide (Rs m)	16,871
Number of shares (m)	850
Per share value	20
Source: Deutsche Bank	

## **Risks**

## Slowdown in sales of four-wheelers and two-wheelers

Sales to OEMs constitute c16% of Exide's revenue and are dependent on demand for cars, two-wheelers and commercial vehicles. We forecast CAGRs (FY10-13E) of 18%, 15% and 13% for passenger vehicles, two-wheelers and commercial vehicles, respectively. However, if there is a significant slowdown in the demand for automobiles, it would negatively affect our earnings forecasts.

## Slowdown in demand for industrial batteries

The telecom segment constitutes a significant part of industrial battery sales for Exide. Sales to the telecom industry fell by 35% in FY10 and we believe sales will remain soft. However, if the fall in demand is severe, it would negatively affect our forecasts.

## Significant increase in lead prices

Lead and lead alloy are the primary materials consumed in the manufacture of batteries, representing c80% of all of the materials consumed by Exide. We have assumed that lead prices will increase during our forecast period and expect this to be partly mitigated by better realisations and increased sourcing from Exide's smelter subsidiaries. If the increase in lead prices is higher than we anticipate, it would have a negative impact on our earnings forecasts.



## Increase in competition from the unorganised sector

We have assumed that Exide will increase its share in the automotive after-market (45% of revenue) at the cost of the smaller unorganised players on the back of efforts undertaken to increase its distribution network. However, if the smaller players engage in a price war, the company could lose revenue in that segment.

### Increased investment in the life insurance business

Exide has invested Rs6.3bn till date in its life insurance joint venture. We estimate that Exide would invest another Rs4bn over FY11-13E to fund business growth and to cover losses. If the investment requirement is significantly higher over the next few years, it would have a negative impact on cash flow and valuation.

## Possibility of investment in unrelated businesses

We note that Exide has net cash of Rs5.4bn on its balance sheet currently and, given its strong cash flow, this position should improve over our forecast period. There is a possibility that the company might invest in unrelated businesses, like in the case of the insurance venture in the past.



## **Key issues**

## Competitive position

## Largest producer of automotive and power storage batteries in India

Exide Industries is a leader in the Indian battery market. With revenue of Rs38bn in FY10, the company commands c40% of the Rs90bn domestic storage battery market and an even higher share (50-55%) of the organised segment. The Indian lead storage battery market comprises two segments: automotive and industrial. 60-65% of the industry's revenue is contributed by the automotive segment, which in turn can be subdivided into the OEM (30%) and Replacement (70%) markets. Demand for industrial batteries is driven by the requirement of uninterrupted power supply (UPS) in commercial organisations, as well as homes, and the infrastructure market (railways, telecom and power).

Figure 8: Exide – battery sales growth trend

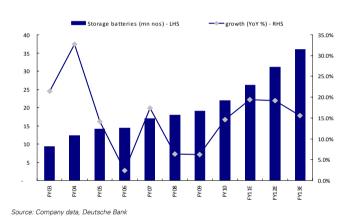
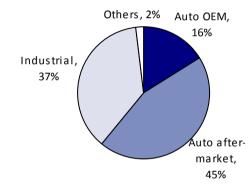


Figure 9: Exide – segmental revenue contribution( FY10)



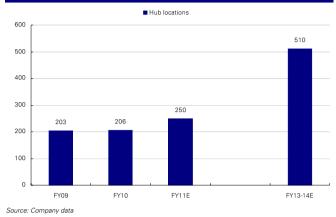
Source: Company data, Deutsche Bank

## Strong sales and distribution network is the key competitive strength

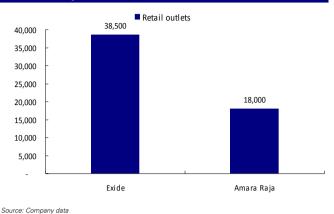
Exide has the widest distribution reach among battery manufacturers in India. It has about 38,500 retail outlets for aftermarket sales, which is more than double its nearest competitor's. The company currently has more than 9,000 main dealers and 210 hub offices, which it plans to increase to 250 by end-FY11E and to 510 over the next 2-3 years. This would enable it to improve its share in the replacement market. The smaller unorganised players still command a 40-45% share in this segment, especially due to their presence in the rural market where they cater mainly to commercial vehicle and tractor battery demand. To address this gap, the company has introduced the following initiatives:

