



28 January, 2008

Key Data	(INR)
CMP	80
Target Price	100

Key Data	
Bloomberg Code	CHLR IN
Reuters Code	EXID.B0
BSE Code	500086
NSE Code	EXIDEIND
Beta (1 year)	0.16
Face Value (INR)	1
Market Cap. (INR mn.)	64000
52 Week High (INR)	90.9
52 Week Low (INR)	38.8
Avg. Daily Volume	44,5871
F&0	NA

Shareholding	%
Promoter (Foreign)	48.87
Mutual Funds / UTI	9.74
Financial Institutions / Banks	0.08
Insurance Companies	12.22
Foreign Institutional Investors	9.13
Bodies Corporate	8.03
Individuals/Others	11.92
Total	100

As on 31st December 2007

(Rs. mn)	FY07	FY08E	FY9E
Net Sales	19,808.3	27,418.6	36,577.9
Sales Growth (%)	34.8	38.4	33.4
Operating Profits	3,177.8	4,455.5	5,687.9
OPM (%)	16.0	16.3	15.6
PAT	1,580.4	2,328.2	3,037.8
PATM (%)	8.0	8.5	8.3
EPS (Rs.)	2.1	2.9	3.8

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Exide Industries Ltd

COMPANY'S BACKGROUND

Exide Industries Limited (EIL) was incorporated in January 1947. It manufactures secondary (rechargeable) lead acid storage batteries for automotive and industrial applications in capacities ranging from 2.5 Ampere-Hour (Ah) to 20600 Ah. Its products are sold under the Exide, Dagenite, SF (Standard Furukawa), Dynex and Index brands. It is one of the five companies in the world, which has the capability to manufature submarine batteries. The company has plants at Chinchwad, Shamnagar, Haldia, Hosur, Taloja, Bawal, Chennai and Mumbai.

INVESTMENT RATIONALE

Market leader in automotive segment - Exide is India's largest manufacturer of automotive lead storage batteries, with 78% market share in Original-Equipment Manufacturing(OEM) and 80% market share in passenger car market in India. The company will benefit from steady passenger-cars sales growth as it also has the power to pass on higher lead costs to OEMs. The growth in the OEM segment is expected to continue at 12 % whereas additional sales are likely to come from new model launches and replacement market. EIL has recently, recived order for car batteries for Tata Motors' small car 'Nano' (Expected in H2FY09).

Industrial market to remain strong - EIL has 50% share of the industrial-battery market in India (Source: EIL), which contributes to 40% of its revenue. It is the only manufacturer of high margin sub-marine batteries, which it supplies to the Indian Navy and to countries like Germany and Russia. Currently it has orders for submarine-batteries from Indian Navy. The industrial-battery segment, which caters to demand from Indian Railways, Telecom and Power firms, with current orders for submarine-batteries from Indian Navy should support sales growth. Motive power (impart motion to machinery or a motor) is another growth area. The product commands good margins and has tremendous potential for exports. On increased demand, the company is doubling its capacity for motive power batteries at its Haldia Plant.

Focusing on Replacement market - EIL's market share in auto replacement market including unorganized segement is 35% (Source: EIL). In FY07, this segment reported a growth of 22% despite the competitive domestic scenario and continued import of cheaper batteries from China and Thailand. With the organized segment now forming 55% of the total replacement market from a level of 30% a few years back, EIL is expected to benefit due to its relationship with OEMs and strong brand recall. The auto sector has seen tremendous growth in the last few years and this growth will translate into high replacement demand in the coming years. In the industrial battery business also, EIL is trying to focus more on high margin business. Incremental sales from this segment will augur well for the company's profitability. Therefore, the company is restricting OEM supply (in digital inverters and un-interrupted power supply systems manufacturer) where margins are low and re-channeling supplies to replacement market.

Insurance investment to create shareholder value - EIL owns 50% stake in ING Vysya Life Insurance Company Ltd., which will accrue a lot of value to the shareholders, particularly, when EIL intends to unlock value from this venture. During

FY07, EIL invested an additional amount of Rs 1000 mn to fund the future capital requirement and maintain its shareholding to 50% in ING Vysya Life Insurance Company Ltd. To match the growth rate of industry, ING Vysya has almost doubled the distribution network by adding 15,063 agents, 2205 employees and 87 branches in FY07. Over the last three years market share in terms of first year premium have dropped from 6.5% in FY05 to 2.8% in FY07, which was due to capital constraint. The Company has already announced its plans to raise capital, which would help to regain its lost market share.

We estimate the value of insurance venture at Rs 12 per share of EIL in FY08E and Rs 17 per share of EIL in FY09E. We have assumed a 50% premium growth in FY08E and 40% premium growth in FY09E with New Business Achieved Profit (NBAP) margin of 17% and a NBAP multiple of 16x in our assumptions.

Both organic and inorganic growth opportunities - EIL intends to double its production of automotive and industrial batteries in phases by FY10. The capacity expansion would be in all the plants during FY08 with an initial infusion of Rs 1500 mn. It has already completed three acquisitions in the recent past, as a pat its inorganic growth.

- It recently announced 26% stake in its traction-batteries distributor in Australia for US\$ 0.8 mn. It targets to grow its traction-battery sales from 0.4m units to 1m units in the next couple of years.
- It has also bought the 49% balance stake in its 51%-owned subsidiary that manufactures battery chargers, making it a 100% subsidiary of the company. Manufacturing of battery charger is a focus area for EIL and is a healthy-margin business with gross margins in the range of 30-40%.
- EIL has acquired a 100% stake in a smelting unit for Rs 220m to reduce dependence on outsourced/imported lead.

