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STATEMENT OF THE PROBLEM

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HYPOTHESIS (ES)

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

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APPENDIX/ANNEXURE

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FINANCIAL STRUCTURE OF SELECT BATTERY COMPANIES IN ANDHRA PRADESH – AN ANALYTICAL STUDY

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ABSTRACT

Any business enterprise requires a combination of both long term and short term funds so as to equip itself with an appropriate combination of fixed assets and current assets. The long term financial strength as well as profitability of a business enterprise are influenced by its financial structure. The financial structure brings to the fore relative size and changing importance of both long term and short term funds as two components of total capitalization. The aim of present research paper is to analyse the trends in the financial structure of select battery companies in Andhra Pradesh. The present study is based on the secondary data only. The present study needs a ten year period commencing with the financial year 2002-03 and ending with 2011-12. Various tools like trend, average, percentages are applied. Graphs and diagrams are presented to illuminate the facts and figures at appropriate contexts. It reveals that ARBL and NBL, had heavily relied on internal source of funds for meeting their financial requirements. In other words, these companies could find it very easy to generate internal funds to finance their activities. But only one company, HBL had depended more on external funds than on internal funds for financing its projects. Long term funds were more than the short term funds in all the battery companies during the entire study period under observation. Hence all individual battery companies and the industry in Andhra Pradesh were heavily depended on long term funds in order to finance their fixed and current assets requirement.

KEYWORDS

ARBL, HBL, NBL financial structure, Battery Industry in A.P.

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INTRODUCTION

ny business enterprise requires a combination of both long-term and short-term sources so as to equip itself with an appropriate combination of fixed assets and current assets. The long-term sources are required to finance both (i) long term uses i.e., fixed assets and (ii) net working capital. The long term financial strength as well as profitability of a business enterprise are influenced by its financial structure. The term 'financial structure' refers to the left hand side of the balance sheet as represented by 'total liabilities' consisting of current liabilities, long-term debt, preferred and common stock. The financial structure brings to the fore relative size and changing importance of both long-term and short-term funds as two components of total capitalization. It provides an insight into the various types of sources tapped to finance the 'total assets' employed in a business enterprise.

REVIEW OF LITERATURE

Rajeswari Rao¹ (1994) in her study entitled, Impact of capital structure decisions on operating performance of state enterprises in Andhra Pradesh. She concluded that the process of capital structure planning was not a one time job, but needs revision and monitoring throughout the time in different situations. Syam Babu² (2009) in his study on Financial performance of select pharmaceutical companies in South India, observed that the pharmaceutical companies utilized less debt capital. In order to increase the equity shareholders wealth, the pharmaceutical companies have to raise debt capital. Purushothamachari³ (2009) in his study, Financial performance of private sector cement companies in Andhra Pradesh, suggested that the cement companies in Andhra Pradesh should design a balanced capital structure, use fixed assets efficiently, adopt sound credit policies, apply modern inventory and cash management systems and control operating costs effectively in order to improve the financial performance in the future. Padmini⁴ (2012), in her study, Financial performance of Pharmaceutical Industry in India, concluded that there is effective use of long term funds to finance the long term needs and also to finance the core current assets in industry. She suggests that the proportion of proprietary funds have to be increased in order to provide greater coverage to fixed assets in all the pharmaceutical groups.

OBJECTIVE OF THE PAPER

The aim of present research paper is to analyse the trends in the financial structure of select battery companies in Andhra Pradesh.

RESEARCH METHODOLOGY

SAMPLE DESIGN

According to A.P. industries website, four registered battery companies are operating in the state of Andhra Pradesh. They include Nippo Batteries Limited (NBL - 1972), Amara Raja Batteries Limited (ARBL - 1985), Hyderabad Batteries Limited (HBL - 1986) and Energy Leader Batteries India Limited (ELBIL - 2007). In order to carryout time series analysis, the companies with ten years of existence were brought into the sample frame. In other words, the companies, which were established prior to 2002-03 alone, are considered for the purpose of the study. Barring ELBIL, the rest of the battery companies fulfilled this criteria.

DATA BASE

The present study is based on the secondary data only. The data for the study have been primarily obtained from the annual reports of select battery companies in Andhra Pradesh. Relevant information is also gathered from the data published by the reports of battery companies, libraries of various institutions and the companys' website and other related websites on the battery industry were consulted. Also internet, journals, magazines, periodicals and research dissertations on finance and industry have been referred.

PERIOD OF THE STUDY

The present study needs a lengthy period so as to arrive at meaningful and purposeful inferences. Therefore, a ten year period commencing with the financial year 2002-03 and ending with 2011-12 has been adopted.

SCOPE AND LIMITATIONS OF THE STUDY

The present study is confined to issues relating to the study of financial structure of battery industry in Andhra Pradesh. The present study may not be free from limitations. The figures taken from the annual reports have been rounded off to two decimals of rupees in crores. Secondary data have been collected from more

than one source. Hence, there may be slight discrepancies between one source and another on the same variable. The reliability and correctness of calculation and findings depend upon the information obtained through secondary data.