- "Humsafar partner" network this comprises a tertiary distribution network of garages to which Exide's dealers sell their products. As of 31 December 2009, the company had approximately 21,970 Humsafar partners.
- "C Dealer Network" The company maintains a separate distribution network for heavy commercial vehicle owners. As of 31 December 2009, the company had approximately 500 C dealers.
- Project Kisan The company also maintains a "Kisan" dealer network for tractor owners in rural India. Its aim is to convert users of low-cost unbranded products into Exide customers. As of 31 December 2009, the company had approximately 3,197 Kisan dealers.



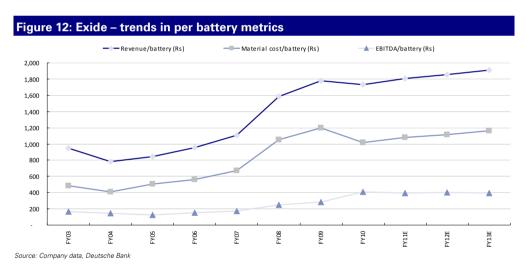


## Figure 11: Exide's retail network significantly larger than closest competitor( as of FY 10)



## Market leadership translates into pricing power

Over the past five years, Exide has been able to improve its realisations, which have more than offset the movements in input prices. This is a reflection of an improvement in sales mix and increased share in the after-market, which enhances the company's ability to pass on the cost increases. As a result, the EBITDA contribution has improved over FY05-10.

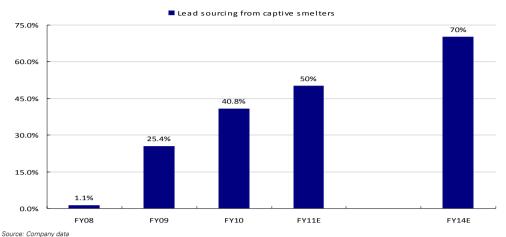


## Increase in lead sourcing from captive smelters to aid profitability

Exide acquired two lead smelting companies - Chloride Metals in November 2007 and Leadage Alloys in June 2008 - to reduce its dependency on imported lead. Though the procurement of lead from these companies is done on the basis of London Mercantile Exchange (LME) prices, it has lead to increased reliability of supply, lower volatility and reduction in inventory carrying costs. The company currently sources 45% of its overall lead requirement from these smelters and expects to increase this to 70% over the next 2-3 years.

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Figure 13: Exide – company plans to increase lead sourcing from captive smelters



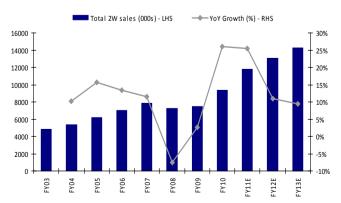
Moreover, since the acquisition of the two smelters, the company has increased its collection efforts for exhausted batteries, from which the smelters recycle lead. The company purchases used batteries from the open market as well as from dealers and institutional clients who collect them from their customers. Exide believes that it offers a better price than the unorganized manufacturers. This is expected to reduce unorganized players' supply of used batteries and will help Exide to compete more effectively in the retail aftermarket.

