Impact of Equity Restructuring on Profit Rate Performance: The Case of "Hero Honda Motors Ltd. Is Now Hero MotoCorp Ltd."

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Abstract

Profitability is the primary measure of overall success and at the same time a necessary condition for the survival and growth of an enterprise. Thus, it indicates financial stability and helps to increase the profit earning capacity of an enterprise. Hero Honda was a joint venture between Hero Group of India and Honda of Japan. In 2010-11, when Honda decided to move out of the joint venture, Hero Group bought out the 26% stake of the Honda in joint venture Hero Honda Ltd. In this backdrop, the present study empirically examines the impact of equity change on profit rate performance due to the new corporate identity of the Hero Group for a span of 16 years i.e., from the financial year 2002-03 to the financial year 2017-18. Two popular profitability ratios namely Return on Average Capital Employed (ROACE) and Return on Average Equity (ROAE) are employed in the study and to statistically test the validity of the results, paired t test has been applied in the study. In relation to the main objective of the study, it may be concluded that Hero MotoCorp Ltd. has experienced negative impact of equity restructuring on its profit rate performance during the study period. This is further strengthened by the results of paired t test as applied in the study.

Key Words: *Profit Rate, Impact, Equity Restructuring, ROACE, ROAE.*

1. Theoretical Underpinnings

Profitability may be defined as the ability to generate return from a given investment of an enterprise. Hence, an enterprise will be regarded as more efficient if it earns more profit and vice versa. Thus, profit is the engine that drives the wheel of business enterprise. It is the primary measure of overall success and at the same time a necessary condition for the survival and growth of an enterprise. Profit rate is measured by the relationship between profit and capital. Thus, it indicates financial stability and helps to increase the profit earning capacity of an enterprise.

2. Hero MotoCorp Ltd. – A Synoptic Overview

Hero MotoCorp Ltd., formerly Hero Honda, was established in the year 1984 as a joint venture company between Hero Group of India and Honda of Japan. Hero MotoCorp Ltd. is an Indian motorcycle and scooter manufacturer based in New Delhi, India. In 2001, the company became the largest two-wheeler manufacturer in the world. Also, it has a market share of about 46% in the two-wheeler category in India. After separation from the joint venture Hero Honda Motors Ltd., Hero MotoCorp Ltd. can now export to Latin America, Africa and West Asia. Hero MotoCorp Ltd. is free to use any vendor for its components instead of just Honda-approved vendors.

3. The Problem Focus

Hero Honda was a joint venture between Hero Group of India and Honda of Japan. In 2010-11, when Honda decided to move out of the joint venture, Hero Group bought out the 26% stake of the Honda in joint venture Hero Honda Ltd. Accordingly, the name of the company was changed from Hero Honda Motors Limited to Hero MotoCorp Limited from the financial year 2010-11. After the split, Hero MotoCorp not only faces the competition of other domestic players in the market but also from their former joint venture partner Honda in the market. In this backdrop, the present study empirically examines the impact of equity change on profit rate performance due to the new corporate identity of the Hero Group.

4. Prior Evidence

4.1 Empirical Studies

Mohanakumar, P.S. (1996) indicated that profitability of textile industry in Kerala was low in comparison to other major industries during the period under study. Rej, Debasis and Sur, Debasish (2001) concluded that profitability performance of Cadbury India Ltd. was not consistent during the study period. Abdurahman, A. et al. (2003) found that small, medium, and large firms were significantly different from each other in terms of their profit rate. Pandey, R. and Bandyopadhyaya, S. (2003) stated that profitability was influenced by several factors. Reduction in operating cost was the most important factor for increased profitability of the banks under study. Eljelly, Abuzar M.A. (2004) found significant negative relationship between liquidity and profitability on a sample of joint stock companies in Saudi Arabia. Oberholzer, M. et al. (2004) studied profitability and efficiency of ten regional offices of one of the largest banks of South Africa for a period of 36 consecutive months. The findings of the study revealed that region ten had the highest technical efficiency and profitability. Abu-Tapanjeh, A.M. (2006) found that firm structure was the most important factor that affected profitability of 48 Jordanian industrial companies listed in the American Stock Exchange. Jonsson, Bjarni (2007) studied profitability performance of Icelandic firms with reference to fisheries and fish processing, banks and civil engineering consulting firms. The study results found that size had no significant effect on profitability. Selvi, A. Manor and Vijayakumar, A. (2007) found a fall in profit rates in majority of the selected companies in the Indian automobile industry during the period under study. Ghosh, Sudipta (2012) studied the impact of profitability performance in the selected central public sector power companies of India. The study showed an improved profitability performance of the selected companies and therefore it should induce for further investment, particularly by the private companies.

