

March 15, 2011

INITIATING COVERAGE

Sector view: Cautious

Price (Rs): 132

Target price (Rs): 160

BSE-30: 18,438

**Powered to perform.** Exide Industries is a leading manufacturer of automotive and industrial batteries in India. We believe its long-term growth potential is firmly in place, driven by strong automotive demand and an unparalleled distribution network. Strong pricing power in the battery industry and low cost advantage (due to sourcing from in-house lead smelters) will help Exide maintain high EBITDA margins. We initiate coverage with an ADD rating and a target price of Rs160.

#### Key beneficiary of strong growth in automobile demand

We expect the automotive battery market size to more than double to Rs201 bn by FY2015 from Rs84 bn in FY2010. We estimate the organized battery segment to grow at a CAGR of 20% over the next five years. We believe Exide Industries would be a key beneficiary of this strong demand given its strong OEM relationships, unmatched distribution network and strong brand loyalty.

#### We expect industrial battery segment revenues to grow at 14% CAGR over FY2011-13

The industrial battery segment contributes 38% to Exide's revenues. The company manufactures batteries for power back-up systems (including UPS and inverters), telecom batteries which are used in base stations of telecom towers, traction batteries to be used in fork lifts and exports (used in infrastructure). We forecast a 14% CAGR in Industrial battery segment revenues over FY2011-2013E, slightly higher than 11% CAGR witnessed in the FY2009-2011 period due to our expectations of strong growth in the UPS segment.

#### Margins to remain stable as rising smelter proportion offsets material cost pressure

We expect EBITDA margins to improve by 80 bps over the next two years despite a sharp spike in lead prices driven by (1) strong pricing power due to the duopoly structure of the battery industry, which we believe is unlikely to be challenged in the near term, (2) increase in sourcing from captive smelters from 45% in FY2011E to 70% in FY2013E which could lead to cost savings, and (3) improvement in mix with the replacement battery segment growing at a faster pace than the OEM battery segment.

#### Initiate with an ADD rating

We initiate coverage with an ADD rating and a target price of Rs160 based on a sum-of-parts valuation methodology. We value our standalone business at Rs134/share (based on 16x PE on our FY2012E EPS) at a 10% premium to historical average due to sustenance of high EBITDA margins due to strong pricing power and improvement in product mix. We value Exide's captive lead smelters at Rs12/share and its 50% stake in ING Vysya Life Insurance at Rs12/share.

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Initiate coverage with an ADD rating and a target price of Rs160

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#### Company data and valuation summary

Company Data	Stock Data	High	Low	Price perf	1M	3M	12M
	52 week range	180	108	Absolute	11.6	(15.7)	23.8
<b>Current Price (Rs)</b>	Yield (%)		0.4	Rel to BSE 30 (%)	8.2	(9.6)	17.1
132	Price at close of	March 14, 2011					
	<b>Capitalization</b>			<b>Forecast valuation</b>	<b>2010</b>	<b>2011E</b>	<b>2012E</b>
	Market cap (Rs bn)		1,122	EPS (Rs)	6.3	7.1	8.4
	Net debt/(cash) (Rs mn)		(178)	P/E (X)	19.0	16.9	14.3
	Free float (%)		49	RoAE (%)	31.0	24.1	22.8
	Shares outstanding (mn)		850	EV/EBITDA (X)	13.0	10.7	9.2

Source: Company data, Kotak Institutional Equities estimates

Kotak Institutional Equities Research

Important disclosures appear at the back

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The prices in this report are based on the market close of March 15, 2011.

## FINANCIAL SNAPSHOT

Exhibit 1: Exide Industries, financial summary, March fiscal year-ends, 2008-2013E

	2008	2009	2010	2011E	2012E	2013E
<b>Profit model (Rs mn)</b>						
Net sales	28,449	33,930	37,940	44,257	52,089	60,057
<b>EBITDA</b>	<b>4,695</b>	<b>5,448</b>	<b>8,894</b>	<b>8,565</b>	<b>10,351</b>	<b>12,133</b>
Other income	65	65	121	887	1,011	1,145
Interest	(374)	(479)	(103)	(65)	(51)	(56)
Depreciation	(642)	(679)	(807)	(830)	(987)	(1,098)
<b>Profit before tax</b>	<b>3,744</b>	<b>4,354</b>	<b>8,106</b>	<b>8,556</b>	<b>10,325</b>	<b>12,124</b>
Tax expense	(1,240)	(1,510)	(2,735)	(2,652)	(3,201)	(3,759)
<b>Adjusted net profit</b>	<b>2,504</b>	<b>2,844</b>	<b>5,371</b>	<b>6,045</b>	<b>7,124</b>	<b>8,366</b>
<b>Adjusted earnings per share (Rs)</b>	<b>3.1</b>	<b>3.6</b>	<b>6.3</b>	<b>7.1</b>	<b>8.4</b>	<b>9.8</b>
<b>Balance sheet (Rs mn)</b>						
Equity	10,264	12,504	22,198	27,976	34,505	42,276
Total Borrowings	3,498	3,172	900	500	500	500
Deferred Tax Liability	479	412	590	590	590	590
Current liabilities	5,725	4,866	5,929	6,517	7,332	8,162
<b>Total liabilities</b>	<b>19,965</b>	<b>20,954</b>	<b>29,616</b>	<b>35,582</b>	<b>42,927</b>	<b>51,528</b>
Net fixed assets	6,018	6,853	7,144	10,315	11,828	13,230
Investments	5,183	6,682	13,354	13,986	16,886	20,786
Cash	17	337	29	678	1,663	2,984
Other current assets	8,748	7,082	9,089	10,603	12,550	14,527
<b>Total assets</b>	<b>19,965</b>	<b>20,954</b>	<b>29,616</b>	<b>35,582</b>	<b>42,927</b>	<b>51,528</b>
<b>Free cash flow (Rs mn)</b>						
Operating cash flow	1,788	3,944	5,718	5,807	6,980	8,316
Working capital changes	(1,390)	488	(637)	(926)	(1,131)	(1,148)
Capital expenditure and strategic investments	(1,692)	(1,515)	(1,098)	(4,000)	(2,500)	(2,500)
<b>Free cash flow</b>	<b>(1,294)</b>	<b>2,917</b>	<b>3,983</b>	<b>881</b>	<b>3,349</b>	<b>4,668</b>
<b>Ratios</b>						
EBITDA margin (%)	16.5	16.1	23.4	19.4	19.9	20.2
PAT margin (%)	8.8	8.4	14.2	13.7	13.7	13.9
Net debt/equity (X)	0.3	0.2	0.0	(0.0)	(0.0)	(0.1)
Book Value (Rs/share)	12.8	15.6	26.1	32.9	40.6	49.7
RoAE (%)	29.5	25.0	31.0	24.1	22.8	21.8
<b>RoACE (%)</b>	<b>33.4</b>	<b>34.3</b>	<b>38.1</b>	<b>32.5</b>	<b>31.9</b>	<b>30.6</b>

Source: Kotak Institutional Equities

## VALUATIONS BACK TO HISTORICAL AVERAGE

We value Exide Industries at 16X PE on our standalone FY2012E EPS estimate—a 10% premium to historical averages. We believe the stock is likely to trade at a slight premium to its historical average given sustained high margins due to strong pricing power in a duopoly structure of the automotive battery industry. We expect cost benefits from increasing in-sourcing from in-house lead smelters and strong distribution networks, which are a key entry barrier for new players. The stock currently trades at 14.9X PE on our FY2012E EPS (excluding Rs12/share in ING Vysya Life Insurance), in line with its historical average. We initiate coverage on the stock with an ADD rating. Our target price of Rs160 is based on a sum-of-parts valuation.

We value the stock according to the sum-of-parts methodology. We value the standalone business at Rs134/share (based on 16x PE on our FY2012E EPS), smelters at Rs10/share and 50% stake in ING Vysya Life Insurance at Rs12/share. Our standalone P/E multiple of 16 is based on a 10% premium to its historical average.

We believe the stock could trade at a premium valuation to historical averages due to:

- ▶ We expect robust growth in the high margin replacement automotive battery market (20% CAGR over FY2011-2013E), which is likely to aid improvement in margins.
- ▶ The increase in sourcing from smelters to 70% of the total lead requirement by FY2013E from 40% in FY2010, which is likely to offset pressure due to increase in lead prices.
- ▶ Strong brand loyalty and wide distribution network are the key entry barriers in this business which is unlikely to be replicated in a short timeframe. We believe the automotive battery industry will continue to be dominated by two players over the next five years and hence margins are unlikely to be impacted by the strong pricing power of organized battery players.