## **Demand scenario**

#### Robust auto demand to drive growth in the OEM segment

Sales to OEMs contribute c16% to Exide's revenues and are driven by production of new vehicles. The automotive sector witnessed a resurgence in domestic demand across all segments in FY10. This was driven by a resumption of consumer spending and an improvement in industrial activity. We expect volume growth to be robust over the next 2-3 years for personal mobility (two-wheelers and cars) vehicles as well as for commercial vehicles. We forecast passenger vehicles, two-wheelers and commercial vehicles to grow at CAGRs (FY10-13E) of 18%, 15% and 13%, respectively. India is fast becoming a global small car hub for all major auto manufacturers that have set up plants there and this should further propel the demand for all auto parts, including batteries. Exide has a 77% market share across OEMs, which would enable it to grow its revenues in line with the growth in overall production.

Figure 14: Two-wheeler snapshot and forecasts



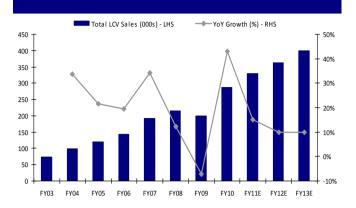
Source: Society of Indian Automobile Manufacturers (SIAM), Deutsche Bank

Figure 15: Four-wheeler snapshot and forecasts



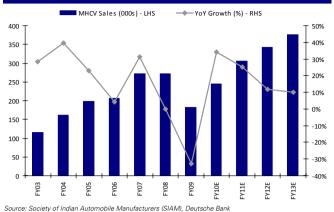
Source: Society of Indian Automobile Manufacturers (SIAM), Deutsche Bank





Source: Society of Indian Automobile Manufacturers (SIAM), Deutsche Bank

## Figure 17: Medium and Heavy CV snapshot and forecasts



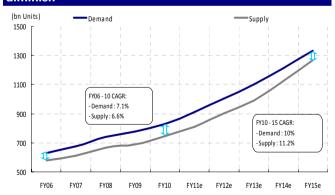
## Weaning away market share from unorganised players in the auto after-market

The automotive replacement market forms the largest and most stable share of revenue for the industry as well as for Exide (45% of overall revenue). The average life span of an automotive battery is 3-3.5 years, after which it needs to be replaced. After-market battery sales have grown by 18-20% over the past few years and the company expects a similar growth rate over the next few years on account of robust vehicle sales in India over the past 10 years. Moreover, the company has been focusing on efforts to increase market share in this segment at the cost of unorganised players, who command 40-45% of the market through cheaper alternatives.

## Demand-supply gap for power in India should drive demand for industrial batteries

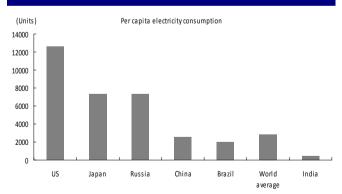
Industrial battery sales account for c37% of Exide's revenue. These batteries are sold primarily for power back-up (home and commercial) and infrastructure uses. Demand for power back-up solutions (UPS and home inverters) correlates to the power deficit in India, which is not likely to diminish in the medium term.

Figure 18: Power demand-supply gap unlikely to diminish



Source: Deutsche Bank, Ministry of Power, Central Electricity Authority

Figure 19: Per capita electricity consumption



Source: Deutsche Bank, Ministry of Power, Central Electricity Authority, Economic survey, CIA World



Our Indian Utilities team believes that India's power demand-supply gap is unlikely to be bridged before FY15E even after the addition of about 100GW of new supply over FY10-15E. Moreover, only up to 90GW of the ordered capacity passes the constraints of environmental clearance, land acquisitions and financial closure.

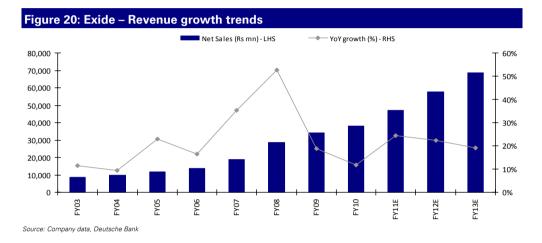
On the infrastructure side, the major demand was driven by the build-out of new telecom towers, which needed power back-up for the radio antennas. We do not expect any growth from this segment as most of the incumbent telecom operators now have pan-India coverage and the newer players are leasing out the existing towers. However, within a year or two this segment would require replacement of batteries, which should add to growth in the industrial segment.