4.2 Research Gap

While reviewing the past studies in the relevant areas as summarized above, it may be stated that no study was found to test the impact of equity restructuring on profit rate performance of the selected company. Hence, the present study may be considered as first time attempt in the area covered under study.

5. Research Objectives

The principal objective of the present study is to examine the impact of equity restructuring on profit rate performance of the new corporate identity of the Hero Group - Hero MotoCorp Ltd. To attain this principal objective, the following incidental objectives of the selected company are sought to be achieved:

- To examine growth rates of profitability performance indicators selected in the study.
- To examine profit rate performance through ratios selected in the study.

- To examine whether there is any change in profit rate performance due to equity restructuring.

6. Hypotheses Development

In conformity with the above objectives of the study, the following testable null hypotheses are formulated as under:

- 1st Null Hypothesis (H_0): There is no significant growth rate in profit rate performance.
- 2nd Null Hypothesis (H_0): There is no significant change in profit rate performance due to equity restructuring.

7. Research Design

7.1 Sample Selection

The sample of our study is Hero MotoCorp Ltd. (formerly Hero Honda Motors Ltd.).

7.2 Study Period

Based on the availability of data from the website of the selected company, the study has been carried out for a span of 16 years i.e., from the financial year 2002-03 to the financial year 2017-18. The chosen study period is long enough to examine the impact of equity restructuring on profit rate performance of the selected company.

Further, to examine the impact of equity restructuring on profit rate performance of the selected company, the entire study period (2002-03 to 2017-18) has been sub-divided into two sub-periods: (i) 1st sub-period comprising 2002-03 to 2009-10 as pre-equity restructuring period and (ii) 2nd sub-period comprising 2010-11 to 2017-18 as post-equity restructuring period.

7.3 Data Source

For the present study, secondary data have been used which are collected from the published annual reports of the selected company.

7.4 Methodology

In this study, the following two popular ratios are used as proxy for measuring profit rate performance of the selected company.

Return on Average Capital Employed (ROACE): This ratio indicates profitability vis-à-vis investments made by the enterprise itself. This ratio is selected in the study since it compares the profitability of an enterprise to the investments made in fresh capital. Moreover, this financial ratio is an overall indicator of profitability of an enterprise.

Return on Average Equity (ROAE): This ratio is an indicator of profit performance of an enterprise over a financial year. Since there has been significant change in equity of the selected company under study, this ratio will reveal a true profitability position of the selected company.

The above two ratios are measured in the following ways:

Profit Rate Performance Drivers	Profit Rate Performance Measures
Return on Average Capital Employed (ROACE)	EBIT ÷ Average Capital Employed
Return on Average Equity (ROAE)	Net Income ÷ Average Shareholders' Equity

To examine growth rate of the selected profit rate performance indicators as stated above, log linear trend equation has been employed in the study, which is shown below:
$\log y_t = a + bt + u_t$ --- *eq.(1)*
Where:
y = predicted value; a = intercept; b = regression co-efficient
t = time
u = error term of the model
The popular 't' test has been used for examining the statistical significance of growth rates. The't' statistic is computed as follows:
$t = |b^* \div Sb^*|$ -- *eq.(2)*
Where:
b* = estimated regression co-efficient and Sb* = standard error of the estimated regression coefficient
The impact of equity restructuring on profit rate performance of the selected company has been tested by paired 't' test. The paired 't' statistic is computed as follows:
$t = (\bar{d}) \div (S / \sqrt{n-1})$ --- *eq.(3)*
Where: $\bar{d}$ and S denote respectively the mean and standard deviation of the differences d_i .

