

FINANCIAL OVERVIEW OF SELECT DEFENCE MANUFACTURING COMPANIES: AN INTER-FIRM COMPARISON FROM INDIAN PERSPECTIVE

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ABSTRACT

The study has been undertaken to show the liquidity position, profitability and financial health of the major defence manufacturing companies as per the IBEF report published in February 2023. As India's defence industry is becoming lucrative to the domestic as well as foreign investors with a market size of 11.3 Billion USD, this study delivers its usefulness towards its potential stakeholders.

Keywords: Defence companies, liquidity, profitability, financial health, India.

INTRODUCTION

Government of India (GOI) has pushed defence industry to be a part of the 'Atmanirbhar Bharat' initiative to reduce the dependency on import of defence products and technologies and be the self-reliant. It encourages research and development to build favourable infrastructure facilities. The government has targeted to achieve the turnover of aerospace and defence goods and services of 25 Billion USD (including export of 5 Billion USD) by 2025.^[1] For the first time ever, the defence productions have touched the benchmark of one lakh crore in the financial year 2022-23.^[2] In India's annual budget 2022-23, it was declared that twenty-five percent of defence research and development budget must be devoted for private industry and start-ups. This decision will lead to innovation of more defence technologies in India.^[3] FDI in this sector has grown up at 74% from 49% through automatic route.^[4] Latest report published by IBEF in February 2023 has revealed that six public sector units namely Bharat Earth Mover Ltd. (BEML), Bharat Electronics Ltd. (BEL), Hindustan Aeronautics Ltd. (HAL), Mazagon Dock Shipbuilders Ltd. (MDL), Bharat Dynamics Ltd. (BDL) and Garden Reach Shipbuilders & Engineers Ltd. (GRSE) are the key players of defence manufacturing in India. A brief description of these companies is enumerated below in Table 1:^[5]

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Table No 1:

PSU Name	Formation	Headquarter	Key Defence Products	Revenue for F.Y 2021-22 (in crores)
BEML	1964	Bangalore	Multipurpose weapon loaders, Trolley to load aircraft weapons, Aarmoured recovery and repair vehicle, military rail coaches and military wagons etc.	₹3556.64
BDL	1970	Hyderabad	Indigenous missiles (Prithvi, Agni, Akash, Konkurs-M, Invar etc.), Heavy weight torpedoes and some products such as Amogha-III, CMDS Mk-II enabled with AI feature are in research and development stage.	₹2901
BEL	1954	Bangalore	Different kinds of radars (Weapon Locating Rader, Indian Doppler Rader, Battel Field Surveillance Rader etc.), C41 systems for Indian Air Force, Akash missile, electronic devices for tanks, Indian Navy's combat management system etc.	₹ 15313
GRSE	1884 (Nationalised in 1960)	Kolkata	Naval vessels (guided-missile frigates, fleet tankers, corvettes, fast patrol vessels, hovercraft etc.), recently an order is received for manufacturing of 15 warships of the Indian Navy by 2027-28.	₹1757.51

HAL	1940 (Nationalised in 1963)	Bangalore	Fighter aircrafts (Tejas MK1, Tejas MK2, TEDBF etc.), trainer aircraft (HAL-26 Pushpak, HJT-36 Sitara etc.), helicopters (Rudra, Dhruv etc.), RTOS for Indira Gandhi Centre for Atomic Research.	₹ 24620
MDL	1934 (Nationalised in 1960)	Mumbai	Various warships (Godavari-class frigate, Delhi-class destroyers, Shivalik-class frigates, Kolkata-class destroyers etc.), Coast guard vessels, Floating police stations, Submarines (Shishumar-class submarine, Kalvari-class submarine etc.).	₹ 5733

LITERATURE REVIEW

Das (2019) analysed the major aspects and fault lines existing in the defence industry of India. He discussed the needs to achieve autonomy in the defence sector. Some recommendations and suggestions were also provided by him to arrive at strategic autonomy in this sector.

Chibber & Dhawan (2013) identified the growth in inventories of defence sector from 2000 to 2011. It was also estimated that nearly 150 Billion USD would be spent on purchasing of defence equipment by 2017. The study identified that India's local defence industry could fulfil domestic demand and support export demand also.

Jindal, Jain & Vartika (2017) analysed how the receivables management was impacted by profitability of India's commercial vehicle industry for the period 2009-2016. A significant positive relationship between profitability and debtors-turnover ratio was found in this study.

Saleem & Rehman (2011) explored the relationship between liquidity and profitability of oil and gas companies of Pakistan for the period of 2004 to 2009. The results had revealed that financial position had been significantly impacted by each of the variables.

Prasad & Rajput (2021) forecasted monetary distress using Altman Z score of four Indian IT companies for the period 2015-2016 to 2017-2018. The results indicated that Wipro faced financial distress during the 2017-2018 only.

Research Gap

From the above review of literatures it is observed that hardly any comparative study has been conducted so far analysing the financial performance and financial health of the major defence manufacturing companies in India. Present study is a humble attempt to fill this gap.