VALUATION

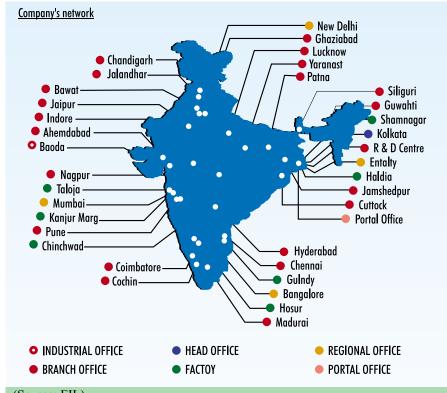
At the current market price of Rs 80, EIL is trading at 27.6x FY08E and 21.2x FY09E earnings. Excluding the value of its insurance business (Rs 17 based on FY09E estimates), EIL is trading at 21.8x FY08E and 16.7x FY09E earnings on a standalone basis. Based on a PE multiple of 22x, based on FY09E EPS and adding the value of insurance subsidiary at Rs 17 per share, we recommend a BUY rating on the stock with a target price of Rs 100 (upside of 25%).

	FY08E	FY09E
EPS (Rs)	2.9	3.8
P/E (x)	27.6	21.2
Insurance value (per share) FY09E (Rs)	17.0	17 .0
P/E excl insurance Value (x)	21.8	16.7
Multiple on core business (x)	22 .0	22 .0
Value of EIL's core business (Rs)	63.7	83.2
Insurance value (per share) (Rs)	17 .0	17 .0
Target Price (Rs)	81.0	100 .0
Upside (%)		25 .0

Wide distribution network and multi location set up

COMPETITIVE ADVANTAGE

- **Scale of operations-** EIL has mass production capabilities, which helps it in servicing the OEMs with timely supplies. It is the largest producer of batteries in India, which helps it in bidding for large orders both domestic and international.
- Multi-location advantage and Wide distribution network EIL's network is spread throughout India and its factories are geographically distributed at strategic locations all over the country. This helps in better servicing of clients, which is crucial for OEMs.



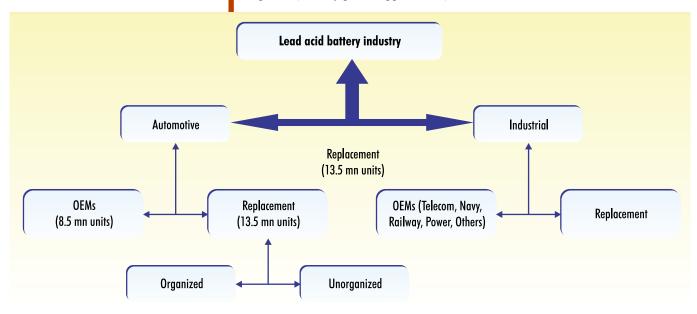
(Source: EIL)

The Batmobile (Annexure - I) service of EIL continues to maintain an average response time of 28 minutes across 29 major cities in India and has logged over 5,30,000 calls. This represents a unique consumer interface, which the company continues to provide free of any charge to the vehicle owners for its services. This helps in creating brand recognition for the company along with replacement sales.

- Technological excellence In order to maintain technological leadership, Exide R&D has been actively developing differentiated battery technologies for tropical countries. The R&D division of EIL is recognized by the Department of Scientific & Industrial Research, Ministry of Science & Technology, Government of India since April 1977. Leadership through innovation has become a crucial selling proposition for EIL wherein it has helped to garner orders from the Navy and other technologically savvy industries like telecom.
- Strong brand equity Currently, EIL's various brands (Exide, Index, SF) are
 well recognized by both retail as well as OEMs clients which helps it in getting
 new as well as replacement orders.

INDUSTRY ANALYSIS

Lead acid batteries are the most widely used secondary batteries in the world. Applications for these batteries range from small portable electronics to large military systems. Key demand driver for lead acid battery is automotive segment and industrial segment (standby power applications).



(Source: ACMIIL research)

EIL's market share is 78% in automotive OEM segment

The automotive segement comprises OEM and replacement markets. Majority of the OEMs get their demand fulfilled domestically and from organized players like Exide, Amara Raja, Tudor India, AMCO Batteries, whereas the replacement market depends more on unorganized and smaller players due to their cost effectiveness. Exide is the market leader in the OEM segment with 78% market share and Amara Raja has around 12% market share. The two-wheeler market is dominated by AMCO with 67% market share and the rest 33% is with EIL. The manufacturers earn very low margins in OEM segment. The pass-through contracts are used to pass on the fluctuation in lead prices. In the **replacement market** local vendor's market share is slowly decreasing due to the poor quality of products being offered and large players like Exide getting aggressive due to the high margins in this space. As per industry sources demand for unbranded batteries could rise, particularly among users of twowheelers. However, Four-wheeler consumers would prefer branded ones. Old batteries are being replaced by new lead acid batteries, valve regulated batteries which are maintenance free. Accordingly, OEMs are also making a shift from conventional batteries to maintenance free batteries.

Market size of the total four wheeler batteries and commercial vehicles in India is reported to be around 9 mn units per annum of which the replacement market demand size is around 7 mn units. Two wheeler sector needs about 13 mn batteries every year of which 50% is in the replacement market space (source: Industry expert).

Under **industrial segment** lead acid batteries find application in telecom, power projects, railways, inverter systems, submarine and office power supply back up. The batteries are used for storing power for back up and emergencies. Exide and Amara Raja are the key players catering to a large part of the market. There is a growing preference for the technologically superior Valve-Regulated Lead Acid (VRLA, Annexure - II) batteries.

Sole manufacturer of submarine batteries in India

Organised players will benefit from government 's action to control environment pollution

Able to control raw material cost more efficiently amongst its peer group

Power plants - The three main applications for battery energy storage systems at power plants include spinning reserve at generating stations, load leveling at substations, and peak shaving on the customer side of the meter. These batteries are also used for safety purposes like shutting down of turbines after electricity is totally cut-off.