8. Research Findings and Analysis

8.1 Growth Rate Analysis of Selected Profit Rate Performance Indicators

To analyze growth rates of the selected profit rate performance indicators, the technique of log linear trend equation has been fitted to the relevant time series data. For this purpose, profit rate performance indicators are Return on Average Capital Employed (ROACE) and Return on Average Equity (ROAE).

Table – I: Growth Rates of Selected Profit Rate Performance Indicators

	ROACE			ROAE		
	Whole Period (2002-03 to 2017-18)	**1st Sub-Period (2002-03 to 2009-10)**	**2nd Sub-Period (2010-11 to 2017-18)**	**Whole Period (2002-03 to 2017-18)**	**1st Sub-Period (2002-03 to 2009-10)**	**2nd Sub-Period (2010-11 to 2017-18)**
R^2	0.49	0.48	0.27	0.40	0.42	0.79
Growth Rate (%)	-3.60***	-7.90[i]	-2.30[i]	-3.70***	-8.10[i]	-8.60***
t-value	-3.69	-2.35	-1.48	-3.07	-2.08	-4.79
Comments	Negatively Significant	Negatively Insignificant	Negatively Insignificant	Negatively Significant	Negatively Insignificant	Negatively Significant
	H_0 Rejected	H_0 Accepted	H_0 Accepted	H_0 Rejected	H_0 Accepted	H_0 Rejected

Source: Computed

Notes: 1) *** marked values indicate significant at 1% level (2-tailed), 2) i marked values indicate insignificant**,** 3) Growth rates are computed by multiplying the trend co-efficient with 100 to express it in percentage per annum form.

From Table-1, it is observed that the values of R^2 for the selected performance indicators (except ROACE in the 2nd sub-period) are found to be moderate, while the value of R^2 for

ROAE in the 2nd sub-period is found to be high. The high value of R^2 indicates that the selected performance indicator is well explained by the independent variable i.e., time during the period under study.

Both ROACE and ROAE have registered negative growth rates (-3.60% and -3.70% respectively) for the whole period which are found to be significant at 1% level. In terms of sub-period analysis, growth rates of ROACE and ROAE in all the cases are observed to be negative, although the results are found to be statistically insignificant (except ROAE for the 2nd sub-period).

The results obtained in Table-I lead to the rejection of the first hypothesis of the study with respect to ROACE and ROAE for the whole period and ROAE for the second sub-period, while the same hypothesis has been accepted in rest of the cases under study.

8.2 Analysis of Profit Rate Performance

This section analyzes the profit rate performance of the selected company in terms of Return on Average Capital Employed (ROACE) and Return on Average Equity (ROAE).