## Financial analysis

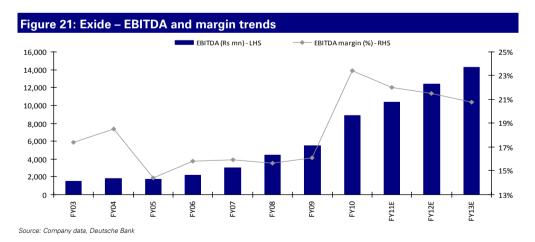
## Revenue - three-year CAGR (FY10-13E) of 22%

We forecast Exide's battery volume to grow at a CAGR (FY10-13E) of 18%, driven by strong growth in the automotive and industrial segments. We believe Exide's growth in the automotive segment would be driven by robust demand for new vehicles as well as an increase in market share in the replacement market. Volume for the industrial segment is a result of the requirement for power back-up and UPS and demand for these applications will continue to grow, given the demand-supply gap in India. We assume that realisations will improve by 3% pa over the same period, leading to a 22% pa growth in revenue.



## EBITDA margins forecast to trend downwards from current peak

We forecast Exide's EBITDA margins to fall by 260bps from 23.4% in FY10 to 20.8% in FY13E. EBITDA/battery is also expected to fall by 1% pa to Rs397/battery. Overall, we expect EBITDA to grow at a CAGR (FY10-13E) of 17%.

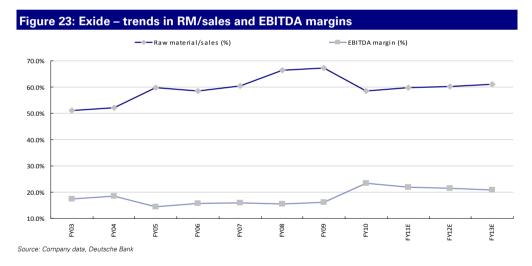


Exide's margins increased considerably (+730bps) in FY10, to an all-time high, due to a combination of softer global lead prices and an increase in sourcing from its smelter subsidiaries (40% in FY10). Exide's raw material/sales ratio has been very volatile over the past five years, mirroring movement in global lead prices. Lead prices have risen significantly from their lows and Deutsche Bank's global commodities team expect lead prices to trend upwards over the next 2-3 years.

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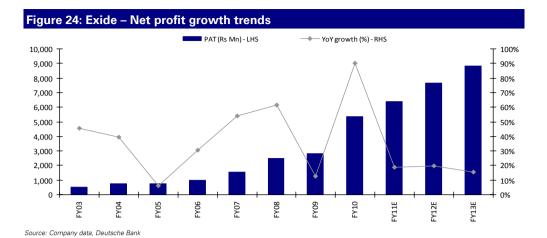
We have assumed Exide's RM/sales will increase by 250bps over FY10-13E to 61%. We believe that the increase in lead prices would be partly offset by increased sourcing from the smelter subsidiaries and improved realisations. Hence, we expect margins to remain considerably higher than the long-term average of 16-17%.



### Net profit growth to be in line with EBITDA

We forecast PAT to grow in line with EBITDA at a CAGR (FY10-13E) of 18%. We do not expect any change in depreciation and, as Exide pays marginal tax rate, the growth in EBITDA would flow down to net profits.





## Capex and cash flows

Exide raised Rs5.4bn (c \$120m) through a Qualified Institutional Placement (QIP) in January 2010, which enabled the company to turn into a net cash company. Over FY11-13E we expect the company to spend Rs8.5bn to enhance battery capacity, mainly for the automotive segment. The company is currently operating at 90-95% capacity utilisation and plans to increase its battery capacity for motorcycles to 15m pa (vs. 9.6m in FY10) and for four-wheelers to 10m pa (vs. 8m in FY10). The company is also expected to continue investing in its life insurance joint venture and we forecast overall investment of Rs4bn over FY11-13E. We expect the company to comfortably fund these requirements as we forecast it to generate operating cash flow of Rs23bn over the same period.