Telecom sector - In the telecom sector storage batteries are used in remote base stations. If services are to be provided without interruption, some kind of energy reserve is needed to provide power during periods when the AC utility power is unavailable. The VRLA (Annexuer - II) batteries are very popular in this segment.

Tractions batteries – These are used for providing motive power for electric or hybrid vehicles. Its usage is mainly for motive power for forklift trucks, electric carts and electric boats among others.

Railways - In railways batteries are used for back up at signaling centers, level crossings, switching centers, signals and security lighting.

Storage batteries – These are used by the Navy for Submarines. Currently, EIL is the sole manufacturer of these kind of batteries in India. The market for such techno savvy products expands beyond domestic markets. Exide has supplied submarines batteries to Russia and Germany in the past. Realization for a submarine battery is as much as Rs. 30 mn.

REGULATORY ENVIRONMENT AND DUTY STRUCTURE

The manufacturers, dealers, assemblers and importers of batteries in India are governed by the Batteries (Management and Handling) Rules, 2001 under which they have to ensure safe collection, recycling and disposal of the lead batteries. Companies which are operational for over three years should send 90% of the sold batteries for recycling and safe disposal. The regulation issued against unorganized smelters has helped organized players gain market share. As a result, EIL's retail sales have grown by 22% during FY07. Organized players are likely to benefit from the government taking stringent action to control environmental problems in pollution creating industries.

PEER GROUP

EIL is the most cost efficient manufacturer of storage batteries in India. While EIL has been able to contain raw material costs at 59% of sales, its competitors like Amara Raja and AMCO Batteries have been hit hard due to the unprecedented rise in lead prices. Amara Raja's cost of raw materials is as much as 66% of sales, the highest among the peer groups. However, net profit margin for EIL is low due to its dependence on OEMs, which is a low margin business. Going forward, EIL intends to increase its sales contribution from replacement market to shore up its margins.

Company name	Exide Inds.	Amara Raja Batt	Tudor India
Net Sales	Rs 20,829.9 mn	Rs 5,943.8 mn	Rs 976.8 mn
Raw material cost as % of net Sales	59.3	66.3	62.3
Power & fuel cost as % of net Sales	4.3	2.5	5.6
Employee cost as % of net Sales	5.8	4.5	4.1
Total expenditure as % of net Sales	89.9	89.1	92.0
OPM (%)	10.1	10.9	8.0
NPM (%)	7.5	7.9	9.0
ROCE (%)(Latest)	30.5	24.3	15.8
RONW (%)(Latest)	27.4	21.1	20.5
Price Earning (TTM)	22.8	10.8	12.1
Installed Capacity (no.)	18,307,585.0	4,300,000.0	600,000.0
Capacity Utilized (%)	93.1	72.5	63.5
Source: Capitaline			

COMPANY'S HISTORY

The company was started as an Associated Battery Makers (Eastern) Ltd., a trading entity of Chloride Electrical Storage Company (Chloride Group, UK) in 1916. It set up its first manufacturing unit in Shamnagar, West Bengal in 1946. In August 1973, the name of the company changed to Chloride India Ltd. and then to Chloride Industries in October 1988. In 1994, the company entered into a technical collaboration agreement with Shin-Kobe, Hitachi's manufacturing arm, for manufacture of valve regulated lead acid storage (maintenance free) batteries to cater to the telecommunication, power and UPS manufacturing sectors. The same year, another agreement was entered into with 'Varta' Germany for transfer of technology relating to most sophisticated submarine and industrial batteries. The name of the company was changed to Exide Industries Ltd. in August 1994, after the Rajan Raheja group acquired control of the company. In November 1997 the company took over Standard Batteries Ltd., the second largest battery manufacturer in India.

Research and Development (R & D)- EIL has an R&D base in Kolkata. The Company has received numerous awards for its quality procedures and has strong technological platforms for its products. It has a number of international patents to its credit. In FY07, the Japanese patent office has granted a patent for leak retardant automotive batteries and this indicates that EIL's efforts towards intellectual properties development makes it a market leader. Also a technology transfer agreement was signed with Furukawa of Japan, for production of VRLA motorcycle batteries in FY07. EIL has received accredition from organizations, such as the Department of Atomic Power and Bhabha Atomic Research Centre, for successful execution of contracts for various types of DC and AC power systems for their nuclear-power plants. Also, it has recently received accredition from NTPC. Superior technology and execution capability will help EIL maintain its market leadership position.

Collaborations- EIL has various collaborations across the globe to support its R&D functions and is also exploring technical joint venture opportunities in Australia and Germany.

A number of international patents registered in its name

Having technical collaborations with international companies for different battery segments

Collaborator	Area
Shin-Kobe Electric Machinery Co. Ltd., Hitachi Group (Japan)	Automotive and VRLA Batteries
The Furukawa Battery Co. Ltd (Japan)	VRLA motorcycle batteries
Oldham Crompton Batteries Ltd (UK)	Mining Cap Batteries
ING Group	Life Insurance Business
(Source: EIL)	

Subsidiaries-

Subsidiaries	Country of incorp.	Voting power (as at end FY07)	Sales (Rs. mn)	PAT (Rs. mn)
Chloride International Ltd (CIL)	India	100 %	98.4	2.3
Caldyne Automatics Ltd. (Caldyne)	India	51 %	230.8	3.8
Chloride Batteries S.E. Asia Pte. Ltd (CBSEA)	Singapore	100 %	926.7	35.1
Espex Batteries Ltd (Espex)	UK	51 %	169.6	4.5
Associated Battery Manufacturers (Ceylon) Ltd (abML)	Sri Lanka	61.5 %	419.88	11.2
(Source: EIL)				

- Chloride International Ltd. has operations in non-conventional energy systems such as solar lanterns, solar home lights.
- Caldyne Automatics Ltd. is into design and manufacturing of battery chargers, DC/AC distribution boards, which find wide application in the industrial segment, specially the power industry.
- Chloride Batteries S.E. Asia Pte. Ltd is into trading of EIL's products mainly
 motive power batteries. Motive power batteries or traction batteries are used in
 forklift trucks, battery powered vehicles etc.
- Espex Batteries Ltd markets and sells products of EIL, mainly traction batteries and chargers.