### A case for premium valuations

Exide has consistently generated very high returns (average ROEs of 26%) with its leadership of the fast-growing duopoly market (Top 2 players dominate >90% of the organized battery market) leading to superior earnings growth (52% CAGR over FY2006-2010). EBITDA margins of Exide have increased from mid teens (15-16%) to high teens (~18-20%) driven by (1) backward integration (acquired lead smelters) which brought down average raw material price for Exide, (2) strong and stable growth in the high-margin, replacement automotive battery segment as consumers shifted to branded batteries from unbranded batteries and (3) very strong growth in the power back up and telecom battery segment which also has a relatively stable competitive intensity with three major players dominating ~95% of the market.

Exide has traded at an average PE of 17X since FY2010 after EBITDA margins improved from ~16% in FY2009 to 23% in FY2010, which led to a re-rating of the stock. We expect margins to remain at ~20% levels and thus expect the stock to trade at close to 15-17X PE band despite earnings growth moderating to 18% CAGR over FY2011-2013E versus 52% during the period FY2006-FY2010. Exide's PE multiple re-rated from 12X to 17X over FY2006-2010.

Exhibit 2: Exide Industries, sum-of-parts valuation  
March fiscal year-ends

	EPS	PE multiple (x)	Per share value
Standalone FY2012 EPS	8.4	16	134
Smelter FY2012 EPS	1.2	10	12
ING Vysya (50% stake value)			12
<b>SOTP Based value</b>			<b>159</b>

Source: Kotak Institutional Equities

Strong return ratios  
and sustainability of  
high EBITDA margins

Exhibit 3: Exide Industries, stock re-rated in FY2010 and now reverting to historical average valuations  
PE chart



Source: Bloomberg, Company, Kotak Institutional Equities

Exhibit 4: Exide has underperformed the Sensex over the past six months due to capacity constraints, which impacted profitability  
Price performance chart

	1 wk	1 month	3 month	6 month	12 month	3 year	5 year
Exide	(3.5)	11.6	(15.7)	(14.0)	23.8	99.9	476.0
Sensex	(0.9)	3.3	(6.1)	(2.6)	6.7	16.2	70.2
<b>Relative to Sensex</b>	<b>(2.6)</b>	<b>8.2</b>	<b>(9.6)</b>	<b>(11.4)</b>	<b>17.1</b>	<b>83.6</b>	<b>405.9</b>

Source: Bloomberg, Kotak Institutional Equities

Exhibit 5: Valuation comparison

Global versus Indian auto component manufacturers

Company	Price (Rs)	Mcap (\$ mn)	PE			EV/EBITDA			EPS CAGR FY2011-2013E	Average ROE (%)	Average EBITDA margin (%)
			FY2011E	FY2012E	FY2013E	FY2011E	FY2012E	FY2013E			
<b>Exide Industries</b>	<b>132</b>	<b>2,543</b>	<b>16.9</b>	<b>14.3</b>	<b>12.2</b>	<b>13.0</b>	<b>10.7</b>	<b>9.2</b>	<b>16.0</b>	<b>26.0</b>	<b>17.3</b>
Amararaja Batteries	172	326	11.0	9.0	7.5	6.3	5.1	4.3	22.0	25.0	13.0
Bosch India	6,032	4,187	22.0	18.5	15.7	13.5	12.0	10.5	17.0	25.0	20.0
Motherson Sumi	194	1,627	21.5	15.5	11.8	9.7	7.4	5.7	35.0	25.0	15.0
Bharat Forge	317	1,655	25.6	16.1	13.9	11.4	7.9	7.2	36.0	12.3	14.0
<b>Indian average</b>		<b>2,068</b>	<b>19.4</b>	<b>14.7</b>	<b>12.2</b>	<b>10.8</b>	<b>8.6</b>	<b>7.4</b>	<b>25.2</b>	<b>22.7</b>	<b>15.9</b>
Johnson Controls (US)	37	27,609	20.7	15.8	12.9	12.6	10.0	8.4	27.0	16.0	7.0
Exide Technologies (US)	11	862	13.9	10.9	8.9	6.3	5.2	4.7	25.0	na	6.0
GS Yuasa (Japan)	520	2,628	27.3	17.3	14.0	8.7	7.5	6.0	26.0	7.0	6.0
<b>Global average</b>		<b>10,366</b>	<b>20.6</b>	<b>14.7</b>	<b>11.9</b>	<b>9.2</b>	<b>7.6</b>	<b>6.4</b>	<b>26.0</b>	<b>11.5</b>	<b>6.3</b>

Note:

(1) Johnson Controls is September fiscal year ending company

(2) Bosch India and Exide Technologies are December fiscal year ending company.

(3) Our valuation excludes Rs22/share of Insurance and smelter business value from Exide and Rs27/share of Alstom value from Bharat Forge. Price are in local currencies. Prices as of close of 15th March 2011

Source: Kotak Institutional Equities.

### We value Exide's 50% stake in ING Vysya Life Insurance at Rs12/share

Nischint Chawathe, KIE's insurance analyst, values ING Vysya Life Insurance at Rs20,496 mn (1.4X Rs14,640 mn capital invested in the business). Exide has a 50% stake in ING Vysya Life Insurance and we value this at Rs12/share based on our insurance analyst's valuation.

#### Exhibit 6: ING Vyasa Life Insurance APE has been declining since FY2009

Trends in adjusted premium equivalent (APE): FY2004-FY2011E

Year	APE (Rs mn)	YoY (%)	Market share (%)
2004	726		0.4
2005	2,678	269	1.7
2006	2,475	(8)	1.2
2007	4,229	71	1.0
2008	6,629	57	1.2
2009	6,399	(3)	1.3
2010	6,281	(2)	1.1
2011E	5,967	(5)	1.1

Source: IRDA

### We value Exide's 100% stake in lead smelters at Rs12/share

We value the lead smelter based on a price-to-earnings valuation methodology. The company owns a 100% stake in two lead smelters, Chloride Metals and Leadage Alloys. Exide has been increasing its sourcing from these smelters from 23% of their total lead requirement in FY2009 to 45% by end of FY2011. Exide plans to increase the sourcing of lead from these smelters to 60% by FY2012 and 70% by the end of FY2013E. Lead smelters covert scrap lead into usable lead which leads to 7-8% cost savings versus procuring imported lead primarily due to two main factors (1) decline in the inventory holding period versus imported lead and (2) cheaper price of lead due to a discount between scrap lead prices and lead prices. Smelter profits are expected to increase significantly as Exide invests in increasing capacities at these smelters. Capacity at the end of FY2010 was 96,000 tonnes and is expected to increase to 140,000 tonnes by end of FY2012E. We value these lead smelters at 10X PE FY2012E EPS and ascribe Rs12/share value to the smelters.

## COMPETITIVE LANDSCAPE

The organized automotive battery industry is a duopoly with Exide leading with ~70% market share in both OEM and replacement market. Unorganized battery players also form a significant chunk of the market with a market share of 45% by volumes. The industrial battery segment is also concentrated among three major players: Exide Industries, Amararaja and Hyderabad Power Systems. Exide is less exposed to the lower margin industrial battery segment than Amararaja Batteries.

The organized automotive battery segment (65% revenue share in the total battery segment) is dominated by two players – Exide Industries (68% of the replacement battery market share) and Amararaja Batteries (forms 26% of the replacement battery segment). Unorganized battery players account for 45% share of the replacement automotive battery market by volumes and 35% share of the replacement market by revenues as the batteries are sold at a 25-30% discount to the organized battery manufacturers. Exide dominates the OEM battery segment with a 70% market share while Amararaja has a 26% market share. Amco is also an established player in the two-wheeler OEM battery segment with a 15% market share.

The industrial battery segment is dominated by three players – Exide Industries, Amararaja Batteries and Hyderabad Industries. Industrial battery segment primarily comprises of UPS, inverter, telecom, construction (used in fork lifts) and railways segment. The power back up segment (including UPS and inverter segments) and telecom segment are the major segments in industrial batteries. Exide dominates the power back-up systems segment with a 70% market share while HBL batteries' dominates the telecom battery segment with a 41% market share.

Amararaja revenue mix is more exposed to the industrial segment (53% of revenues, of which 30% of revenues comes from telecom segment) than Exide Industries. Exide Industries' industrial segment accounts for 39% of overall revenues (of which telecom segment comprises only 8% of overall revenues).