Figure 25: Exide – capex a	and cash flows						
Rs m	2007	2008	2009	2010	2011E	2012E	2013E
Cash profit	2,075	3,056	3,439	6,356	7,293	8,751	10,087
Change in WC	(220)	(1,388)	808	(945)	(1,046)	(937)	(978)
Cash from operations	1,855	1,668	4,247	5,410	6,247	7,814	9,109
Capex	(936)	(1,649)	(1,515)	(1,098)	(4,000)	(2,500)	(2,000)
Investments	(995)	(1,403)	(946)	(933)	(2,000)	(1,250)	(1,250)
Operating free cash flow	(76)	(1,383)	1,786	3,379	247	4,064	5,859
Net Debt	3,233	3,481	2,282	(5,420)	(4,547)	(7,271)	(11,583)

Source: Company, Deutsche Bank



## **Appendix A: Management** and board of directors

## Management backgrounds

## Mr. R G Kapadia, Chairman and Independent Non-Executive Director

Mr. Kapadia is a practicing Chartered Accountant and Senior Partner at G M Kapadia & Company, Chartered Accountants, Mumbai. He served as the President of the Indian Merchants Chamber for 2005-06 and is considered an expert on taxation and accountancy. He has several years of experience in the profession. He has been a Director of the company since 21 June 1991.

## Mr. R B Raheja, Vice-Chairman and Non-Executive Director

Mr. R B Raheja holds a Bachelor's degree in Commerce and has a wide range of experience in industry and business. Mr. Raheja has been a director of the company since December 1991.

## Mr. T V Ramanathan, Managing Director and Chief Executive Officer

He is a Chartered Accountant and a qualified Company Secretary. His total experience of 41 years includes 15 years overseas of which nearly five years was with the World Bank. Before taking his present assignment in 1995, he was associated with the United Breweries group as Group Vice-President - Finance and has a wealth of experience in dealing with Financial and Accounting matters in addition to corporate management. Mr. Ramanathan has been on the company's board since May 1996.

## Mr. G Chatterjee, Director - Industrial

Mr. Chatterjee holds a Bachelor's of Engineering degree from the Regional Engineering College, Durgapur and also holds a Post-Graduate Diploma in Business Administration from the Indian Institute of Management, Ahmedabadand has a wide range of experience in manufacturing and marketing. He spent over two decades in the company and is currently responsible for the company's industrial batteries business. Mr. Chatterjee has been on the board of directors of the company since May 1996.

## Mr. P K Kataky, Director - Automotive

Mr. Kataky holds a B.E. (Electrical) degree from Assam Engineering College, Guwahati and is responsible for the company's automotive batteries business. He has more than 39 years of experience and has been associated with the battery manufacturing industry for more than two decades. Mr. Kataky has been on the company's board of directors since March 2005.

## Dr. S K Mittal, Director – Research & Development

Dr. Mittal holds MS and Ph.D. (Engg Sc.) degrees from the University of Florida and has more than 30 years of experience in the battery manufacturing industry. He was instrumental in setting up the company's Research & Development wing. He has been on the board of directors since May 1996.

#### Mr. A K Mukherjee, Director - Finance and Chief Financial Officer

Mr. Mukherjee is a Chartered Accountant and also a Cost Accountant. He has a wide range of experience in financial and accounting matters. He joined the company in 1998 and has been on the company's board of directors since May 2007.



## Mr. S B Raheja, Non-Executive Director

Mr. Raheja holds a Bachelor's degree in Business Administration and has more than 25 years of work experience in business management. Mr. Raheja has been a member of the company's board since December 1991.

## Mr. Winston Wong, Non-Executive Director

Mr Wong is qualified as a FCCA, FCPA Australia, and FCPA Singapore. Mr. Wong has more than 40 years of working experience in various types of businesses. Mr. Wong has been a member of the company's board since March 1994 and is liable to retire by rotation.