TOOLS AND TECHNIQUES OF ANALYSIS

The data gleaned from the annual reports of select battery companies in Andhra Pradesh has been carefully processed, tabulated, analysed, and interpreted by using well established financial tools. Various tools like trend, average and percentages are applied. Graphs and diagrams are presented to illuminate the facts and figures at appropriate contexts.

FINANCIAL STRUCTURE OF BATTERY INDUSTRY

The term financial structure refers to the left hand side of the balance sheet as represented by total liabilities consisting of current liabilities, long term debt, preferred common stock. The financial structure therefore, includes both short term and long term funds. The financial structure of a business enterprise, therefore, consists of three elements – assets, liabilities and capital. The interrelation of these three elements is indicated by the following equation: Assets = Liabilities + Capital.

The term 'financial structure' is broader in its concept than 'capital structure'. Gestenberg has treated both the terms synonymously and has used it only in its narrow sense, indicating the long-term funds. Walker has considered capital structure as having two connotations, the broader connotation to include both the long-term and short-term funds and narrow connotation to include only long-term funds. Weston and Brigham have clearly brought out the distinction between the two terms. "Financial structure refers to the way the firm's assets are financed. It is the entire right hand side of balance sheet. Capital structure is the permanent financing of the firm, represented primarily by long-term debt, preferred stock and common equity but excludes all short-term credit. Thus, firm's capital structure is only part of financial structure". Similar view is also expressed by Grunewald and Nemmers. Capital Structure = Total Assets – Current Liabilities.

The overall financial structure of select battery companies and the battery industry in Andhra Pradesh has been studied keeping in view of the following aspects:

- Growth in internal and external sources of finance,
- Quantum and structure of total funds,

SOURCES OF FINANCE

Conventionally, the sources of finance are divided into internal and external sources and they together make up fresh capital.

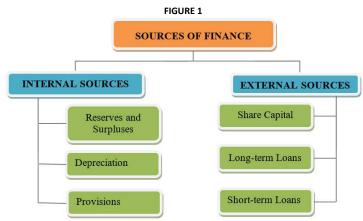
INTERNAL SOURCES

Generally, internal sources refer to the funds generated within the company and they contribute significantly to the financing and growth of companies. The permanence of internal funds minimizes solvency risk. The generation of internal funds reflects the soundness of financial health and buoyancy of a company. On the other hand, heavy dependence on external sources leads the organization into troubles. Whenever there is a shortage of funds in the capital market, the only source available to the organization is internal sources of funds.¹⁰

EXTERNAL SOURCES

External funds refer to the sources of finance external to the firm. They include amounts obtained through the issue of share capital, borrowings from various sources, trade dues and other current liabilities. In companies where there is poor generation of internal sources, the external sources of finance will play a crucial role in financing their requirements.

In order to have a clear understanding of the financing methods and practices followed in battery industry; emphasis has been focused on the study of sources of finance. It enables the analyst to keenly observe the shifts in the financial pattern and also to ascertain the significance of diverse internal and external sources of finance in battery industry in Andhra Pradesh. The sources of finance is shown in Figure 1.

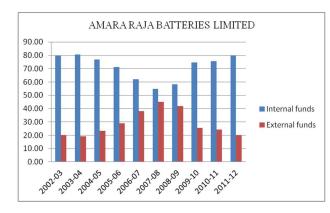


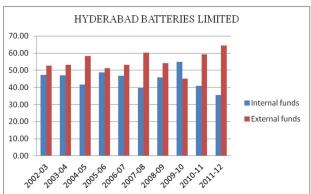
Only year-wise changes in the amounts of various internal and external sources of finance are incorporated for the present analysis. The data pertaining to the structure of internal and external sources of finance for the period from 2002-03 to 2011-12 for the select battery companies and the industry in Andhra Pradesh are embodied in Table 1 and Figure 2.