### Exhibit 7: Industrial battery segment

Market size, segments, market shares based on FY2010 revenues, Rs mn

	Size	Exide	Amararaja	HBL
<b>Segment</b>				
UPS/inverter/power back up	17,267	12,565	2,706	1,996
Telecom	14,495	3,478	5,073	5,944
Others (infrastructure, exports, traction, railways etc)	5,681	1,348	1,184	3,150
<b>Total industrial</b>	<b>37,443</b>	<b>17,391</b>	<b>8,963</b>	<b>11,090</b>
<b>Market share (%)</b>				
UPS/inverter	46	73	16	12
Telecom	39	24	35	41
Others	15	24	21	55

Note:

(1) UPS/inverter segment also has imports and local players which has been excluded and above market shares are based on relative market size addressed by Exide Industries, Amararaja Batteries and HBL Power Systems

Source: Kotak Institutional Equities

Exide Industries has  
a wide lead over  
Amararaja Batteries

### Chasm between #1 and #2

- ▶ Exide Industries' capacity (both in automotive and industrial batteries) is more than twice that of Amara Raja Batteries
- ▶ Exide has 38,500 retail outlets versus 18,000 of Amara Raja—a key reason for a significantly higher market share of Exide versus Amara Raja
- ▶ Exide has lower dependence on the telecom segment (which is facing pricing pressure due to surplus capacities) versus Amara Raja Batteries
- ▶ Exide sources 45% of its lead requirements from its own smelters while Amara Raja sources 20% of its lead requirements from outsourced smelters

#### Exhibit 8: Exide Industries has a long lead over Amara Raja Batteries

Key differentiating factors

	Exide	Amararaja
<b>Market share (%)</b>		
OEM auto	70	26
Replacement auto	68	26
Telecom	24	35
UPS	70	15
<b>Revenue Mix (%), FY2010</b>		
OEM	16	13
Replacement	45	34
Exports	2	4
Telecom	8	30
UPS/inverter	25	16
Infrastructure	4	3
<b>Capacities (%), FY2011E</b>		
4 wheeler batteries	10.6	5.1
2 wheeler batteries	10.0	3.6
Industrial capacity (amp hour)	1,750	900
Retail outlets	38,500	18,000
Backward integration	Yes, 45% of lead procurement from smelters	No, 20% of requirement met through outsourced smelters
Technological Tie up	Shin Kobe Electrical Machinery	Johson Controls Limited

Source: Kotak Institutional Equities

## AUTOMOTIVE BATTERY MARKET TO MORE THAN DOUBLE BY FY2015E

We expect the automotive battery market to more than double in size to Rs201 bn by FY2015E from Rs84 bn in FY2010. We believe the passenger vehicle battery segment will post higher growth than the two-wheeler and commercial vehicle battery segment. We expect the organized battery segment to grow at a CAGR of 20% over the next five years and we believe Exide Industries would be a key beneficiary given its unmatched distribution network and strong brand loyalty. We believe organized battery manufacturers will continue to gain market share from unorganized players (forms ~35% of replacement battery market in terms of revenue and 45% in terms of volumes in FY2010) due to a consumer shift towards branded batteries as they are perceived to be much more reliable and have a longer life cycle.

### Key assumptions in forecasting automotive battery size

- ▶ We forecast 15% CAGR in OEM battery volumes in the period FY2010-2015E driven by (1) 17% CAGR in passenger vehicle volumes, (2) 15% CAGR in two-wheeler vehicle volumes and (3) 11% CAGR in commercial vehicle volumes.
- ▶ We expect 17% CAGR in replacement volumes in the period FY2010-2015E driven by high vehicle population base created due to strong growth in automobile industry over the past five years. We assume a replacement cycle of three years for passenger vehicles, four years for two-wheelers and 1.5 years for commercial vehicles.
- ▶ We estimate battery prices to increase by 2% per annum as we expect stable competitive intensity in the battery industry over the next few years. Global players like GS Yuasa and Exide Technologies also have tie-ups with Tata Auto comp and Tudor India but they have not been able to gain any significant market share. Hence, we expect pricing to remain stable in the automotive battery industry.

Exhibit 9: Automotive battery volume forecasts, 2010-2015E  
March fiscal year-ends, in mn units

	2010	2015E	CAGR
<b>PVs</b>			
OEM	2.3	5.1	16.7
Replacement	6.3	16.1	20.5
<b>Total PV</b>	<b>8.7</b>	<b>21.2</b>	<b>19.5</b>
<b>2 wheelers</b>			
OEM	10.5	20.9	14.7
Replacement	20.0	41.1	15.4
<b>Total 2 wheelers</b>	<b>30.6</b>	<b>61.9</b>	<b>15.2</b>
<b>CVs</b>			
OEM	0.6	0.9	10.7
Replacement	2.8	5.7	14.9
<b>Total CVs</b>	<b>3.4</b>	<b>6.6</b>	<b>14.2</b>
OEM	13.4	26.9	14.9
Replacement	29.2	62.9	16.5
<b>Total volumes</b>	<b>42.6</b>	<b>89.7</b>	<b>16.0</b>

Source: Company, Kotak Institutional Equities

**Exhibit 10: Automotive battery size to more than double by FY2015E**

Automobile battery revenues (Rs bn): FY2010-2015, March fiscal year-ends

	2010	2015E	CAGR
<b>Segment</b>			
PVs	32	88	22%
2Whs	25	57	18%
CVs	26	56	17%
<b>Total Size</b>	<b>84</b>	<b>201</b>	<b>19%</b>
Unorganized players	23	46	15%
Organized players	61	155	20%
OEM	18	40	17%
Replacement	66	161	20%
<b>Revenue mkt shr of organized players (%)</b>			
OEM	100	100	
Replacement	65	71	

Note:

(1) PVs: passenger vehicles, CVs: commercial vehicles. We assume a replacement cycle of 2 years for PVs, 4 years for two-wheelers and 1.5 years for CVs.

Source: Kotak Institutional Equities

We estimate Exide's automotive battery segment revenues to grow at 18% CAGR over FY2011-2013E driven by 15% CAGR in volumes and 3% increase in pricing/mix. We expect the share of replacement battery revenues in the overall automotive revenues to increase from 67.9% in FY2011E to 69.2% in FY2013E.

The company is operating at peak capacity utilization and hence was not able to supply to the replacement automotive segment in 3QFY2011. During this time, Exide faced capacity constraints as it utilized existing capacities for the OEM segment due to long standing relationships with OEM manufacturers. The replacement battery segment has close to >25% EBITDA margins while the OEM battery segment has ~5-7% EBITDA margins, which we attribute to premium pricing in the replacement segment. Exide has 38,500 retailers versus 18,000 for its nearest competitor Amararaja Batteries, a key strength of Exide Industries.

Exide has also gained market share in the replacement automotive battery segment as a result of several developments: (1) The company started collecting used batteries from its distribution channel which led to a decline in availability of lead for the unorganized battery players, in turn making it difficult for the latter to compete with Exide on pricing, (2) customers, especially in the passenger vehicle segment, have also become brand conscious and shifted to organized battery manufacturers from unorganized players.

**Exhibit 11: Exide Industries, automotive battery revenue mix, March fiscal year-ends, 2008-2013E**

	2008	2009	2010	2011E	2012E	2013E
4 wheeler battery volumes (000s)	6,000	6,600	7,392	8,501	9,946	11,239
YoY change (%)	15.4	10.0	12.0	15.0	17.0	13.0
2 wheeler battery volumes (000s)	7,200	8,300	9,278	10,855	12,483	14,356
YoY change (%)	7.5	15.3	11.8	17.0	15.0	15.0
<b>Automotive battery volumes (000s)</b>	<b>13,200</b>	<b>14,900</b>	<b>16,670</b>	<b>19,356</b>	<b>22,429</b>	<b>25,595</b>
YoY change (%)	10.9	12.9	11.9	16.1	15.9	14.1
OEM battery gross revenues (Rs mn)		6,741	7,433	10,034	11,740	13,501
Replacement battery gross revenues (Rs mn)		18,873	19,646	22,397	27,324	31,969
Others (Rs mn)		311	450	540	626	727
<b>Total automotive gross revenues (Rs mn)</b>		<b>25,925</b>	<b>27,529</b>	<b>32,971</b>	<b>39,690</b>	<b>46,197</b>
YoY change (%)			6.2	19.8	20.4	16.4
<b>Revenue Mix (%)</b>						
OEM		26.0	27.0	30.4	29.6	29.2
Replacement		72.8	71.4	67.9	68.8	69.2
Others		1.2	1.6	1.6	1.6	1.6

Source: Company, Kotak Institutional Equities

## INDUSTRIAL BATTERY SEGMENT TO GROW AT 14% CAGR OVER FY2011-2013E

The industrial battery segment contributes 38% of Exide's revenues. The company manufactures batteries for power back-up systems (including UPS and inverters), telecom batteries which are used in base stations of telecom towers, traction batteries to be used in fork lifts and exports (used in infrastructure). We estimate a 14% CAGR in industrial battery segment revenues over FY2011-2013E, slightly higher than the 11% CAGR seen during the FY2009-2011E period due to strong growth in the UPS segment.