## Independent directors

## Mr. Vijay Aggarwal, Independent Director

Mr. Aggarwal holds a Bachelor's of Technology (Electrical) degree from Indian Institute of Technology, Delhi and a Post-Graduate Diploma in Management from Indian Institute of Management, Ahmedabad. Mr. Aggarwal is the Managing Director of H. & R. Johnson (India) Limited. Mr. Aggarwal has been on the company's board of directors since March 1995.

## Mr. H M Kothari, Independent Director

Mr. Kothari is a leading investment banker with more than 40 years of experience in the investment banking industry and was previously associated with DSP Merrill Lynch Limited, since its incorporation in India, as its Chairman. He is currently the Chairman of DSP BlackRock Investment Managers Pvt. Ltd. Mr. Kothari has been a member of the company's board since December 1991.

## Mr. Bhaskar Mitter, Independent Director

Mr. Mitter, a Barrister-at-Law (London), has several decades of experience in business management and was previously the Chairman of Andrew Yule Limited, BOC India Limited and Calcutta Electric Supply Corporation Limited. Mr. Mitter has more than 54 years of working experience and was the Past President of Bengal Chamber of Commerce & Industry. He has been a member of the company's board since October 1966.

#### Mr. S N Mookherjee, Independent Director

Mr. Mookherjee, a Barrister-at-Law, is a Senior Advocate having several years of experience in the profession and is a leading legal practitioner. He has been a member of the company's board since August 1994 and is liable to retire by rotation.

## Mr. A H Parpia, Independent Director

Mr. Parpia is an Advocate by profession and is the Managing Partner of A H Parpia & Company, Advocates, Mumbai. Mr. Parpia has several years of experience in the profession and has been a member of the company's board since November 1993.

## Mr. D S Parekh, Alternate Independent Director to Mr. S B Raheja

Mr. Parekh holds a Bachelors' in Commerce and is a Fellow Chartered Accountant (England & Wales). Mr. Parekh is the Non-Executive Chairman of Housing Development Finance Corporation Limited and has more than 37 years of working experience. He has received several awards and served on several committees constituted by the Government of India. Mr. Parekh has been a member of the company's board since November 1989. The term of Mr. Parekh's directorship is until Mr. S B Raheja holds the office of Director on the board of the company, subject to the provisions of Section 313 of the Companies Act, 1956.

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## **Appendix B: Assumptions and** financials

	FY07	FY08	FY09	FY10	FY11E	FY12E	FY13E
Automotive batteries (nos)	12,600,000	13,300,000	14,900,000	16,837,000	20,590,823	24,490,383	28,163,940
growth	21.2%	5.6%	12.0%	13.0%	22.3%	18.9%	15.0%
Realisations/battery (Rs)	928	1,355	1,400	1,397	1,439	1,482	1,527
growth	0.0%	46.0%	3.3%	-0.2%	3.0%	3.0%	3.0%
Automotive revenues (Rs m)	11,698	18,028	20,860	23,523	29,630	36,299	42,996
growth		54.1%	15.7%	12.8%	26.0%	22.5%	18.5%
Industrial batteries (Mah)	1,000	1,170	1,335	1,601	1,922	2,306	2,721
growth	0.0%	0.0%	84.0%	91.0%	0.0%	0.0%	0.0%
Realisations/Ah (Rs)	6.8	8.7	9.5	8.8	8.9	9.1	9.3
growth	0.0%	28.2%	8.8%	-7.5%	2.0%	2.0%	2.0%
Industrial revenues (Rs m)	6,793	10,190	12,651	14,038	17,182	21,031	25,313
growth		50.0%	24.1%	11.0%	22.4%	22.4%	20.4%
Overall revenues (Rs m)	18,716	28,561	33,930	37,940	47,213	57,730	68,709
growth	35.4%	52.6%	18.8%	11.8%	24.4%	22.3%	19.0%