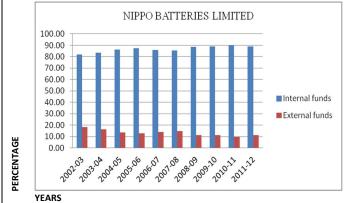
TABLE 1: STRUCTURE OF INTERNAL AND EXTERNAL SOURCE OF FINANCE (Rupees in crores)												
Years	IN	TERNAL FUN	IDS			EXTERNAL F	UNDS	Total	Internal Funds	External Funds		
	Reserves and Sur-	Deprecia-			Share Capi-	Long-Term	Current	Total	Funds	as a	as a % of Total	
	plus	tion	sions		tal	Debt	Debt			% of Total Funds	Funds	
	aja Batteries Limite											
2002-03		46.89	30.18		11.39	9.74	40.15	61.28	302.09	79.71	20.29	
2003-04	163.20	59.16	19.84	242.20	11.39	14.88	31.55	57.82	300.02	80.73	19.27	
2004-05	169.30	72.37	29.39	271.06	11.39	23.31	47.60	82.30	353.36	76.71	23.29	
2005-06	189.90	86.36	48.01	324.27	11.39	37.87	82.09	131.35	455.62	71.17	28.83	
2006-07	232.28	100.95	57.70	390.93	11.39	140.71	87.14	239.24	630.17	62.04	37.96	
2007-08	321.71	121.73	99.34	542.78	11.39	316.26	119.69	447.34	990.12	54.82	45.18	
2008-09		145.77	70.51		17.08	285.87	132.05		1039.79	58.16	41.84	
2009-10	526.56	185.38	153.45	865.39	17.08	91.18	187.27	295.53	1160.92	74.54	25.46	
2010-11	628.85	223.67	157.22	1009.74	17.08	95.04	212.38	324.50	1334.24	75.68	24.32	
2011-12	806.39	266.68	220.71	1293.78	17.08	84.07	223.27	324.42	1618.20	79.95	20.05	
Total	3590.44	1308.96	886.35	5785.75	136.66	1098.93	1163.19 2398.7		8184.53	70.69	29.31	
	(43.87)	(15.99)	(10.83)	(70.69)	(1.67)	(13.43)	(14.21)	(29.31)	(100.00)			
Mean	359.04	130.90	88.64	578.58	13.67	109.89	116.32	239.88	818.45	71.35	28.65	
	ad Batteries Limited				ı	1		1	1	1	1	
2002-03		20.95	11.69		20.07	69.49	32.71	122.27		47.35	52.65	
2003-04		25.75	5.64	113.13	20.07	62.92	45.00	127.99		46.92	53.08	
2004-05	96.75	31.39	12.36	140.50	20.07	112.21	64.14	196.42	336.92	41.70	58.30	
2005-06		38.04	17.69	223.96	22.07	140.10	73.43	235.60		48.73	51.27	
2006-07	215.53	46.34	7.75	269.62	24.28	176.28	105.06	305.62		46.87	53.13	
2007-08	278.36	60.56	13.91	352.83	24.28	352.45	159.58	536.31		39.68	60.32	
2008-09	360.79	87.48	24.09	472.36	24.28	367.57	168.45	560.30	1032.66	45.74	54.26	
2009-10	486.03	115.00	147.51	748.54	25.30	426.97	162.64	614.91	1363.45	54.90	45.10	
2010-11		144.93	11.77		25.30	701.47	224.57	951.34	1607.58	40.82	59.18	
2011-12	404.73	162.49	13.31		25.30	591.03	440.28	1056.61	1637.14	35.46	64.54	
Total	2669.02	732.93	265.72	3667.67	231.02	3000.49	1475.86	4707.37	8375.04	43.79	56.21	
	(31.87)	(8.75)	(3.17)	(43.79)	(2.76)	(35.83)	(17.62)	(56.21)	(100.00)			
Mean	266.90	73.29	26.57	366.77	23.10	300.05	147.59	470.74	837.50	44.82	55.18	
Nippo B	atteries Limited											
2002-03	94.61	62.06	11.65	168.32	3.75	0.00	33.88	37.63	205.95	81.73	18.27	
2003-04		68.23	11.72	184.90	3.75	0.00	32.36	36.11	221.01	83.66	16.34	
2004-05		75.25	56.95	239.12	3.75	0.00	33.99	37.74	276.86	86.37	13.63	
2005-06		82.47	63.17	254.25	3.75	2.50	30.36	36.61	290.86	87.41	12.59	
2006-07		88.57	64.33	262.05	3.75	3.80	35.29	42.84	304.89	85.95	14.05	
2007-08		93.25	11.79	221.42	3.75	3.50	30.99	38.24	259.66	85.27	14.73	
2008-09		98.60	26.25	248.49	3.75	1.80	26.32	31.87	280.36	88.63	11.37	
2009-10		104.27	26.70	262.36	3.75	1.90	26.97	32.62	294.98	88.94	11.06	
2010-11		108.40	26.78	272.48	3.75	0.00	25.71	29.46	301.94	90.24	9.76	
2011-12		113.27	8.10	260.00	3.75	8.87	28.66	32.41	292.41	88.92	11.08	
Total	1171.58	894.37	307.44		37.50	22.37	304.53		2728.92	86.97	13.03	
	(42.93)	(32.77)	(11.27)	(86.97)	(1.37)	(0.50)	(11.16)		(100.00)	06.47	12.52	
	117.16	89.44	30.74	237.34	3.75	2.24	30.45	35.55	272.89	86.47	13.53	
Consolic		420.00	E0 E0	E40.00	25.24	70.00	4067:	224 12	740.00	70.43	20.00	
2002-03		129.90	53.52	519.09	35.21	79.23	106.74	221.18		70.12	29.88	
2003-04		153.14	37.20	540.23	35.21	77.80	108.91	221.92		70.88	29.12	
2004-05		179.01	98.70		35.21	135.52	145.73	316.46		67.28	32.72	
2005-06		206.87	128.87		37.21	180.47	185.88		1206.04	66.54	33.46	
2006-07		235.86	129.78	1	39.42	320.79	227.49	_	1510.30	61.09	38.91	
2007-08		275.54	125.04		39.42	672.21	310.26		2138.92	52.22	47.78	
2008-09		331.85	120.85		45.11	655.24	326.82		2352.81	56.34	43.66	
	1143.98	404.65	327.66		46.13	520.05	376.88		2819.35	66.55	33.45	
	1265.69	477.00	195.77	1938.46		796.51	462.66		3243.76	59.76	40.24	
	1449.75	542.44	242.12	2234.31		683.97	692.21		3656.62	61.10	38.90	
Total	7531.04	2936.26	1459.51	11926.81		4121.79	2943.58		19397.36	61.49	38.51	
Mas	(38.83)	(15.14)	(7.52)		(2.09)	(21.25)	(15.17)		(100.00)	62.10	26.01	
Mean	753.10	293.63	145.95	1192.68		412.18	294.36		1939.74	63.19	36.81	