Industrial battery demand comes from UPS/inverter, telecom, railways and power systems segments. Batteries are used in telecom base stations for supporting switching and transmission networks. In railways, these are used for train lighting and signaling systems. In the power sector, batteries are put to use to support generation, transmissions and distribution networks. Over the period FY2006-2010, industrial battery demand for Exide grew at a robust 25% CAGR driven by aggressive rollout of telecom base stations, addition of power capacity, strong business confidence which led to strong demand for UPS/inverter systems.

However, over the period FY2009-2011E, industrial battery demand (CAGR of 10%) has been impacted by a decline in telecom battery revenues due to (1) slower addition of telecom base stations, (2) aggressive price competition and (3) a decline in export revenues. We expect the growth rate to improve slightly to 14% CAGR over the next two years driven by 15% revenue CAGR in UPS/inverter systems, 5% CAGR in telecom revenues (driven by replacement demand of batteries at telecom towers), 15% CAGR in revenues in traction batteries (pick-up in infrastructure activities) and export revenues.

Exhibit 12: Industrial segment revenue forecasts, March fiscal year-ends, 2009-2013E (Rs mn)

	2009	2010	2011E	2012E	2013E
<b>Segment</b>					
Power back up	9,486	12,565	14,701	16,906	19,442
Infrastructure	4,111	3,083	2,775	2,913	3,059
Traction	348	473	544	626	719
Exports	1,107	620	682	784	902
Others	759	650	748	837	938
<b>Total Industrial</b>	<b>15,810</b>	<b>17,391</b>	<b>19,449</b>	<b>22,067</b>	<b>25,060</b>
% YoY change		10.0	11.8	13.5	13.6
<b>Revenue Mix (%)</b>					
Power back up	60.0	72.3	75.6	76.6	77.6
Infrastructure	26.0	17.7	14.3	13.2	12.2
Traction	2.2	2.7	2.8	2.8	2.9
Exports	7.0	3.6	3.5	3.6	3.6
Others	4.8	3.7	3.8	3.8	3.7

Source: Company, Kotak Institutional Equities

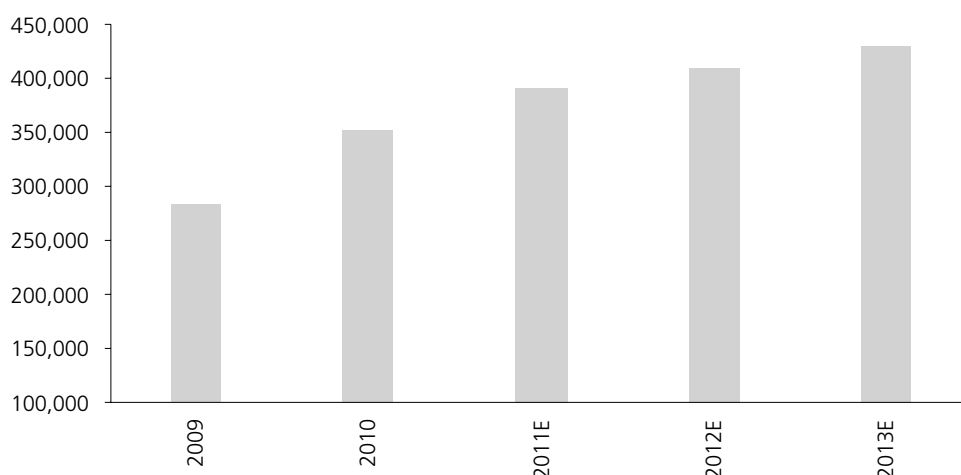
## Telecom segment under pressure due to excess capacities

Telecom battery volumes have declined by about 30% from peak demand of 2,000 mn ampere hour in FY2009 to 1,400 mn ampere hour currently. Pricing pressure has been quite severe in the telecom segment due to excess capacities as industry capacities are at about 2,500 mn ampere hours. This resulted in a 36% decline in telecom battery revenues of Exide Industries in FY2010.

Telecom battery demand was boosted by a significant increase in telecom tower rollouts by telecom companies in the past. Given regulatory pressures and intense competition in the telecom space, telecom tower rollouts have slowed down considerably. Kotak's telecom analyst expects new telecom tower additions of 20,000 per year over the next two years. He also believes that over the next two years, 60,000-70,000 towers would require replacement of their batteries assuming a three-year replacement cycle for batteries. We believe telecom tower demand could increase from 1,400 mn ampere hours at present to 2,000 amp hours by FY2012E if the telecom replacement cycle kicks—leading to a potential 17% CAGR increase in telecom battery size assuming pricing remains stable. However, we believe pricing could be under further pressure given excess capacities with players. We estimate a modest 5% increase in telecom battery revenues for Exide Industries over FY2011-2013E as (1) we assume a slower ramp-up in telecom replacement demand and (1) we expect pricing to remain under pressure.

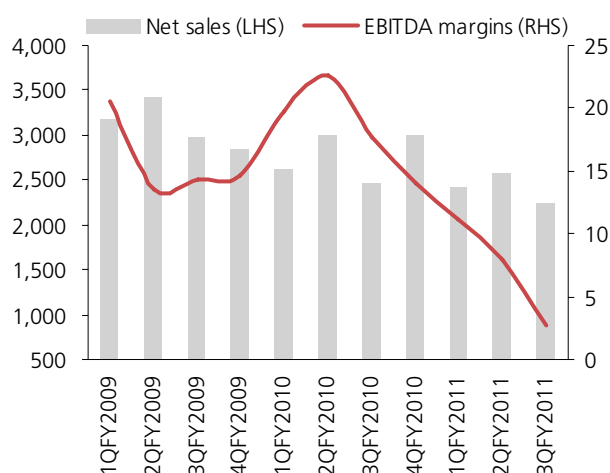
Hyderabad Power Systems (~54% of its revenues comes from telecom segment) EBITDA margins have declined from 20.6% in 1QFY09 to 2.7% in 3QFY11 indicating severe price competition in the telecom segment.

**Exhibit 13: New telecom tower addition to slow down to 5% CAGR over 2011-2013E**  
Telecom tower rollout, units, March fiscal year-ends



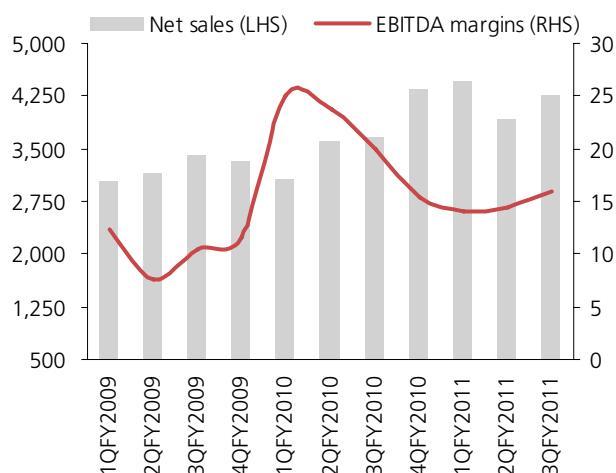
Source: Kotak Institutional Equities

**Exhibit 14: Hyderabad Industries, quarterly trend, March fiscal year-ends**



Source: Company

**Exhibit 15: Amararaja Batteries, quarterly trend, March fiscal year-ends**



Source: Company

## STRONG PRICING POWER TO OFFSET SHARP SPIKES IN LEAD PRICES

Lead accounts for 80% of the total raw material costs of Exide while plastic resins (polypropylene and polyethylene) account for 18% of the total raw materials. The company has lead price escalation clauses built into its contracts with OEMs, which helps them pass on the rising input costs to the OEMs. Exide's sustained profitability in the automotive battery segment is underpinned by its strong branding power in the replacement segment and market dominance. However, rapidly escalating competition in the industrial segment is likely to constrain margins significantly over the next few years.

We believe an increase in sourcing from lead smelters to 70% by FY2013E from 45% currently would be key to maintaining EBITDA margins. We estimate an increase in sourcing from lead smelters would increase EBITDA margins by 1.6-2.7% over FY2011-2013E, offsetting the impact of increasing lead prices and slower growth of industrial battery segment. We expect automotive EBITDA margins to increase by 1.5% over FY2011E-FY2013E, driven by the benefit of sourcing from smelters and a marginal improvement in replacement batteries share in overall product mix.