OBJECTIVES

- To investigate and review the liquidity, profitability and financial health of the selected defence manufacturing companies in India.
- To identify the company, that is most efficient in terms of the above parameters.

LIMITATIONS

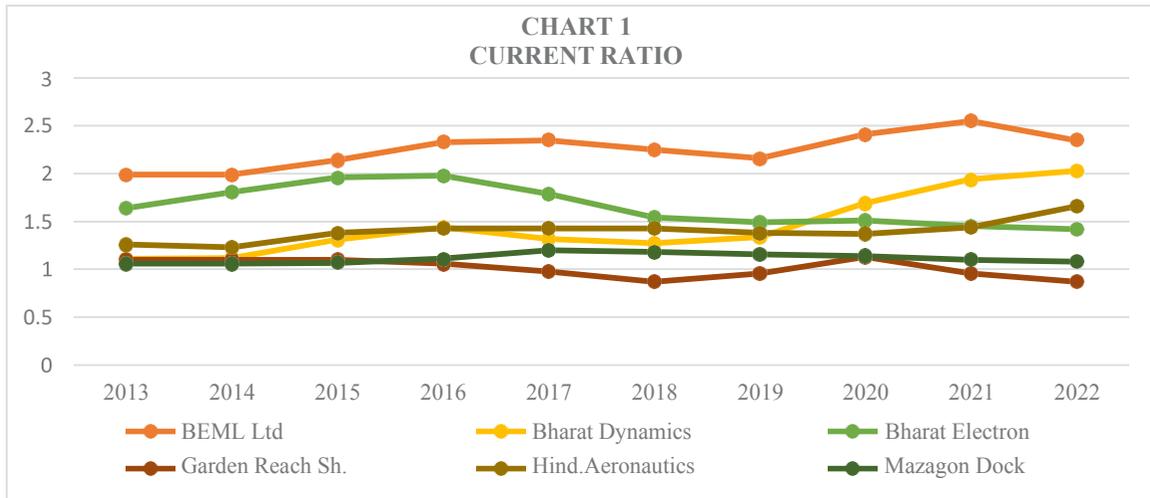
- The study concentrated only on six defence manufacturing companies in India with a limited study period from 2013 to 2022.

RESEARCH METHODOLOGY

The study focuses on financial overview of defense manufacturing companies in India which is based on secondary data collated from Capitaline database. ^[6] The study period is from 2012-13 to 2021-22. Relevant data have been analysed with the help of proper charts and tables using MS Excel. To examine the liquidity, current ratio (CR) is taken as a proxy (Saleem & Rehman, 2011), Return-on-Capital-Employed (ROCE) is used to measure the profitability (Jindal, Jain, & Vartika, 2017) and Altman Z score is considered as to show the monetary distress risks (Prasad & Rajput, 2021) for measuring financial health of the companies.

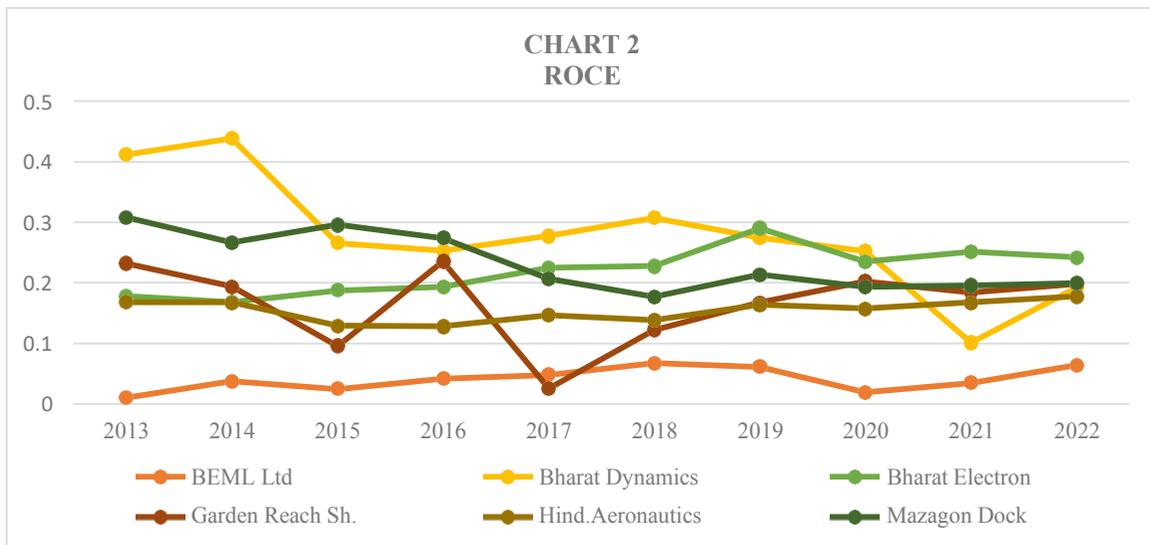
ANALYSIS AND INTERPRETATION

Collected data have been examined and explained as below:



Authors' own calculation

Sufficient liquidity ensures a company to meet up its short-term obligations whereas excessiveliquidity can cause reduction of profit also. If CR remains 1 time or more, it ensures that the company can meet its short-term obligations with the help of current assets. Chart 1 depicts theCR of the companies during the study period of ten years. It shows that BEML is the only company which enjoyed a higher liquidity position (CR 2 times or more) compared to others during these periods. On the other hand, BDL, BEL, HAL and MDL also had a good liquidityposition (CR being more than 1 throughout the period). Only GRSE faced liquidity crisis (CRless than 1) in 2016-17 to 2018-19, 2020-21 and 2021-22.



Authors' own calculation

ROCE is used to show the overall profitability of the companies. Higher ROCE reflects that company is enjoying more profitability. Chart 2 shows ROCE of the companies during the

study period of ten years. BDL is more profitable compared to others during most of the years under study. BEML, which is highly liquid also remains less profitable (ROCE less than 10%) throughout the period. In the years 2014-15 and 2016-17 only, GRSE earns a ROCE less than 10% whereas other companies earn more than 10% ROCE during all-over the period.

TABLE 2
Altman Z Score

COMPANY										
NAME	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BEML	2.63	2.92	3.06	3.25	3.29	3.59	3.68	2.90	2.87	3.13
BDL	54.11	152.76	7.50	12.85	26.28	5.02	4.33	3.71	2.95	3.40
BEL	5.09	5.12	5.10	3.90	3.91	3.79	4.03	3.78	3.85	3.74
GRSE	20.55	21.18	33.95	36.91	13.87	2.98	4.41	4.42	2.61	3.30
HAL	2.82	3.08	2.80	2.69	2.70	2.92	2.87	2.91	3.21	3.08
MDL	6.07	6.71	7.22	4.10	3.64	3.29	3.24	3.29	3.12	3.70

Authors' own calculation

Altman Z score measures the risk of financial distress of a company. The score of 2.99 and above implies 'safe zone', when the score is higher than 1.81 but less than 2.99 it is considered as 'grey zone' and the score less than 1.81 is marked as 'distress zone' (Altman, 1968). From table 2, it can be interpreted that BEL and MDL are staying in the 'safe zone' during the whole period of study. BEML has enjoyed safe position in 2014-15, 2019-20 and 2020-21 while in rest of the years the company is in the 'grey zone'. BDL, on the other hand, faces 'grey zone' only in the year 2020-21 but during the rest of the period it enjoys safe position. GRSE has faced the grey area only in the years 2017-18 and 2020-21. Again, HAL stays in the safe area only in the years 2013-14, 2020-21, 2021-22 and grey area for rest of the period.

TABLE No 3: AVERAGE RESULTS

COMPANY NAME	AVERAGE LIQUIDITY		AVERAGE PROFITABILITY		AVERAGE RISK OF FINANCIAL DISTRESS	
	VALUES	RANK	VALUES	RANK	VALUES	RANK
	BEML	2.25	I	0.04	VI	3.13
BDL	1.46	III	0.28	I	27.29	I
BEL	1.66	II	0.22	III	4.23	IV

GRSE	1.01	VI	0.17	IV	14.42	II
HAL	1.40	IV	0.15	V	2.91	VI
MDL	1.12	V	0.23	II	4.44	III

Authors' own calculation

Table 3 shows the average liquidity, profitability and financial distress risk of the selected companies. In terms of liquidity BEML is in the most favourable position with an average value of 2.25 followed by BEL, BDL, HAL, MDL and GRSE. Considering the average profitability, it can be stated that BDL is more profitable company compared to the others and BEML comes at the last position. On the other hand, the most profitable company BDL also enjoys least average risk of financial distress as it has the higher average z score compared to others and HAL is the only company which stays in grey area as it has average z score value higher than 1.81 but lower than 2.99.

Thus, out of the six defence companies it has been identified that in terms of overall liquidity, profitability and risk of financial distress, BDL is the most efficient one, followed by BEL, BEML, GRSE, MDL and HAL.

CONCLUSION

Near about 80% of India's defence industry is owned by the Government of India. In 2021-22, 2.1% of GDP had been spent on defence. With a market size of 11.3 Billion USD, the industry has become more lucrative to investors. In this study the liquidity position, profitability position and risk of financial distress situation of the top six government-owned defence manufacturing companies have been evaluated. It has been found that liquidity position of BEML is favourable than others, whereas in terms of profitability measure and low financial distress risk BDL is performing well compared to others. On the other hand, least liquid company is GRSE, lower profitable company is BEML and HAL is facing high risk of financial distress. Finally, it has been observed that BDL is the most efficient company and HAL is the least efficient company compared to others in terms of the parameters taken together. Thus, this study delivers its usefulness towards potential stakeholders of this industry.

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