Source: Annual Reports of select battery companies in Andhra Pradesh

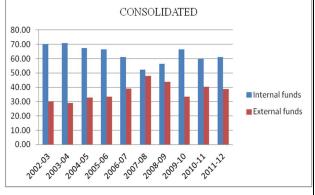
FIGURE 2: INTERNAL AND EXTERNAL FUNDS AS A PERCENTAGE OF TOTAL FUNDS







for the study period. Borrowings seemed to be more acceptable to battery industry.



Amara Raja Batteries Limited

Financial structure of ARBL resembles the overall industry position. The company is finding it very easy to generate internal funds to finance its activities. The internal funds were in positive level in view of earning profits. Its operating revenue position over the years was such that it could even provide for depreciation during the study period. The continuing operating revenues have helped to improve the net worth of the company. The company, in order to finance its activities, had to rely on the internal sources of funds largely. The amount of internal funds acquired increased from Rs.240.81 crores in 2002-03 to Rs.1293.78 crores in 2011-12 and recorded 70.69 per cent of total source of funds. The external borrowed funds were shared more or less equally between long-term and short-term loans contribution worked out to be 13.43 per cent and 14.21 per cent respectively of the total external source of funds. The amount of total external funds increased from Rs.61.28 crores in 2002-03 to Rs.324.42 crores in 2011-12 and formed 29.31 per cent of total source of funds. It may be observed that ARBL had heavily relied upon internal funds for meeting its financial requirements.

Hvderabad Batteries Limited

In HBL, internal funds generated accounted for 43.79 per cent of total funds mobilized from 2002-03 to 2011-12. In internal funds, reserves and surplus occupied a major place followed by depreciation with 31.87 per cent and 8.75 per cent respectively. The amount of provisions moved from Rs.11.69 crores in 2002-03 to Rs.13.31 crores in 2011-12. The company's external funds formed at 56.21 per cent of total funds, which is greater than internal funds by 12.42 per cent. HBL was forced to depend on external sources of funds as it undertook major expansion programme. In the case of borrowings – long-term debt was more than the short-term debt. For the ten-year period, the contribution of long-term and short-term loans recorded 35.83 per cent and 17.62 per cent respectively of the total external sources of funds. Share capital formed 2.76 per cent of total external sources of funds. It is evident that there was an increase in total external sources of funds as a percentage of total sources of funds from 52.65 per cent in 2002-03 to 64.54 per cent in 2011-12. It may be concluded that the company had depended more on external sources of finance when compared to internal sources of finance. All these external funds were used for meeting its financial needs, which may be a good financial practice.

Nippo Batteries Limited

In the case of NBL, the total internal funds so generated, accounted for 86.97 per cent of total funds. NBL was able to generate adequate funds internally. The major components of internal funds were reserves and surplus (42.93 per cent of total internal sources of funds) followed by depreciation and provisions. These variables had formed 32.77 per cent and 11.27 per cent respectively of the total internal sources of funds. External funds in NBL consist of capital and borrowings -long-term as well as short-term. During the period under reference, share capital as a source of external funds, was mobilized to a cumulative amount of Rs.37.50 crores. For the ten-year period, the contribution of long-term and short-term loans worked out to be 0.50 per cent and 11.16 per cent respectively of the total external source of funds. Meagre percentage of long-term borrowed funds was observed in NBL. It may be observed that the company had heavily depended on internal sources of funds.