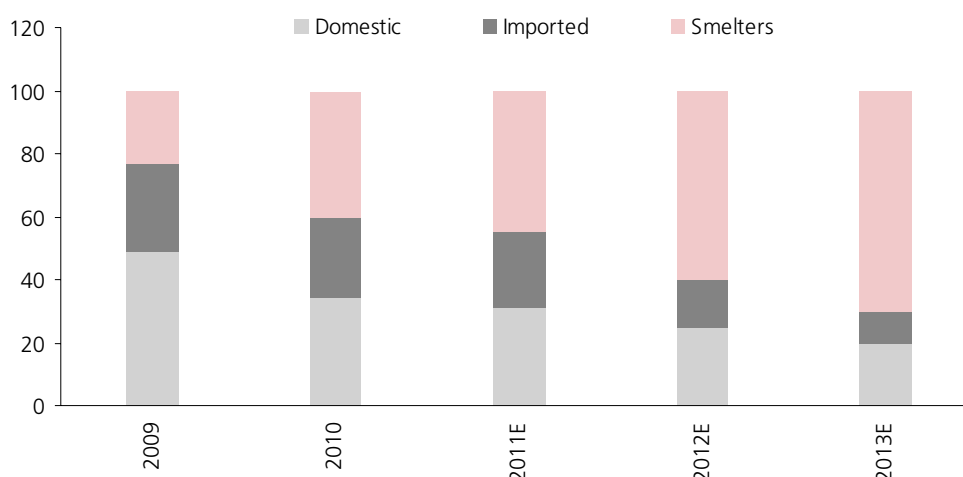
We estimate industrial EBITDA margins to decline by 1.1% over the next two years driven by pricing pressure in both telecom and UPS segments.

**Exhibit 16: Increase in lead from smelters will be key to maintaining EBITDA margins**  
March fiscal year-ends

	2009	2010	2011E	2012E	2013E
Captive lead consumption	23	40	45	60	70
Lead consumed (tonnes)	154,908	174,519	203,286	232,622	263,160
Captive lead procurement (tonnes)	35,629	69,808	91,479	139,573	184,212
Imported/domestic lead procured (tonnes)	119,279	104,711	111,807	93,049	78,948
Average imported/domestic lead price (Rs/tonne)	114,250	103,967	111,245	120,144	126,152
Average captive lead price (Rs/tonne)	106,252	96,689	103,458	111,734	117,321
Average lead cost/tonne	112,410	101,056	107,741	115,098	119,970
Captive lead sourcing benefit	285	508	712	1,174	1,627
Net sales (Rs mn)	33,930	37,940	44,257	52,089	60,057
Positive impact on EBITDA margins (bps)	0.8	1.3	1.6	2.3	2.7
<b>EBITDA margins without captive smelter benefit</b>	<b>15.3</b>	<b>22.1</b>	<b>17.8</b>	<b>17.6</b>	<b>17.5</b>
<b>EBITDA margins after captive smelter benefit</b>	<b>16.1</b>	<b>23.4</b>	<b>19.4</b>	<b>19.9</b>	<b>20.2</b>

Source: Company, Kotak Institutional Equities

**Exhibit 17: Smelter contribution is increasing in lead raw material sourcing**  
March fiscal year-ends, 2009-2013E

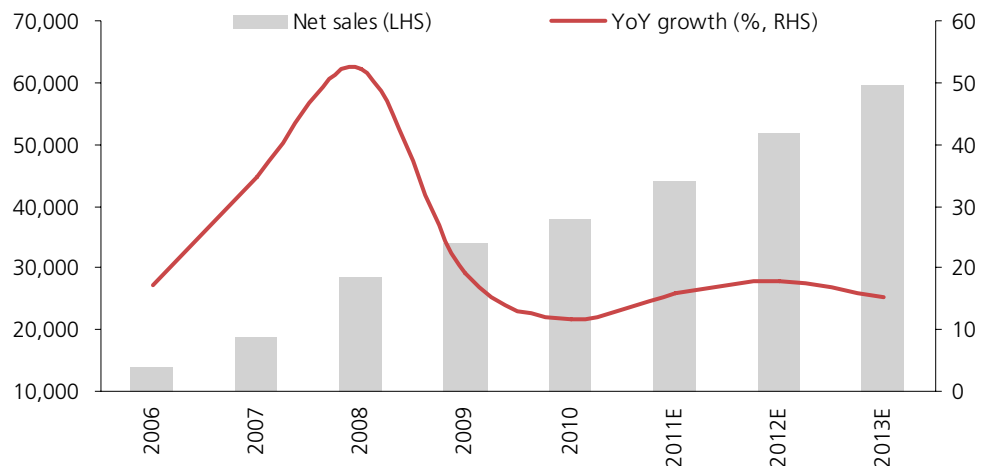


Source: Company, Kotak Institutional Equities

## FINANCIALS

We expect revenue CAGR of 16% over FY2011-2013E driven by 18% CAGR in the automobile battery segment. We expect the replacement segment to grow at 20% CAGR versus 16% CAGR for the OEM segment, driven by an increase in the market share of Exide from unorganized players as capacity constraints ease. We estimate revenue CAGR for the industrial battery segment to increase at 14% over the same period.

Exhibit 18: Revenues have grown at 29% CAGR over FY2006-2010  
March fiscal year-ends



Source: Company, Kotak Institutional Equities

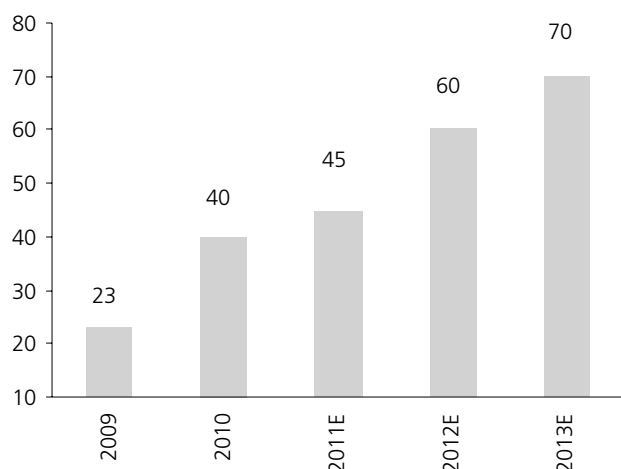
### Ramp-up in smelter production could ease raw material cost pressures

Exide has increased lead sourcing from its smelters to 45% from 23% in FY2009. The company plans to increase sourcing from these smelters to 70% by FY2013E, which would reduce the volatility of earnings due to a lower reliance on imports and aid EBITDA margins given that lead sourced from smelters is 7-8% cheaper than imported lead. We estimate the increase in sourcing from lead smelters would help improve EBITDA margins by 1.6-2.7% over FY2011-2013E, offsetting the impact of increasing lead prices and slower growth of the industrial battery segment.

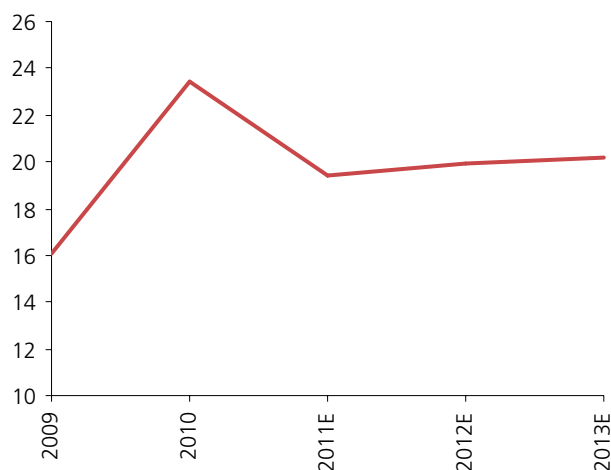
Exhibit 19: Exide Industries, profit and loss statement for smelters, March fiscal year-ends, 2009-2013E

	2009	2010	2011E	2012E	2013E
Capacity (MT)	96,000	96,000	122,400	140,000	185,000
Tonnage sold (MT)	52,187	75,347	91,479	139,573	184,212
Utilization (%)	54.4	78.5	74.7	99.7	99.6
Lead sales (Rs million)	6,561	8,331	10,874	17,842	25,038
Avg lead price (Rs/MT)	125,728	110,573	118,867	127,832	135,918
YoY chg (%)		(12.1)	7.5	7.5	6.3
Gross sales	6,872	8,731	11,578	18,896	26,483
Sales tax, VAT	959	940	1,238	2,060	2,912
<b>Net sales</b>	<b>5,913</b>	<b>7,791</b>	<b>10,340</b>	<b>16,836</b>	<b>23,571</b>
% YoY		31.8	30.4	60.9	39.1
Raw Materials	5,413	6,609	8,787	14,442	20,270
Employee cost	66	97	114	139	169
Manufacturing exp	161	233	273	342	426
SG&A	69	142	172	273	378
less: withdrawn from RVS	(6)	(10)	—	—	—
<b>Total expenses</b>	<b>5,702</b>	<b>7,071</b>	<b>9,346</b>	<b>15,195</b>	<b>21,243</b>
<b>EBITDA</b>	<b>211</b>	<b>721</b>	<b>994</b>	<b>1,641</b>	<b>2,328</b>
Other income	56	74	85	90	95
Interest exp	95	49	40	37	34
Depreciation	23	58	59	66	74
PBT	148	688	980	1,628	2,315
Tax	54	237	343	570	810
<b>PAT</b>	<b>94</b>	<b>452</b>	<b>637</b>	<b>1,058</b>	<b>1,505</b>
EPS	0.1	0.5	0.7	1.2	1.8
Raw material to net sales (%)	91.5	84.8	85.0	85.8	86.0
Gross margins (%)	8.5	15.2	15.0	14.2	14.0
Employee cost to net sales (%)	1.1	1.2	1.1	0.8	0.7
Other exp to net sales (%)	3.8	4.7	4.3	3.7	3.4
EBITDA margins (%)	3.6	9.2	9.6	9.7	9.9