In FY01, EIL acquired 49% stake in Associated Battery Manufacturers (Ceylon) Ltd., Sri Lanka to counter cheap imports from China, Bangladesh, and Thailand. It was a three-way joint venture between EIL, Standard Finance Corporation and a Sri Lankan bank. Later Sri Lankan bank sold out its stake to EIL. In FY05, EIL raised its stake from 49% to 61.5% keeping in mind the FTA, which India has signed with Thailand and Sri Lanka. The Company has a manufacturing base in Sri Lanka and also trades in EIL's products manufactured in India.

Acquisition-

- 1. In October 2007, the company finalized the acquisition of 100% shareholding in Tandon Metals Pvt Ltd, located near Pune (Maharashtra) which is in the business of smelting primary and secondary lead with a capacity to recycle 10,000 tonnes of used lead. The backward integration is expected to help EIL to use more recycled lead in its battery manufacturing facilities. Tandon Metals is an important supplier of lead alloys of good quality to EIL facilities located in Western India. EIL is now planning to scale up the production capacity of this unit in a cost effective manner in a shortest possible time. As per EIL management, this will give economies of scale, which will assist in import substitution.
- 2. In July 2007, the board of directors of the company gave approval for acquisition of a 26% stake in Ceil Motive Power Pty Ltd, a joint venture company in Australia for marketing of traction batteries. EIL has been exporting traction batteries to Australia through Ceil Motive Power Pty Ltd (CMPPL) for last 18 months. This equity participation would ensure that CMPPL would henceforth be marketing



- only EIL products. EIL currently exports 400,000 traction batteries a year of which 100,000 are exported to Australia. Exports to Australian market are expected to double in the next few years and the company hopes to become the market leader in traction battery segment in Australia in two years.
- 3. The board also approved the acquisition of the balance 49% shareholding in its existing 51% subsidiary company Caldyne Automatics. This acquisition will help EIL to look for synergies in production and marketing of its products in the industrial segments.

Capex-

- In 2006, EIL planned to set up a new factory in Haldia, West Bengal dedicated to the export market for industrial range of batteries. Work on the project is going on in full swing and the first phase of the project is expected to be complete by the end of the current financial year.
- 2. During FY08, EIL will infuse Rs 1500 mn for capacity expansion in all its plants. EIL is expected to invest Rs 4000 mn in the next three years to double its production capacity of automotive batteries, two-wheeler batteries and batteries for industrial applications in phases by FY10. During FY07, production of automotive batteries for four wheelers increased from 4.6 mn units to 5.6 mn units. Production of two-wheeler batteries rose from 5.8 mn units to 7 mn units. Industrial battery production increased from 800 mn ampere-hours to over 1-bn ampere hours.

Largest lead acid battery manufacturer in India

COMPANY ANALYSIS

Products

EIL is the largest lead-acid-battery manufacturer in India, which broadly serves automotive and industrial (including submarine) segments.

	Market Share as a % of the total segment
Telecom	30%
Railways	30%
Auto (OEM)- Passenger cars	80%
Auto (OEM) - Overall	78%
Auto (Replacement) - Overall including unrecognized	35%
Source: EIL	

Bagged order from Tata Motors' 'Nano' 5 5

Automotive segment:

The company is the market leader in automotive segment. It powers almost all the cars which have been introduced / launched in India by major manufacturers such as Honda, Hyundai, Suzuki, Tata, Toyota and Mahindra. In FY07 the company remained the sole supplier for all Tata Motors passenger vehicles, including the Indigo, the new Indica and its various variants. Exide batteries are now fitted in all models of Toyota including the Innova petrol and diesel versions and the Corolla. It was the initial supplier to Logan from the Mahindra Renault stable. It has exclusive arrangements with Honda Civic, Maruti Swift diesel, Zen Estilo and Hyundai Verna. EIL also has order for manufacturing batteries for Tata Motors'small car 'Nano'. The company may set up a plant in Singur for the purpose. However, the company expects that the profit from the order will come in only after Tata Motors places replacement orders for batteries, likely after 1-1.5 years.

Extended the coverage to over 30000 villages to boost tractor retail sales

Market presence:

Automotive batteries-

- a) Two & Three wheelers
- b) Passenger vehicles
- c) Commercial vehicle
- d) Tractors

EIL has been the market leader in the OEM segment of tractor batteries but has little presence in the replacement market of the same. During FY07, under Project Kisan (tractor battery retail sales) EIL extended coverage to over 30,000 villages in 250 districts. The Company is expecting a major growth in this segment in the current fiscal. In FY07, sales of tractor batteries in this segment grew by 24%, and EIL expects this to improve substantially this year. EIL is looking at 15 % market share in the replacement market for tractor batteries in the next three years. At present, EIL enjoys 8 % market share in the segment with 0.15 mn units' production. Looking at the growing demand for traction batteries, the company is setting up a new plant for export of traction batteries at Haldia.