Consolidated

An observation of the data concerning the financial structure of consolidated position of battery companies (here after termed as battery industry) reveals that these companies relied on internal sources of funds for meeting their financial requirement. In other words, its business operations have been carried on efficiently which resulted in creating internal funds. Internal funds in the battery industry consist of reserves and surplus amounting to a cumulative figure of Rs.7531.04 crores followed by depreciation of Rs.2936.26 crores and provisions of Rs.1459.51 crores. It is noticed that the total internal funds registered Rs.11926.81 crores. In percentage, total of these internal funds formed 61.49 of total source of funds. In this context, it may be pointed out that the internal funds exceeded external funds by 22.98 per cent. Further, it may be stated that the battery industry depends more on internal sources of finance than external sources of finance. External funds in the battery industry consist of capital and borrowings – long-term as well as short-term. During the period under observation, share capital as a source of external funds, was mobilized to a cumulative amount of Rs.405.18 crores. Share capital as an external source of funds was not popular with battery industry in Andhra Pradesh. Of the borrowings, it is surprising to observe that the industry used more long-term debt funds as against short-term funds. Long-term debt formed 21.25 per cent while the percentage of short-term debt was 15.17 per cent and of share capital, 2.09 per cent of total external source of funds

To conclude, the battery industry depended more on internal sources of finance. Percentage of total internal source of funds on the whole contributed to a higher portion of the total source of funds for the battery industry in Andhra Pradesh. Further, the industry relied on long-term funds for financing modernization and expansion programmes. It may be concluded that the financial structure of battery industry was balanced as it has earned profits, which contributed to internal sources of funds.

To sum up, an analysis of individual battery companies under reference reveals that two out of three battery companies i.e., ARBL and NBL, had heavily relied on internal source of funds for meeting their financial requirements. In other words, these companies could find it very easy to generate internal funds to finance their activities. But only one company, HBL had depended more on external funds than on internal funds for financing its projects.

QUANTUM AND STRUCTURE OF TOTAL FUNDS

In the present study funds are, however, divided into two categories, viz., short-term funds and long term funds. The former includes current liabilities and provisions while the latter consists of all funds whose repayment period is more than one year. Thus, long term funds include long-term borrowed funds and also owners' funds. The long term funds for battery industry include net worth as denoted by share capital, reserves & surplus and long term borrowed funds consisting of debentures and other long term loans from financial institutions and government whose repayment period is beyond one year. The short term funds include current liabilities and provisions. The details concerning quantum and structure of long term and short term funds of select battery companies in Andhra Pradesh are presented in Table 2 and Figure 3. The overall picture of long term and short term funds in the battery industry has been studied through the analysis of data contained in this Table.

Amara Raja Batteries Limited

It is obvious that long-term funds went up from Rs.184.87 crores in 2002-03 to Rs.907.54 crores in 2011-12 during the same period while short-term funds increased from Rs.70.33 crores to Rs.443.98 crores. It may be noted that the short-term funds were less than the long-term funds in ARBL. Owned funds which amounted from Rs.175.13 crores in 2002-03, went up to Rs.823.47 crores in 2011-12 with an average of 54.21 per cent of total funds. Borrowed funds had ranged from a minimum of Rs.9.74 crores in 2002-03 to the maximum of Rs.316.26 crores in 2007-08. Current liabilities varied between the lowest of Rs.31.55 crores in 2003-04 and the highest of Rs.223.27 crores in 2011-12. The analysis reveals that the company had largely depended on long-term funds to finance not only its fixed assets but also core current assets requirement.

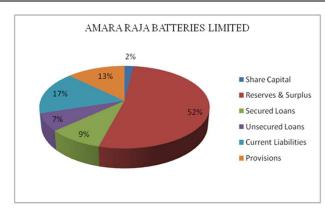
TABLE 2: QUANTUM AND STRUCTURE OF TOTAL FUNDS (Rupees in crores)