Source: Company, Kotak Institutional Equities

Exhibit 20: Contribution of smelters in total lead requirement  
March fiscal year-ends

Source: Company, Kotak Institutional Equities

Exhibit 21: EBITDA margins expected to improve with better  
automotive battery mix  
March fiscal year-ends

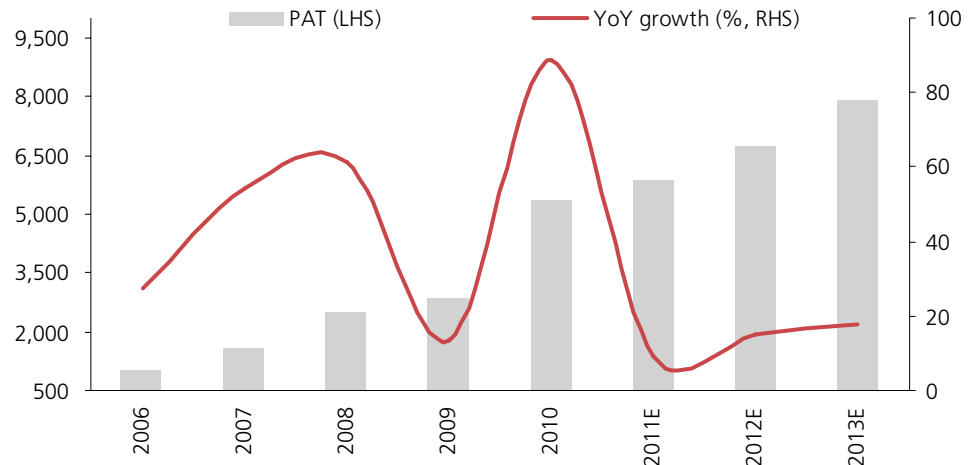
Source: Company, Kotak Institutional Equities

### We expect earnings to grow at 18% CAGR over FY2011-2013E

We forecast earnings to grow at 18% CAGR over FY2011-2013E driven by 16% revenue CAGR and 80 bps improvement in EBITDA margins. We expect depreciation expenses to increase as new capacities come on stream.

**Exhibit 22: 52% CAGR in profits reported over FY2006-2010**

March fiscal year-ends



Source: Company, Kotak Institutional Equities

### Margins have declined sharply in 3QFY11 driven by capacity constraints

Exide's EBITDA margins declined to 15% in 3QFY11 versus 23% in 1QFY11. This sharp drop in EBITDA margins was due to several factors (1) the company faced capacity constraints and hence could not supply batteries to high margin replacement automotive segment, (2) margins of the industrial segment declined due to a sharp dip in telecom battery demand and fall in margins in UPS segment. However, we expect EBITDA margins to increase over the next few quarters driven by (1) a 3% increase in prices in the replacement automotive battery segment in January 2011 and increase in capacities, which has improved supplies to the replacement segment, and (2) uptick in inverter demand in the summer seasons which has higher margin.

Exide plans to increase 4-wheeler battery capacity to 10.6 mn from April 2011 and 12 mn by October 2011 from its current 9.6 mn. Two wheeler battery capacity will be expanded to 21 mn by end of FY2013 from 10 mn currently. The company plans to spend Rs4 bn to increase capacity including a new plant at Ahmednagar in FY2012.

### Strong return ratios and free cash flow yield should support valuations

Exide has generated ROEs in excess of 20% over the past five years, driven by healthy revenue growth and increase in EBITDA margins. The company has also generated excess free cash to fund its capital expenditure plans and also invest in loss making ING Vyasa Life insurance company. We expect healthy return ratios to continue and generate strong free cash flow yield of 4-5% over FY2012-2013E.

Exhibit 23: Exide Industries, profit and loss statement, March fiscal year-ends, 2008-2013E (Rs mn)

	2008	2009	2010	2011E	2012E	2013E
Gross Sales	36,060	42,334	45,417	53,321	62,758	72,358
Excise Duty	4,491	4,644	3,283	4,266	5,021	5,789
Sales tax and Octroi	3,119	3,759	4,195	4,799	5,648	6,512
<b>Net Sales</b>	<b>28,449</b>	<b>33,930</b>	<b>37,940</b>	<b>44,257</b>	<b>52,089</b>	<b>60,057</b>
Raw Materials	18,741	22,484	21,807	27,172	32,396	37,705
Employee Cost	1,510	1,709	2,252	2,635	2,898	3,188
Power & Fuel Cost	1,007	1,189	1,358	1,589	1,716	1,853
Freight and forwarding	599	859	1,052	1,262	1,388	1,527
Publicity, sales promotion	361	290	431	517	569	626
Other expenses	1,537	1,952	2,146	2,517	2,770	3,025
Total expenses	23,754	28,483	29,046	35,692	41,738	47,924
<b>EBITDA</b>	<b>4,695</b>	<b>5,448</b>	<b>8,894</b>	<b>8,565</b>	<b>10,351</b>	<b>12,133</b>
Other Income	65	65	121	887	1,011	1,145
Depreciation	642	679	807	830	987	1,098
Interest Expense	374	479	103	65	51	56
Profit Before Tax	3,744	4,354	8,106	8,556	10,325	12,124
Tax Provisioning	1,240	1,510	2,735	2,652	3,201	3,759
Exceptional Expenses / (Income)	—	—	—	469	—	—
<b>PAT (Reported)</b>	<b>2,504</b>	<b>2,844</b>	<b>5,371</b>	<b>6,373</b>	<b>7,124</b>	<b>8,366</b>
<b>Pre - exceptional PAT</b>	<b>2,504</b>	<b>2,844</b>	<b>5,371</b>	<b>6,045</b>	<b>7,124</b>	<b>8,366</b>
EPS FD (Rs)	3.1	3.6	6.3	7.1	8.4	9.8
DPS FD	0.4	0.6	1.0	0.6	0.6	0.6
Excise duty as a % of gross sales	12.5	11.0	7.2	8.0	8.0	8.0
Sales tax as a % of gross sales	8.7	8.9	9.2	9.0	9.0	9.0
Raw material as a % of net sales	65.9	66.3	57.5	61.4	62.2	62.8
Employee cost as a % of net sales	5.3	5.0	5.9	6.0	5.6	5.3
Power cost as a % of net sales	3.5	3.5	3.6	3.6	3.3	3.1
Freight exp as a % of sales	2.1	2.5	2.8	2.9	2.7	2.5
Sales promotion as a % of sales	1.3	0.9	1.1	1.2	1.1	1.0
Other expenses as a % of net sales	5.4	5.8	5.7	5.7	5.3	5.0
<b>EBITDA margin (%)</b>	<b>16.5</b>	<b>16.1</b>	<b>23.4</b>	<b>19.4</b>	<b>19.9</b>	<b>20.2</b>

Source: Company, Kotak Institutional Equities

Exhibit 24: Exide Industries, balance sheet, March fiscal year-ends, 2008-2013E (Rs mn)