year ending march (Rs m)	FY06	FY07	FY08	FY09	FY10	FY11E	FY12E	FY13E
Net Sales	13,819	18,716	28,561	33,930	37,940	47,213	57,730	68,709
YoY Growth %	16.5%	35.4%	52.6%	18.8%	11.8%	24.4%	22.3%	19.0%
Material Costs	8,098	11,303	18,952	22,825	22,212	28,233	34,811	41,913
RMC / Net Sales %	58.6%	60.4%	66.4%	67.3%	58.5%	59.8%	60.3%	61.0%
Employee Costs	994	1,268	1,531	1,709	2,252	2,880	3,522	4,191
% of sales	7.2%	6.8%	5.4%	5.0%	5.9%	6.1%	6.1%	6.1%
Manu/Admin/Other Expn.	1,394	1,601	1,824	2,153	2,393	2,974	3,637	4,329
% of sales	10.1%	8.6%	6.4%	6.3%	6.3%	6.3%	6.3%	6.3%
SG&A Overheads	1,152	1,571	1,794	1,788	2,189	2,738	3,348	3,985
SG&A / Net Sales %	8.3%	8.4%	6.3%	5.3%	5.8%	5.8%	5.8%	5.8%
EBITDA	2,184	2,977	4,462	5,455	8,894	10,387	12,412	14,292
EBITDA Margin %	15.8%	15.9%	15.6%	16.1%	23.4%	22.0%	21.5%	20.8%
growth %	27.7%	36.3%	49.9%	22.2%	63.1%	16.8%	19.5%	15.1%
Other Income	89	174	279	40	121	250	325	390
PBDIT	2,273	3,151	4,741	5,495	9,016	10,637	12,737	14,682
Depreciation	548	542	599	679	807	907	1,117	1,273
Depr/sales	4.0%	2.9%	2.1%	2.0%	2.1%	1.9%	1.9%	1.9%
Core EBIT	1,636	2,435	3,863	4,776	8,088	9,480	11,295	13,019
core EBIT margin	11.8%	13.0%	13.5%	14.1%	21.3%	20.1%	19.6%	18.9%
Interest	210	283	421	479	103	55	55	55
PBIT	1,725	2,609	4,142	4,815	8,209	9,730	11,620	13,409
Pre-tax Profit	1,515	2,325	3,721	4,336	8,106	9,675	11,565	13,354
Prior Period Adjustments	-17.7	-49.1	76.5					
Provision for Tax	491	724	1,294	1,510	2,735	3,290	3,932	4,540
Effective Tax Rate %	32.4%	31.1%	34.8%	34.8%	33.7%	34.0%	34.0%	34.0%
Adjusted Profit After Tax	1,007	1,552	2,503	2,826	5,371	6,386	7,633	8,813
Net Margin %	7.3%	8.3%	8.8%	8.3%	14.2%	13.5%	13.2%	12.8%
growth %	30.3%	54.1%	61.3%	12.9%	90.0%	18.9%	19.5%	15.5%
Reported Net Profit	1,007	1,552	2,503	2,844	5,371	6,386	7,633	8,813
No of shares	750	750	800	800	850	850	850	850
EPS	1.3	2.1	3.1	3.5	6.3	7.5	9.0	10.4
growth %	30.3%	54.1%	51.2%	12.9%	78.9%	18.9%	19.5%	15.5%
Source: Company data Doutscho Bank								