Major Customers:

Cars	Fiat, General Motors, Honda, Hyundai, Mitsubishi, Suzuki, Telco, Toyota
Commercial Vehicles	Iveco, Leyland, Piaggio, Mazda, Telco
Motorcycles	Bajaj Auto, Honda, Yamaha
Tractors	Eicher Tractors, John Deere, Mahindra Tractors, New Holland Tractors
Special Purpose Vehicles	Caterpillar India, JC Bamford
Source: EIL	

Dominant player in industrial segment with market share of 50%

Industrial segment:

EIL is a dominant player in the industrial battery segment with 50% market share, with a product range covering capacities from 2.5 Ah to 10,000 Ah and more. EIL manufactures industrial batteries for the power, telecom, infrastructure projects, computer industries, railways, (used in Mines) and defence sectors. The Company is the largest manufacturer of caplamp batteries in the world and is one of the few manufacturers of submarine batteries in the world, though only one in India.

Batteries sales for industrial applications grew significantly during FY07. The submarine division did extremely well during the year, with orders from the Indian Navy as well as an export orders from Algeria. EIL is now in the process of developing prototypes for testing batteries for submarines, being sourced from France. It is also a large player in the motive power battery segment and has dedicated the Haldia plant in West Bengal for this purpose. In the industrial applications segment, EIL is hoping to grab a significant demand from the Railways. It is also looking at opportunities to supply batteries for telecom towers.

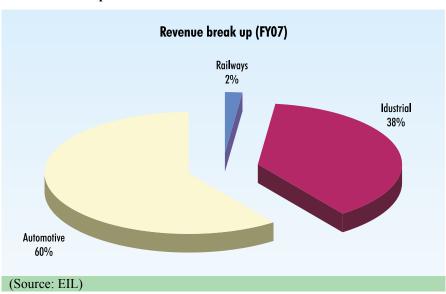
Customers: NTPC, BHEL, BEL, VSNL, Emerson, ABB, Godrej among others.

New Product development & launches:

- 1. The company launched solar water heating systems in 2007. EIL is deploying technology to its advantage. A 100-litre solar water heater, which costs around Rs 17,000 can replace a geyser for residential use and save up to 1,500 units annually. It would also help in reduction of 1.5 tonnes of carbondioxide per annum.
- 2. A deep cycling VRLA battery was assembled in February 2007 for electric bikes.
- 3. New products for telecom and railways are also planned for FY08.

- 4. Tele-tubular batteries for telecom application have been supplied to BSNL sites for trial. Commercial production of the same may start by next fiscal.
- 5. The "MATRIX" brand batteries which are completely sealed maintenance free batteries, with a four year warranty period, is another product which will establish EIL's credentials on the technology front. This product will cater to Hyundai's full range, including Santro, Accent, Sonata and Getz besides Toyota Corolla, Indica, Honda City and Maruti vehicles.

Revenue break-up:



Pricing/Margins:

The key element in pricing power is product differentiation through quality of product, after sales service and various types of product guarantees and warranties offered by the manufacturer. Therefore, 1-year warranty battery may cost less than a 3-year warranty battery.

Automotive- EIL can pass on any increase in lead prices to the OEMs and has to pass on any reduction in prices as well. Thus, whether lead prices rise or fall, the impact on this segment will be minimal. In the replacement market however, price environment is very competitive and any increase or decrease in the lead prices has a direct impact on margins in this segment. This segment has a large portion of local and unorganized players along with low cost import from countries like Thailand, Malaysia etc.

	OEM Automotive	Replacement	Industrial
Margins (%)	3-4	22-24	13-14

Although prices in the OEM segment are at lowest level possible, it is a key segment, as much of the replacement demand is dependent upon what the OEM has initially used. Increasing share of replacement market sales are likely to add to the margins of the company.

BUSINESS STRATEGY

The company intends to increase its share of replacement battery market along with other high margin products from the industrial segments. During the last one year the company has focused on capturing the rural market with tractor and inverter batteries. The company is hopeful to increase the market share from current 8% to 15% in rural replacement sales of tractor batteries over the next three years.



Asit C. Mehta

Export of industrial batteries will increase going forward

EIL is protected by price escalation clause in case of OEMs

Apart from the current business growth plans it also intends to retain its market leadership position wherein it will set up new production facilities to cater to demand from new OEM products (like the TATA's Nano). EIL's pan India presence along with the long standing relationship with automobile OEMs and a strong brand recall will help it maintain its leadership position in this competitive market. It has adequate scale of operations, which gives it an upper hand in relation to its peers in bidding for large projects. Moreover, EIL's backward integration into recycling of lead (acquisition of a smelting plant at Pane) will reduce its reliance on other smaller players for recycling purpose and reduce its overall cost of operations along with better quality management.

EXPORTS

During FY07, exports of automotive batteries remained at lower levels primarily on account of a lack of capacity. Exports of traction batteries during the same period recorded impressive gains and continued to be a profitable business. Australia, UK, South Africa, South Korea and the European markets continued to be focus areas for exports. Exports formed only 5% of total sales for EIL in FY07 out of which 60% were in the industrial segment, mostly for traction batteries sold to subsidiaries in UK and Singapore. Going forward, there is little scope for export of automotive batteries but industrial batteries, especially traction batteries and submarine batteries will continue to grow. Margins in the submarine batteries are as much as 30%, however, demand is erratic.

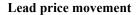
RAW MATERIAL SOURCING

A significant portion of EILs' business is covered by price fluctuation clause that minimizes the adverse effect of raw material price movements. This helps EIL in protecting its margins by passing on the incremental cost to OEMs. In a scenario where the price of lead has been highly volatile, the company is planning to increase the reliance on domestic sourcing of recycled lead. EIL's imported raw material share has decreased from 40.2% in FY06 to 37.4% in FY07 and indigenous share of raw material increased from 59.8% in FY06 to 62.6% in FY07.

Lead consumption in the country is estimated at 0.275 mn tonnes. In India, Hindustan Zinc is the sole producer of lead with a capacity to produce 85,000 tonnes but it produced only 48,800 tonnes last year. The rest of the demand was met from recycling, which is estimated to be over hundred thousand tonnes, and imports. For the lead-acid battery, lead makes up 70% of the raw material costs.