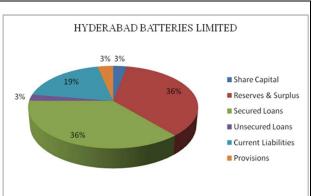
Particulars	2002-03 2003-04					4-05	2005-06		2006-07		2007-08		2008-09		2009-10		2010-11		2011-12		Δνοι	200
r ai ticulai s	Rs. % Rs.		% Rs.		% Rs.		% %	Rs. %		Average Rs. %												
Amara Raja Batteries Lim		/0	NS.	/0	NS.	/0	NS.	/0	ns.	/0	ns.	/0	ns.	/0	NS.	/0	ns.	/0	ns.	/0	ns.	/0
Share Capital	11.39	4.46	11.39	4.73	11.39	4.05	11.39	3.08	11.39	2.15	11.39	1.31	17.08	1.91	17.08	1.75	17.08	1.54	17.08	1.26	13.67	1.99
Reserves & Surplus	163.74	64.16	163.20		169.30		189.90		232.28	43.89	321.71	37.05	388.51	43.46	526.56	53.98	628.85	56.62	806.39	59.67	359.04	52.22
Share holders' funds - I	175.13	68.62	174.59		180.69		201.29		243.67	46.04	333.10	38.36	405.59	45.37	543.64	55.73	645.93	58.16	823.47	60.93	372.71	54.21
Secured Loans	1.07	0.42	4.49	1.86	7.37	2.62	16.23	4.40	107.49	20.31	226.65	26.10	207.83	23.25	27.29	2.80	24.04	2.16	5.60	0.41	62.81	9.13
Unsecured Loans	8.67	3.40	10.39	4.31	15.94	5.67	21.64	5.86	33.22	6.28	89.61	10.32	78.04	8.73	63.89	6.55	71.00	6.39	78.47	5.81	47.09	6.85
Borrowed Funds - II	9.74	3.82	14.88	6.18	23.31	8.30	37.87	10.26	140.71	26.59	316.26	36.42	285.87	31.98	91.18	9.35	95.04	8.56	84.07	6.22	109.89	15.98
	184.87	72.44		78.66	204.00	72.60		64.77	384.38	72.63	649.36	74.78	691.46	77.34	634.82	65.07	740.97	66.72	907.54	67.15	482.60	70.19
Current Liabilities	40.15	15.73	31.55	13.10	47.60	16.94	82.09	22.23	87.14	16.47	119.69	13.78	132.05	14.77		19.20	212.38	19.12	223.27	16.52	116.32	16.92
Provisions	30.18	11.83	19.84	8.24	29.39	10.46	48.01	13.00	57.70	10.90	99.34	11.44	70.51	7.89	153.45	15.73	157.22	14.16	220.71	16.33	88.64	12.89
B Short Term Funds	70.33	27.56	51.39	21.34	76.99	27.40		35.23	144.84	27.37	219.03	25.22	202.56	22.66	340.72	34.93	369.60	33.28	443.98	32.85	204.95	29.81
C TOTAL FUNDS (A+B)				_	280.99	-				100.00		_	894.02	100.00			1110.57				687.56	100.00
Hyderabad Batteries Limi																	100.00					
Share Capital	20.07	9.50	20.07	9.32	20.07	6.57	22.07	5.24	24.28	4.59	24.28	2.93	24.28	2.57	25.30	2.03	25.30	1.73	25.30	1.61	23.10	2.98
Reserves & Surplus	77.32	36.60	81.74	37.95	96.75	31.67		39.91	215.53	40.75	278.36	33.59	360.79	38.17	486.03	38.93	499.54	34.15	504.73	32.05	276.90	35.77
	97.39	46.10		47.27	116.82	38.24		45.15	239.81	45.34	302.64	36.53	385.07	40.74	511.33	40.96	524.84	35.88	530.03	33.66	300.00	38.75
Secured Loans	57.04	27.00	49.64	23.05	92.83	30.38	118.56		153.66	29.05	327.84	39.57	350.41	37.07		32.83	683.48	46.73	565.93	35.94	280.92	36.28
Unsecured Loans	12.45	5.89	13.28	6.17	19.38	6.34	21.54	5.11	22.62	4.28	24.61	2.97	17.16	1.82	17.16	1.37	17.99	1.23	25.10	1.59	19.13	2.47
Borrowed Funds - II	69.49	32.89	62.92	29.21	112.21	36.73	140.10		176.28	33.33	352.45	42.54	367.57	38.89	426.97	34.20	701.47	47.96	591.03	37.53	300.05	38.76
A Long Term Funds (I+II)	166.88	78.99	164.73	76.49	229.03	74.96		78.38	416.09	78.67	655.09	79.06	752.64	79.63	938.30	75.16	1226.31	83.84	1121.06		600.05	77.51
Current Liabilities	32.71	15.48	45.00	20.89	64.14	20.99	73.43	17.42	105.06	19.86	159.58	19.26	168.45	17.82	162.64	13.03	224.57	15.35	440.28	27.96	147.59	19.06
Provisions	11.69	5.53	5.64	2.62	12.36	4.05	17.69	4.20	7.75	1.47	13.91	1.68	24.09	2.55	147.51	11.82	11.77	0.80	13.31	0.85	26.57	3.43
B Short Term Funds	44.40	21.01	50.64	23.51	76.50	25.04	91.12	21.62	112.81	21.33	173.49	20.94	192.54	20.37	310.15	24.84	236.34	16.16	453.59	28.81	174.16	22.49
C TOTAL FUNDS (A+B)	211.28	100.00	215.37	100.00	305.53	100.00	421.52	100.00	528.90	100.00	828.58	100.00	945.18	100.00	1248.45	100.00	1462.65	100.00	1574.65	100.00	774.21	100.00