	2008	2009	2010	2011E	2012E	2013E
<b>Sources of Funds</b>						
Share Capital	800	800	850	850	850	850
Reserves & Surplus	9,464	11,704	21,348	27,126	33,655	41,426
<b>Total Shareholders Funds</b>	<b>10,264</b>	<b>12,504</b>	<b>22,198</b>	<b>27,976</b>	<b>34,505</b>	<b>42,276</b>
Secured Loans	2,724	1,796	2	—	—	—
Unsecured Loans	774	1,376	898	500	500	500
<b>Total Debt</b>	<b>3,498</b>	<b>3,172</b>	<b>900</b>	<b>500</b>	<b>500</b>	<b>500</b>
Deferred Tax Liability	479	412	590	590	590	590
<b>Total sources of funds</b>	<b>14,241</b>	<b>16,087</b>	<b>23,687</b>	<b>29,066</b>	<b>35,595</b>	<b>43,366</b>
<b>Application of funds:</b>						
Gross Block	10,975	12,567	13,365	17,365	19,865	22,365
Less: Accum. Depreciation	5,424	5,887	6,598	7,427	8,414	9,512
<b>Net Block</b>	<b>5,551</b>	<b>6,680</b>	<b>6,767</b>	<b>9,937</b>	<b>11,451</b>	<b>12,853</b>
Capital Work in Progress	467	173	378	378	378	378
Net Fixed Assets	6,018	6,853	7,144	10,315	11,828	13,230
Total Investments	5,183	6,682	13,354	13,986	16,886	20,786
<b>Current Assets</b>						
Inventories	5,707	4,385	6,068	7,072	8,432	9,814
Sundry Debtors	2,592	2,310	2,546	3,031	3,568	4,114
Cash and Bank Balance	17	337	29	678	1,663	2,984
Loans and Advances & Other CA	448	387	476	500	550	600
<b>Total current assets</b>	<b>8,765</b>	<b>7,419</b>	<b>9,118</b>	<b>11,281</b>	<b>14,213</b>	<b>17,511</b>
Current Liabilities	4,671	3,807	4,943	5,415	6,230	7,060
Provisions	1,054	1,059	985	1,102	1,102	1,102
Total current liabilities and provisions	5,725	4,866	5,929	6,517	7,332	8,162
Net Current Assets	3,040	2,552	3,189	4,765	6,881	9,349
<b>Total Application of Funds</b>	<b>14,241</b>	<b>16,087</b>	<b>23,687</b>	<b>29,066</b>	<b>35,595</b>	<b>43,366</b>
Net debt/equity (x)	0.34	0.23	0.04	(0.01)	(0.03)	(0.06)
Book value per share (x)	12.8	15.6	26.1	32.9	40.6	49.7
ROAE (%)	29.5	25.0	31.0	24.1	22.8	21.8
ROACE (%)	33.4	34.3	38.1	32.5	31.9	30.6
Debtor days	33	25	24	25	25	25
Creditor days	48	32	38	38	38	38
Inventory days	111	71	102	95	95	95

Source: Company, Kotak Institutional Equities

Exhibit 25: Exide Industries, cash flow statement, March fiscal year-ends, 2008-2013E (Rs mn)

	2008	2009	2010	2011E	2012E	2013E
Profit before tax	3,744	4,354	8,106	8,556	10,325	12,124
Tax Paid	(1,240)	(1,510)	(2,735)	(2,652)	(3,201)	(3,759)
Change in DTL	33	(67)	178	—	—	—
Add: D&A	642	679	807	830	987	1,098
Miscellaneous expenditure written off	—	—	—	—	—	—
Chg in Debtors	(1,108)	282	(236)	(485)	(536)	(546)
Chg in Loans & Advances	(160)	62	(89)	(24)	(50)	(50)
Chg in other CA	(1,744)	1,002	(1,375)	(1,004)	(1,360)	(1,382)
Chg in CL	1,440	(863)	1,136	471	815	830
Chg in Provisions	183	5	(74)	117	—	—
Change in Working Capital	(1,390)	488	(637)	(926)	(1,131)	(1,148)
<b>Cash Flow from Operations</b>	<b>1,788</b>	<b>3,944</b>	<b>5,718</b>	<b>5,807</b>	<b>6,980</b>	<b>8,316</b>
Capex	(1,692)	(1,515)	(1,098)	(4,000)	(2,500)	(2,500)
Change in Investments/Assets including goodwill	(1,403)	(1,499)	(6,672)	(633)	(2,900)	(3,900)
<b>Cash Flow from Investing Activities</b>	<b>(3,095)</b>	<b>(3,014)</b>	<b>(7,770)</b>	<b>(4,633)</b>	<b>(5,400)</b>	<b>(6,400)</b>
Change in Debt	251	(326)	(2,272)	(400)	—	—
Change in Equity	50	—	50	—	—	—
Change in Reserves	1,379	(43)	5,175	—	(0)	0
Dividend and Dividend Tax	(374)	(561)	(902)	(595)	(595)	(595)
<b>Cash Flow from Financing Activities</b>	<b>1,306</b>	<b>(930)</b>	<b>2,052</b>	<b>(995)</b>	<b>(595)</b>	<b>(595)</b>
Extraordinary Items + Tax Adjustments + others	3	320	(308)	469	—	—
Increase/(Decrease) in Cash	3	320	(308)	649	985	1,321
Opening Cash and Bank Balance	14	17	337	29	678	1,663
Closing Cash and Bank Balance	17	337	29	678	1,663	2,984

Source: Company, Kotak Institutional Equities

## RISKS

We believe key downside risks for Exide would be slower-than-expected ramp-up in the capacity of lead smelters and unforeseen levels of competition in the automotive replacement battery market and industrial battery market.

### Industry-specific downside risks

- ▶ Slower-than-expected growth in the automotive replacement battery market due to an increase in competition from unorganized players resulting in a decline in revenues and EBITDA margins for Exide Industries
- ▶ Increase in replacement cycle of batteries due to improvement in battery life which could lead to lower-than-expected growth in replacement volumes
- ▶ Longer-than-expected improvement in telecom replacement battery market which could lead to decline in telecom battery volume growth
- ▶ Delay in ordering by railways for signaling systems
- ▶ Greater than expected increase in lead prices which could lead to decline in EBITDA margins

### Company-specific downside risks

- ▶ Lower-than-expected ramp-up in smelter capacities could result in decline in EBITDA margins as Exide will have to rely more on outside lead which is expensive than the lead produced from smelters
- ▶ Inability of Exide to increase market share from unorganized players, especially in two-wheeler batteries
- ▶ Delays in capacity ramp-up could pose risks on account of a decline in market share which would impact revenues
- ▶ Greater-than-envisaged increase in losses in ING Vyasa Life Insurance business, which could lead to higher contribution from Exide to fund those losses

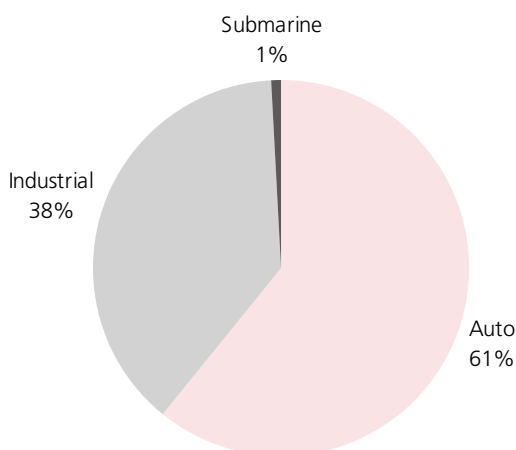
## COMPANY PROFILE

Exide Industries is the leading automobile and industrial battery manufacturer in India. The company's edge comes from its unparalleled distribution network, excellent customer relationships and strong brand loyalty. It is well positioned to benefit from strong auto demand in India as its vast distribution network is a key entry barrier for the new players, in our view.

Exide Industries is the leading battery manufacturer in India with an installed capacity of 9.6 mn four-wheeler batteries, 10 mn two-wheeler batteries and 1,750 mn ampere hour industrial batteries in FY2010. Exide commands a ~70% market share in OEM battery segment, ~68% market share in the organized replacement battery segment and ~70% market share in UPS/power back up systems. The company manufactures a wide range of storage batteries ranging from 2.5 ampere hour to 15,000 ampere hour capacity from its six manufacturing plants across India. Exide Industries has established an extensive sales and distribution network that includes a dedicated in-house sales force for OEMs and approximately 38,500 retail outlets for aftermarket sales that include 12,500 dealers spread across 202 cities in India. Exide's automotive segment accounts for 61% of total revenues while the industrial segment accounts for 38% of total revenues.

The replacement automotive segment is the key contributor to revenues and earnings for Exide due to its high profitability versus sales to OEM customers. The replacement auto segment contributes ~73% of auto revenues and ~91% of automotive segment EBITDA. In the industrial segment, UPS/power back up segment is the key to industrial segment revenues (contributes 72% of industrial revenues) and is likely the highest profitable segment in the industrial segment as well.