Lead - Outlook for 2008

As per the forecast of International Lead and Zinc Study Group, global usage of refined lead metal is to increase by 4.1% in FY08 to 8.67 mn tonnes. The forecast for Global lead mine production indicates increase by 10.4% to 4.02 mn tonnes in FY08. The shortfall is likely to be contributed by recycling of used lead. According to 25 global commodity strategies polled by Reuters Mean Price for FY08 for lead is \$1850/1900 per ton. Hence, we may expect lead prices to stabilize at current levels with down trend.





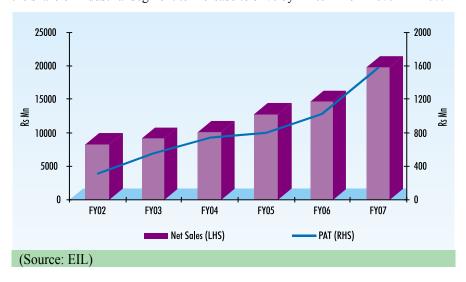
INVESTMENT CONCERNS

- 1. Lead prices: Any sharp increase or decrease in lead prices will impact the company accordingly.
- 2. Regulatory environment: Any change in regulations leading to environmental concerns and re-cycling of used lead may increase costs for the company.
- 3. There is a threat not only from low cost imports from China and the ASEAN but also from Thailand as discussions are on for including more products under the free trade agreement.

FINANCIAL PERFORMANCE

Revenue- In the last 13 years, Exide's turnover grew almost 10 times, from Rs 2380 mn to Rs 2,3826.8 mn. Going forward we expect net sales to grow at a CAGR of 35% over FY07-FY09E. The growth in four-wheeler, commercial vehicle, tractors, replacement market and the industrial market will be growth drivers.

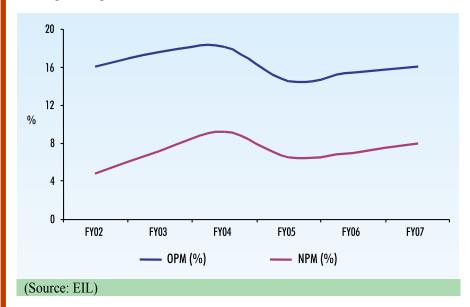
We have estimated a 38% Y-o-Y growth in gross sales in FY08E and 33% Y-o-Y growth in gross sales in FY09E. We estimate that sales growth rates will be more driven by industrial segments thereby increasing their share in overall pie. We estimate the share of industrial segment to increase to 51% by FY09E from 40% in FY07.



Sales expected to grow at a CAGR of 35% over FY07-FY09E

Revenue Breakup	FY08E	FY09E	
Automotive	53	49	
OEMs	25	21	
Replacement	28	28	
Industrial	47	51	
(Source: ACMIIL research)			

Margins- Better inventory management and prudent purchase decisions helped the company in improving margins in FY07 despite the fact that lead prices touched all time high during FY07.



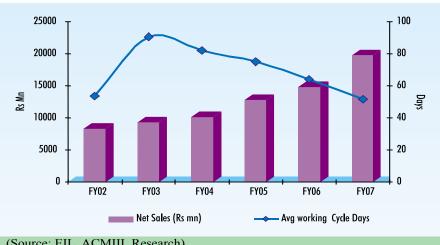
Debt - During FY07 the Company repaid ECB of Japanese Yen worth of US \$20 mn. ICRA has given MAAA rating (indicating highest credit quality and carrying the lowest credit risk) to EIL's medium debt and A1+ to its short-term debt (indicating highest credit quality and carrying the lowest credit risk in the short term) in August 2007.

Return ratio - EIL has made net investments (excluding losses) of Rs 2363.8 bn for the year ended FY07. However, the insurance venture is not yielding any profits to the consolidated earnings of the company. Removing the investments from its capital employed, we witness a steep increase in its return ratios, which justifies its leadership position and ability to generate returns on its capital base from the core business.

Rs Mn	FY07	FY08E	FY09E
EBIT	2,688	3,888	5,107
Capital Employed	9,184	12,303	15,240
Net investment in insurance	2,364	2,864	3,364
Adjusted Capital employed	6,820	9,439	11,876
Avg adj capital employed	6,495	8,130	10,658
Adjusted RoCE (%)	41	48	48
RoCE (%)	31	36	37
(Source: ACMIIL research)			

Working capital management - Average inventory turnover days have steadily reduced from 72.9 days in FY03 to 63.4 days in FY07. Average collection days have also reduced from 62.8 days in FY03 to 33.1 days in FY07.

Financing - the Company's recent rights issue (Rs 1500 mn) ensures sufficient funds. The issue proceeds will be utilized in augmenting the long-term resources of the company. It may also be required for equity infusion in ING Vysya Life.



(Source: EIL, ACMIIL Research)

THE LIFE INSURANCE BUSINESS

EIL has made strategic investment in an insurance venture (ING Vysya Life Insurance Company), wherein it owns 50% stake. It has also recently infused further capital in this venture to support the high growth rates and maintain its shareholding at 50%. This venture will create value for shareholders as and when the management of EIL intends to unlock some value from this venture by either selling some stake to another strategic investor or listing it on the capital markets.

Post the recent liberalization of the insurance sector (inclusion of private players), the insurance industry has witnessed strong growth rates coupled with better quality of products and services. The level of insurance penetration has improved in the country with insurance premiums increasing from 1.2% of GDP in FY00 to 4.1% of GDP in FY07 (Source: Insurance Regulatory and Development Authority). The life insurance premium contributions per capita have increased from Rs 280 in FY00 to Rs 1,510 in FY07.