Nippo Batteries Limited		•	•						•								•		•			•
Share Capital	3.75	2.61	3.75	2.45	3.75	1.86	3.75	1.80	3.75	1.73	3.75	2.25	3.75	2.06	3.75	1.97	3.75	1.94	3.75	1.99	3.75	2.03
Reserves & Surplus	94.61	65.75	104.95	68.69	106.92	53.03	108.61	52.12	109.15	50.46	116.38	69.94	123.64	68.02	131.39	68.90	137.30	70.94	138.63	73.74	117.16	63.55
Share holders' funds - I	98.36	68.36	108.70	71.15	110.67	54.89	112.36	53.92	112.90	52.19	120.13	72.19	127.39	70.09	135.14	70.86	141.05	72.88	142.38	75.73	120.91	65.59
Secured Loans	0.00	0.00	0.00	0.00	0.00	0.00	2.50	1.20	3.80	1.76	3.50	2.10	1.80	0.99	1.90	1.00	0.00	0.00	0.00	0.00	1.35	0.73
Unsecured Loans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.87	4.72	0.89	0.48
Borrowed Funds - II	0.00	0.00	0.00	0.00	0.00	0.00	2.50	1.20	3.80	1.76	3.50	2.10	1.80	0.99	1.90	1.00	0.00	0.00	8.87	4.72	2.24	1.21
A Long Term Funds (I+II)	98.36	68.36	108.70	71.15	110.67	54.89	114.86	55.12	116.70	53.95	123.63	74.29	129.19	71.08	137.04	71.86	141.05	72.88	151.25	80.45	123.15	66.80
Current Liabilities	33.88	23.55	32.36	21.18	33.99	16.86	30.36	14.57	35.29	16.31	30.99	18.62	26.32	14.48	26.97	14.14	25.71	13.28	28.66	15.24	30.45	16.52
Provisions	11.65	8.10	11.72	7.67	56.95	28.25	63.17	30.31	64.33	29.74	11.79	7.08	26.25	14.44	26.70	14.00	26.78	13.84	8.10	4.31	30.74	16.68
B Short Term Funds	45.53	31.64	44.08	28.85	90.94	45.11	93.53	44.88	99.62	46.05	42.78	25.71	52.57	28.92	53.67	28.14	52.49	27.12	36.76	19.55	61.20	33.20
C TOTAL FUNDS (A+B)	143.89	100.00	152.78	100.00	201.61	100.00	208.39	100.00	216.32	100.00	166.41	100.00	181.76	100.00	190.71	100.00	193.54	100.00	188.01	100.00	184.34	100.00
Consolidated																						
Share Capital	35.21	5.77	35.21	5.78	35.21		37.21	3.72	39.42	3.09	39.42	2.12	45.11	2.23	46.13	1.91	46.13	1.67	46.13	1.48	40.52	2.46
Reserves & Surplus	335.67	54.99	349.89	57.45	372.97	47.32	466.74	46.71	556.96	43.70	716.45	38.45	872.94	43.19		47.38	1265.69	45.75	1449.75	46.55	753.10	45.75
Share holders' funds - I	370.88	60.76	385.10	63.23	408.18	51.79	503.95	50.44	596.38	46.80	755.87	40.56	918.05	45.43	1190.11	49.29	1311.82	47.41	1495.88	48.03	793.62	48.21
Secured Loans	58.11	9.52	54.13	8.89	100.20	12.71	137.29	13.74	264.95	20.79	557.99	29.95	560.04	27.71	439.00	18.18	707.52	25.57	571.53	18.35	345.08	20.96
Unsecured Loans	21.12	3.46	23.67	3.89	35.32	4.48	43.18	4.32	55.84	4.38	114.22	6.13	95.20	4.71	81.05	3.36	88.99	3.22	112.44	3.61	67.10	4.08
Borrowed Funds - II	79.23	12.98	77.80	12.77	135.52	17.20	180.47	18.06	320.79	25.17	672.21	36.07	655.24	32.42	520.05	21.54	796.51	28.79	683.97	21.96	412.18	25.04
A Long Term Funds (I+II)	450.11	73.74	462.90	76.01	543.70	68.99	684.42	68.50	917.17	71.97	1428.08	76.64	1573.29	77.85	1710.16	70.82	2108.33	76.20	2179.85	70.00	1205.80	73.25
Current Liabilities	106.74	17.49	108.91	17.88	145.73	18.49	185.88	18.60	227.49	17.85	310.26	16.65	326.82	16.17	376.88	15.61	462.66	16.72	692.21	22.23	294.36	17.88
Provisions	53.52	8.77	37.20	6.11	98.70	12.52	128.87	12.90	129.78	10.18	125.04	6.71	120.85	5.98	327.66	13.57	195.77	7.08	242.12	7.77	145.95	8.87
B Short Term Funds	160.26	26.26	146.11	23.99	244.43		314.75		357.27	28.03	435.30	23.36	447.67	22.15	704.54	29.18	658.43	23.80	934.33	30.00	440.31	26.75
C TOTAL FUNDS (A+B)	610.37	100.00	609.01	100.00	788.13	100.00	999.17	100.00	1274.44	100.00	1863.38	100.00	2020.96	100.00	2414.70	100.00	2766.76	100.00	3114.18	100.00	1646.11	100.00