Source: Company data, Deutsche Bank

Figure 28: Exide – Pro	Figure 28: Exide – Profit and loss account on a per battery basis							
Per battery basis (Rs)	FY06	FY07	FY08	FY09	FY10	FY11E	FY12E	FY13E
No of batteries	14,418,061	16,921,064	17,995,708	19,108,947	21,899,029	26,146,633	31,157,355	36,030,967
YoY Growth %	2.4%	17.4%	6.4%	6.2%	14.6%	19.4%	19.2%	15.6%
Net Sales	958	1,106	1,587	1,776	1,732	1,806	1,853	1,907
YoY Growth %	13.8%	15.4%	43.5%	11.9%	-2.4%	4.2%	2.6%	2.9%
Material Costs	562	668	1,053	1,194	1,014	1,080	1,117	1,163
EBITDA	151	176	248	285	406	397	398	397
EBITDA Margin %								
growth %	24.8%	16.1%	40.9%	15.1%	42.3%	-2.2%	0.3%	-0.4%
Depreciation	38	32	33	36	37	35	36	35
Pre-tax Profit	105	137	207	227	370	370	371	371
Provision for Tax	34	43	72	79	125	126	126	126
Profit After Tax	70	92	139	148	245	244	245	245

Source:	Company	data,	Deutsche	Bank
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year ending march (Rs m)	FY06	FY07	FY08	FY09	FY10	FY11E	FY12E	FY13E
Total Assets	8,999	10,518	14,364	16,087	23,688	28,954	35,248	42,516
Gross Block	8,894	9,772	11,442	12,567	13,365	17,365	19,865	21,865
Less: accum Depn.	4,320	4,803	5,424	5,887	6,598	7,504	8,621	9,894
Net Fixed Assets	4,575	4,968	6,018	6,680	6,767	9,860	11,243	11,971
CWIP				173	378	378	378	378
Capex	274	877	1,670	1,299	1,002	4,000	2,500	2,000
Investments	2,785	3,780	5,183	6,682	13,354	14,354	15,604	16,854
Investments made during the year	1,669	995	1,403	1,499	6,672	1,000	1,250	1,250
Trade Investments (subsidiaries and others)	216	210	489	809	805	1,305	1,305	1,305
Trade investments (Insurance)	2,570	3,570	4,694	5,320	6,257	7,757	9,007	10,257
Investments made during the year	2,570	1,000	1,124	626	937	1,500	1,250	1,250
Others				553	6,292	5,292	5,292	5,292
Net Current Assets	1,415	1,635	3,023	2,215	3,161	4,207	5,144	6,123
Working Capital Days	29	25	30	19	25	27	27	27
Cash / Bank	174	14	17	337	29	155	2,879	7,191
Cash / Total Assets %	1.9%	0.1%	0.1%	2.1%	0.1%	0.5%	8.2%	16.9%
Capital Employed	8,999	10,518	14,364	16,087	23,688	28,954	35,248	42,516
Equity Capital	750	750	800	800	850	850	850	850
Reserves	4,790	5,955	9,464	11,704	21,348	26,613	32,906	40,173
Borrowings	2,899	3,247	3,498	3,172	900	900	900	900
Borrowing for the year	(3)	349	251	(326)	(2,272)	-	-	-
Deferred Tax	511	447	479	412	590	591	592	593
Deferred Tax Liabilities	561	567	602	412	590	591	592	593

Source: Company data, Deutsche Bank

## **Appendix 1**

## **Important Disclosures**

Additional information available upon request

Disclosure checklist			
Company	Ticker	Recent price*	Disclosure
Exide Industries Ltd	EXID.NS	149.00 (INR) 25 Aug 10	NA

<sup>\*</sup>Prices are sourced from local exchanges via Reuters, Bloomberg and other vendors. Data is sourced from Deutsche Bank and subject companies.

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## Equity rating key

Buy: Based on a current 12- month view of total shareholder return (TSR = percentage change in share price from current price to projected target price plus projected dividend yield ), we recommend that investors buy the stock.

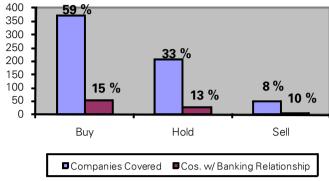
Sell: Based on a current 12-month view of total shareholder return, we recommend that investors sell the stock

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## Equity rating dispersion and banking relationships



Asia-Pacific Universe

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