In 2001, ING joined hands with Vysya Bank, to form ING Vysya Life Insurance, which was the first Bancassurance venture in the country, with major presence in Southern India. ING Vysya Life Insurance is jointly owned by ING Group (26%), Exide Industries (50%) and the balance is held by Ambuja Cement and Enam Group. ING Vysya has announced its plans to raise Rs 1 bn, which will shore up its paid-up equity to Rs 8.9 bn by the year-end. According to Mr. Kshitiz Jain (CEO - ING Vysya), the Company is expected to increase its capital to Rs 13.4 bn by FY09 end. ING Vysya has expanded its network to 300 branches in November 2007 up from 195 branches during the corresponding period of last year, which covers 188 cities in the country.

Low penetration levels, huge untapped rural market, increased level of consumer awareness, tax benefits and better products will give a push to the future growth prospects of the Indian insurance industry. There is enough room for all the existing as well as any new players to thrive in this market.

ING Vysya recorded new business premium of Rs 4.67 bn with the capital base of 7.9 bn in FY07. ING Vysya's market share by first year premium among private sector had dropped considerably from FY05 (6.5%) to 2.8% in FY07, mainly due to capital constraints. To match the growth rate of industry, ING Vysya has almost doubled the distribution network by adding 15,063 agents, 2205 employees and 87 branches in FY07.

EIL holds 50% stake in **ING Vysva Life Insurance**

Insurance premium increased from 1.2% of GDP in FY00 to 4.1% of GDP in FY07

ING Vysya increased its number of branches from 195 to 300

Methodology used for insurance valuation:

As per a sub committee set up by Insurance Regulatory and Development Authoity (IRDA), the embedded value method is an indicator of the value of the existing insurance business. In the absence of any standard valuation methodology at present, New Business Achieved Profits (NBAP, Annexure - III) is used for valuation purpose. We have applied the NBAP multiplier method to arrive at a value for EIL's insurance venture.

Assumption:

Indian life insurance industry is expected to report a 30% CAGR growth over the next few years, however we have assumed a higher growth rate of 50% in FY08E and 40% in FY09E for ING Vysya life insurance. We have taken the higher growth rate keeping in mind the low base effect, expansion plans, new capital infusion and strong parentage support of ING which has increased focus on its Indian operations. We believe private sector players are in a better position to adapt to regulatory changes and market dynamics to plan or launch customized products thereby gaining market share from LIC. We have witnessed that LIC (the largest PSU player) has lost market share since the entry of private sector players in the life insurance business. LIC's market share has decreased from 98.4% in FY02 to 60.6% in FY07.

We have estimated the value of insurance venture at Rs 12 per share of EIL in FY08E and Rs 17 per share of EIL in FY09E. We have assumed a 50% premium growth in FY08E and 40% premium growth in FY09E with NBAP (New Business Achieved Profit) margin of 17% and a NBAP multiple of 16x in our assumptions.

	FY07	FY08E	FY09E
First Year Business Premium (Rs mn)	4,674	7,011	9,815
NBAP Margin (%)	17	17	17
NBAP (Rs mn)	795	1,192	1,669
Multiple (x)	16	16	16
Enterprise Value (Rs mn)	12,713	19,070	26,697
Exide's Shareholding (%)	50	50	50
Value for Exide (Rs mn)	6,357	9,535	13,348
Value Per share for Exide Shareholders (Rs)	8	12	17
(Source: IRDA, ACMILL Research)			

Key risk to the insurance venture:

Insurance being a relatively new field for private sector players creates a lot of risk for investors in these ventures due to the lack of clarity on the regulatory / accounting front. Any unfavorable norms / accounting policies can prolong the break even period or delay the process of unlocking value.

EIL's core business also lacks synergy with this insurance business wherein the management may not be able to infuse regular capital or take active part in day-to-day operations thereby leading to losses / depletion of net worth.

In insurance, expenses are high for getting new business premiums. In case of ING Vysya Life Insurance it is 83% (estimated). Any increase in cost will adversely affect the NBAP margin.

VALUATION

At the current market price of Rs 80, EIL is trading at 27.6x FY08E and 21.2x FY09E earnings. Excluding the value of its insurance business (Rs 17 based on FY09E estimates), EIL is trading at 21.8x FY08E and 16.7x FY09E earnings on a standalone basis. Based on a PE multiple of 22x, based on FY09E EPS and adding the value of insurance subsidiary at Rs 17 per share, we recommend a BUY rating on the stock with a target price of Rs 100 (upside of 25%).

Asit C. Mehta Investment Interrmediates Ltd.

Consolidated Profit & Loss Account				Rs in mn	
Particulars	FY05	FY06	FY07	FY08E	FY09E
Net Sales	12,701.4	14,692.2	19,808.3	27,418.6	36,577.9
Total Expenditure	10,862.6	12,420.2	16,630.5	22,963.1	30,890.1
Operating Profits	1,838.8	2,272.0	3,177.8	4,455.5	5,687.9
Other Income	23.0	75.0	69.2	27.4	36.6
EBDIT	1,861.9	2,347.1	3,246.9	4,482.9	5,724.4
Depreciation	553.7	563.9	558.6	594.6	617.6
EBIT	1,308.1	1,783.2	2,688.4	3,888.4	5,106.9
Interest	122.7	236.2	293.0	360.7	511.0
PBT	1,185.4	1,547.0	2,395.4	3,527.6	4,595.8
Taxes	374.6	517.0	815.0	1,199.4	1,558.0
Exceptional item	17.0	-	-	-	-
Profit After Tax before minority Interest	827.8	1,029.9	1,580.4	2,328.2	3,037.8
Minority Interest	1.2	8.9	10.5	12.2	14.3
Profit After Tax After minority Interest	826.6	1,021.0	1,569.9	2,316.0	3,023.5
Growth in sales (%)	26.2	15.7	34.8	38.4	33.4
Operating Profits Growth (%)	0.5	23.6	39.9	40.2	27.7
PAT Growth (%)	-10.5	24.4	53.4	47.3	30.5
(Souce: ACMIIL Research, Company)					