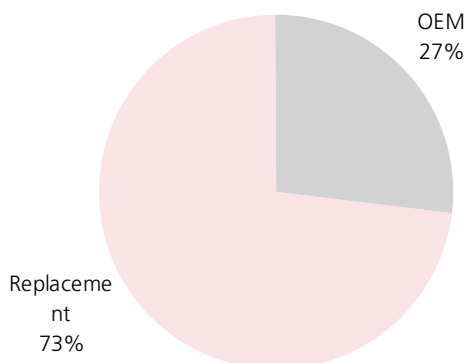
**Exhibit 26: Automotive segment contributes 61% of gross revenues**  
Revenue mix, FY2010, March fiscal year-ends



Source: Company

**Exhibit 27: Replacement auto segment forms 73% of automotive gross revenues**

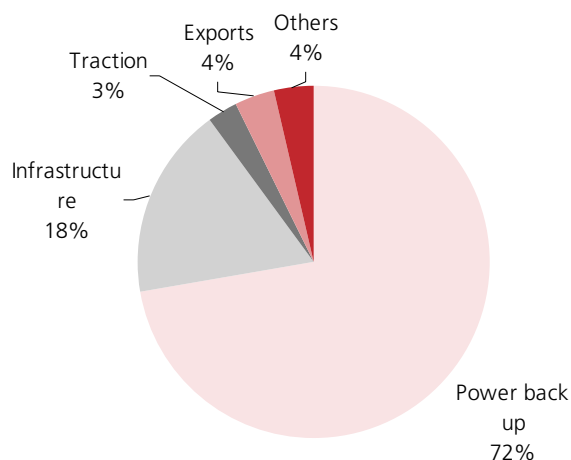
Automotive revenue mix, FY2010, March fiscal year-ends



Source: Company

**Exhibit 28: Power back-up segment forms 72% of industrial gross revenues**

Industrial revenue mix, FY2010, March fiscal year-ends



Source: Company

**Exhibit 29: Industrial battery segment summary**

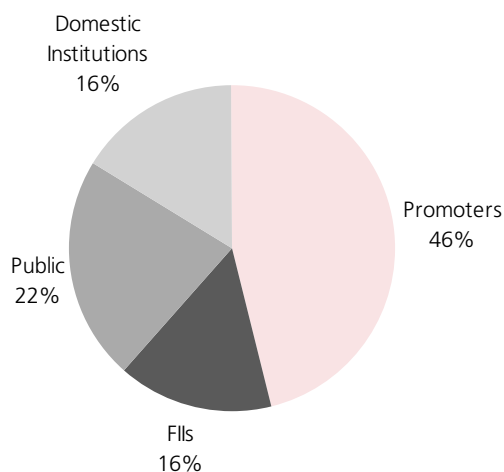
March fiscal year-ends

Industrial Segment	Type of battery used	Major customers	Application	Revenue contribution to overall industrial segment revenues (FY2010)	Revenue contribution to overall revenues (FY2010)
UPS systems, power back up and inverters	Flooded flat pasted, flooded tubular and valve regulated lead acid batteries (VRLA)	American Power Corporation, NTPC	Power back up systems in offices, malls, power stations	72.0	27.7
Telecom	Tubular batteries and VRLA	Telecom companies	Telecom tower base stations	20.0	8.0
Railways	VRLA	Indian Railways	Signalling, coach and track lighting	1.7	0.4
Traction batteries	Tubular batteries	Godrej, Mcneil, Voltas, Maini	In Fork Lifts	2.7	1.0
Exports	Flooded Plante and tubular batteries	customers in Australia, Japan, Korea, Germany etc	primarily traction batteries	3.6	1.3

Source: Company, Kotak Institutional Equities

The company also has a 50% stake in ING Vysya Insurance Limited (IVL), a joint venture with ING Group, Netherlands, a significant player in the global life insurance industry. Under the terms of the joint venture agreement, Exide could not divest its stake in IVL until October 2010. IVL began its operations in September 2001 and currently services more than 1 mn customers. Exide has invested Rs6.3 bn in ING Vysya Insurance Limited and the business has been making losses since its inception.

**Exhibit 30: Exide Industries, shareholding pattern**  
As of December 31, 2010



Source: Bombay Stock Exchange

**Exhibit 31: Key management personnel**

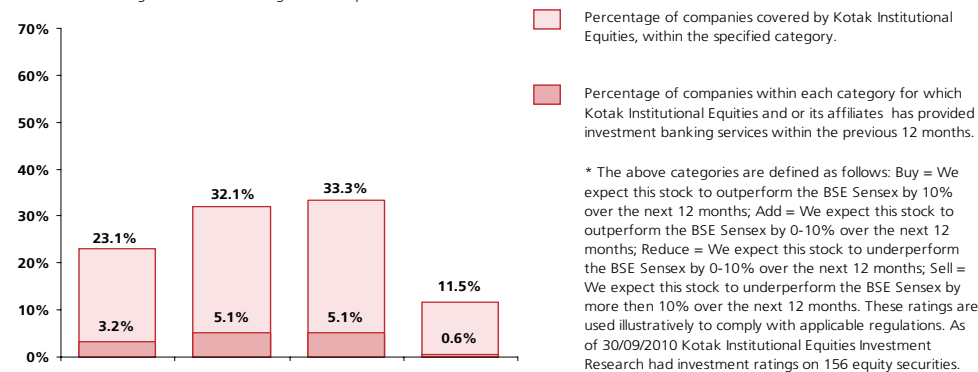
Person	Designation	Key achievements
Mr. Rajesh Gordhandas Kapadia	Chairman and Non Executive Independent Director	He is a practicing Chartered Accountant and Senior Partner at G.M.Kapadia and Company. He has been with the company since June 1991
Mr. Rajan B. Raheja	Vice Chairman and Non Executive Independent Director	He has wide range of experience in industry and business. He has been in the company since December 1991
Mr. T.V.Ramanathan	Managing Director and CEO	He is a Chartered Accountant and has 41 years experience in different organisations including World Bank and United Breweries group. He has been in the company's board since May 1996
Mr. Gautam Chatterjee	Director- Industrial	He holds a engineering and a MBA degree from IIM A. He has been with the company since May 1996
Mr. Paban Kumar Katakya	Director - Automotive	He has a engineering degree and has been with the company since March 2005. He has more than 20 years experience in battery business
Mr. A.K.Mukherjee	Chief Financial Officer	He is a CA and a cost accountant. He has been with the company since 1998

Source: Company

"I, Hitesh Goel, hereby certify that all of the views expressed in this report accurately reflect my personal views about the subject company or companies and its or their securities. I also certify that no part of my compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report."

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Distribution of ratings/investment banking relationships

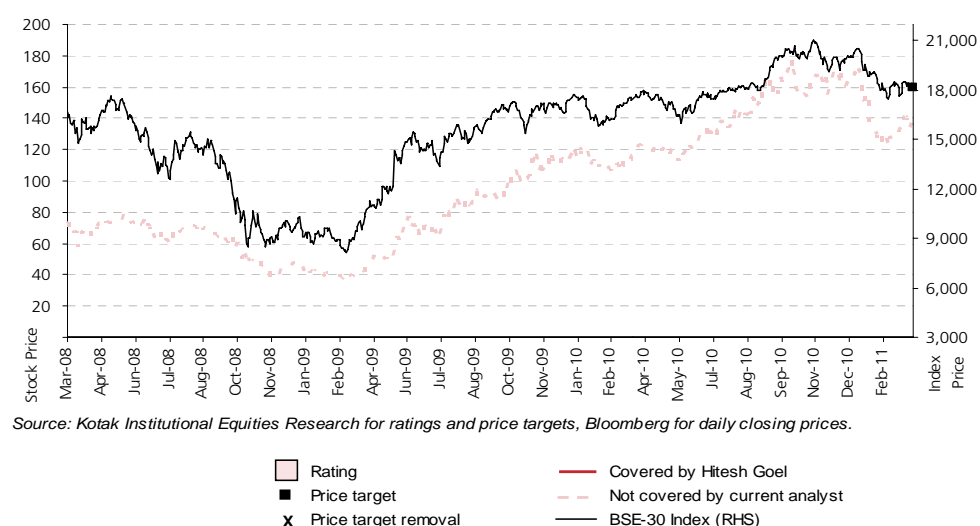


Source: Kotak Institutional Equities

As of September 30, 2010

**Exide Industries (EXID.BO)**

Kotak Institutional Equities rating and stock price target history



The price targets shown should be considered in the context of all prior published Kotak Institutional Equities research, which may or may not have included price targets, as well as developments relating to the company, its industry and financial markets

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Companies that the analyst mentioned in this document follow

Covering Analyst: Hitesh Goel	
Company name	Ticker
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Bajaj Auto	BJAT.BO
Bharat Forge	BFRG.BO
Exide Industries	(EXID.BO)
Hero Honda	HROH.BO
Mahindra & Mahindra	MAHM.BO
Maruti Udyog	MRTI.BO
Tata Motors	TAMO.BO

Source: Kotak Institutional Equities research

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**ADD.** We expect this stock to outperform the BSE Sensex by 0-10% over the next 12 months.

**REDUCE.** We expect this stock to underperform the BSE Sensex by 0-10% over the next 12 months.

**SELL.** We expect this stock to underperform the BSE Sensex by more than 10% over the next 12 months.

Our target price are also on 12-month horizon basis.

#### Other definitions

**Coverage view.** The coverage view represents each analyst's overall fundamental outlook on the Sector. The coverage view will consist of one of the following designations: **Attractive, Neutral, Cautious.**

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