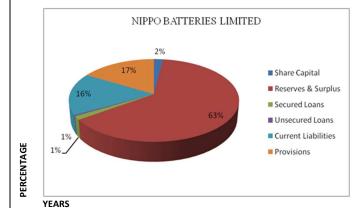
Source: Annual Reports of select battery companies in Andhra Pradesh

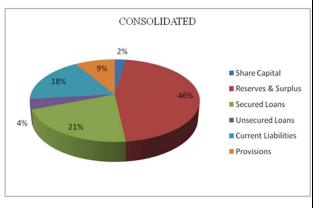
Note: Figures in parentheses represent common size percentages considering total funds for the respective years equal to hundred

FIGURE 3: AVERAGE STRUCTURE OF LONG TERM AND SHORT TERM FUNDS AS A PERCENTAGE OF TOTAL FUNDS









Hyderabad Batteries Limited

It is evident that long-term funds had contributed more on an average 77.51 per cent of total funds when compared to short-term funds (22.49 per cent) during the entire period of the study. In other words, long-term funds were more than the short-term funds in HBL. Long-term funds had formed nearly more than two-thirds of total funds. The borrowed funds had varied between the lowest of Rs.62.92 crores in 2003-04 and the highest of Rs.701.47 crores in 2010-11. Share holders' funds had jumped from Rs.97.39 crores in 2002-03 to Rs.530.03 crores in 2011-12. Reserves and surplus had occupied on an average 52.22 per cent, a major chunk of the total funds. It is interesting to note that on an average, shareholders' funds are equal to the borrowed funds. It may be concluded that HBL had used more long-term funds when compared to short term funds. The company had shown an inclination to strengthen long term funds consisting of both shareholders' funds as well as long term borrowed funds in order to finance its total assets requirement.

Nippo Batteries Limited

In NBL, shareholders' funds which stood at Rs.98.36 crores in 2002-03 went up to Rs.142.38 crores in 2011-12 because of attractive profits earned by the company. The long-term funds continued to be more than the short-term funds during the study period. Borrowed funds as a source of long-term funds were stagnant with an average of 1.21 per cent of total funds and it was quite a negligible share. It is observed that an insignificant proportion of long-term borrowed funds were used in NBL. The issue of shares remained constant as there is no fresh issue of equity shares during the entire study period. Reserves and surplus had increased from Rs.94.61 crores in 2002-03 to Rs.138.63 crores in 2011-12. It is observed that reserves and surplus had formed on an average 63.55 per cent, a major portion of the total funds. Short-term funds varied between the minimum of Rs.36.76 crores in 2011-12 and the maximum of Rs.99.62 crores in 2006-07. For the ten-year period, the current liabilities and provisions contribution recorded on an average 16.52 per cent and 16.68 per cent respectively of the total funds. The owned funds of NBL were more significant than the borrowed funds. It may be concluded that the company had heavily depended on shareholders' funds. In other words, long-term borrowed funds were not adequately represented in its financial structure.

Consolidated

It is apparent that long term funds constituted the major source of financing the investments in battery industry in Andhra Pradesh. It contributed on an average 73.25 per cent of the total investment in the consolidated position. Of these, owners' funds constituted 48.21 per cent and that of long-term borrowed funds 25.04 per cent. The use of long-term funds was, therefore, more than short-term funds. But the extent of long term funds as a percentage of total funds invested had fluctuated between the minimum of 68.50 per cent in 2005-06 and the maximum of 77.85 per cent in 2008-09. Short-term funds on an average contributed 26.75 per cent of total investments. Short-term funds as a percentage of total funds fluctuated between the lowest of 22.15 per cent in 2008-09 and the highest of 31.50 per cent in 2005-06. Thus, it may be noted that in absolute figures, the amount of short-term funds in battery industry put together had advanced from Rs.160.26 crores in 2002-03 to Rs.934.33 crores in 2011-12. It may be observed that the short-term funds in absolute figures registered an increasing trend. It may be concluded that the industry had heavily depended upon long term funds in financing its fixed and current assets requirement. In other words, long term funds were sufficient to finance fixed assets and leave a part of these funds to finance core current assets.

An observation of the financial structure of individual battery companies resembles the overall industry position. It reveals that the long-term funds were more than the short-term funds in all the battery companies during the entire study period under observation. Hence, all individual battery companies and the industry in Andhra Pradesh were heavily depended on long term funds in order to finance their fixed and current assets requirement.

CONCLUSION

The financial structure brings to the fore relative size and changing importance of both long term and short term funds as two components of total capitalization. ARBL and NBL, had heavily relied on internal source of funds for meeting their financial requirements. In other words, these companies could find it very easy to generate internal funds to finance their activities. But only one company, HBL had depended more on external funds than on internal funds for financing its projects. Internal source of finance on the whole contributed to a higher portion of the total source of funds for the battery industry in Andhra Pradesh. Long term funds were more than the short term funds in ARBL, HBL and NBL during the entire study period under observation. Hence, all the battery companies heavily depended on long term funds in order to finance their fixed and current assets requirement. The financial structure of individual battery companies resembles the

overall industry position. Long term funds of the battery industry in Andhra Pradesh were sufficient to finance fixed assets and leave a part of these funds to finance core current assets.

SUGGESTIONS

ARBL and NBL had depended on internal sources of funds for meeting their financial requirements. These companies shall tap the external sources of funds more particularly debt capital to reap the benefits of financial leverage, so that the capital structure will become a balanced capital structure. The NBL Company shall raise long term debt for meeting the expansion requirement since the debt capital is a cheaper source than equity finance. The reason is that the interest on debt is tax deductable.

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