Consolidated Balance Sheet				Rs in mn	
Particulars	FY05	FY06	FY07	FY08E	FY09E
Sources of Funds					
Equity Share Capital	750	750	750	800	800
Reserves and Surplus	4,228.8	4,658.2	4,959.0	8,287.0	10,827.3
Total Shareholders Funds	4,978.8	5,408.2	5,709.0	9,087.0	11,627.3
Growth in networth (%)	22.5	8.6	5.6	59.2	28.0
Total Loan Funds	2,981.2	2,970.7	3,415.4	3,087.0	3,413.1
Minority Interest	52.6	61.5	72.0	84.2	98.5
Deferred tax liability	589.9	514.6	448.5	438.8	429.5
Total	8602	8955	9645	12697	15568
Application of funds					
Gross Block	8,964.6	9,236.0	9,889.1	10,581.3	11,322.0
Less: Accumulated Depreciation	3,967.2	4,522.4	5,015.2	5,609.8	6,227.4
Net Block	4,997.4	4,713.7	4,873.8	4,971.5	5,094.6
Capital Work in Progress	41.2	66.2	334.7	485.4	679.5
Investments	930.3	2,283.8	2,378.2	2,734.9	3,281.9
Net Current Assets	2,633.5	1,891.3	2,058.2	4,505.2	6,512.4
Total Assets	8,602	8,955	9,645	12,697	15,568
(Souce: ACMIIL Research, Company)					

Asit C. Mehta Investment Interrmediates Ltd.

Consolidated Ratios					
Particulars	FY05	FY06	FY07	FY08E	FY09E
Profitability Ratios(%)					
Operating Profit Margin	14.5	15.5	16.0	16.3	15.6
EBDITA Margin	14.7	16.0	16.4	16.4	15.7
EBDT Margin	13.7	14.4	14.9	15.0	14.3
EBIT Margin	10.3	12.1	13.6	14.2	14.0
PAT Margin	6.5	7.0	8.0	8.5	8.3
Avg. RONW	21.0	22.0	31.0	33.2	30.2
Avg. ROCE	18.5	21.7	30.5	36.2	37.1
Per Share(Rs) FVRs 1					
Earnings	1.1	1.4	2.1	2.9	3.8
Cash Earnings	1.8	2.1	2.8	3.6	4.6
Avg. Book Value	5.2	6.2	6.7	8.7	12.5
Valuation Ratios(X)					
P/E	-	-	38.2	27.6	21.2
Cash P/E	-	-	28.2	22.0	17.6
P/BV	-	-	11.9	9.2	6.4
Capital Structure Ratios					
Debt/Equity	0.7	0.6	0.7	0.4	0.3
Current Ratio	2.1	1.6	1.5	1.9	2.4
Turnover Ratios(X)					
Avg.Inventory Turnover	5.4	5.7	5.8	5.6	5.7
Avg.Debtors Turnover	7.7	7.9	11.0	13.1	13.2
Avg. fixedAsset Turnover	1.5	1.6	2.1	2.7	3.3
Avg creditor Turnover	9.1	8.1	8.1	8.3	8.2
(Souce: ACMIIL Research)					

Consolidated Cash Flow				Rs in mn	
Particulars	FY05	FY06	FY07	FY08E	FY09E
Profit Before Tax	1,185.4	1,547.0	2,395.4	3,527.6	4,595.8
Operating Profit before WC changes	1,814.9	2,273.7	3,186.6	4,094.8	5,176.8
Change in Working Capital	(523.1)	510.9	(462.4)	(901.7)	(1,142.5)
Cash generated from Operations	1,291.8	2,784.6	2,724.2	3,193.1	4,034.3
Direct taxes paid(net of refund)	(407.8)	(551.0)	(846.9)	(1,199.4)	(1,558.0)
NET CASH FROM OPERATING ACTIVITIES	884.0	2,233.6	1,877.2	1,993.7	2,476.4
NET CASH USED IN INVESTING ACTIVITIES	(1,580.7)	(1,903.3)	(1,961.9)	(1,172.2)	(1,445.2)
NET CASH USED IN FINANCING ACTIVITIES	1,036.5	(512.2)	(64.3)	439.6	(602.6)
Net Inc/(Dec) in Cash and Cash Equivalent	339.8	(181.9)	(148.9)	1,261.1	428.5
Opening balance	28.9	368.7	186.8	37.9	1,299.0
Cash and Cash Equivalents at End of the year	368.7	186.8	37.9	1,299.0	1,727.5
(Souce: ACMIIL Research, Company)					





Annexure -I

Bat-Mobile: Bat-mobile has been introduced to provide service support to motorists who are otherwise unable to find timely and convenient help nearby. Under this, vans well-equipped with the latest facilities and manned by trained personnel, are placed in strategic locations in the city, ready to rush to the aid of vehicles stalled with battery problems. Central communication centres have been set up with dedicated telephone lines in different cities to receive calls from customers.

Annexure - II

VRLA: VRLA stands for valve regulated lead acid and is the designation for maintenance-free lead-acid batteries. VRLA batteries use much less electrolyte (battery acid) than traditional lead-acid batteries.

Annexure - III

NBAP: NBAP stands for New Business Achieved Profits. It is the present value of the profits generated from the new business written in that year.

Notes:

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Disclosure of Interest	Exide Industries Ltd
1. Analyst ownership of the stock	NO
2. Broking Relationship with the company covered	NO
3. Investment Banking relationship with the company covered	NO
4. Discretionary Portfolio Management Services	NO

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