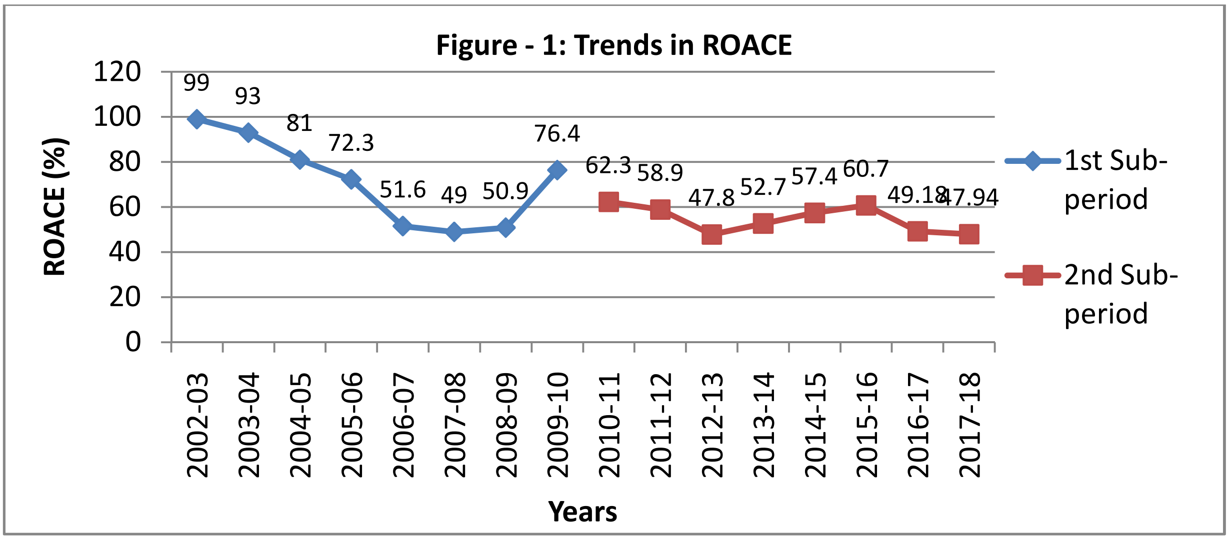
ROACE is a financial ratio that shows profitability versus the investments a company has made in it. On the other hand, ROAE is a financial ratio that shows corporate profitability more accurately, especially if the value of the shareholders' equity has changed considerably during a financial year.

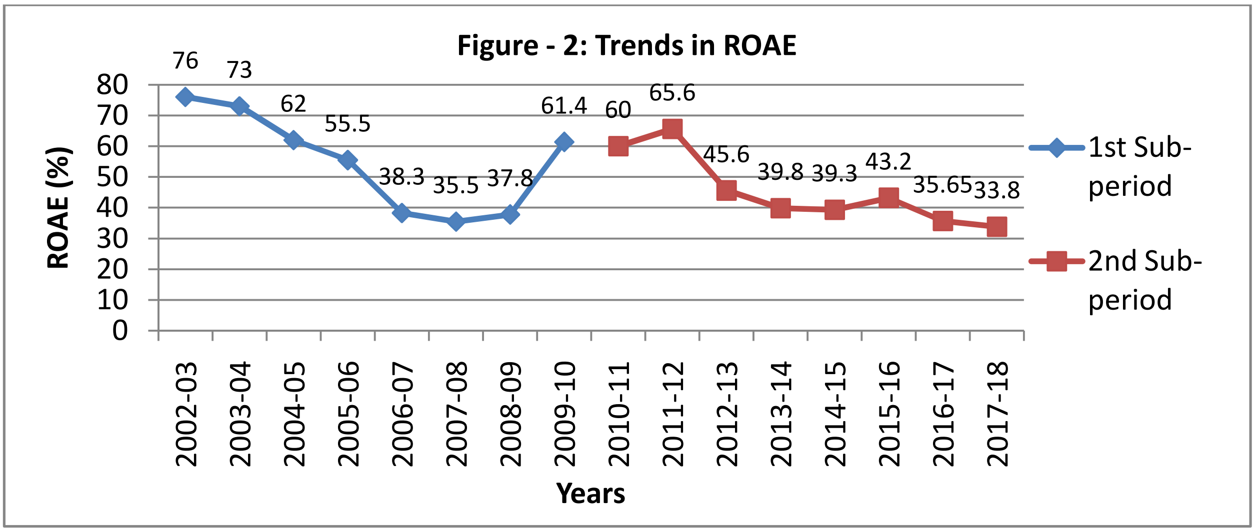
The results of the selected ratios are shown in Table – II, Figure - 1 and Figure – 2 below:

Table – II: Profit Rate Performance (represented by ROACE and ROAE) during 2002-03 to 2017-18 (Figures in %)

Years	Return on Average Capital Employed (ROACE)	Return on Average Equity (ROAE)
2002-03	99.00	76.00
2003-04	93.00	73.00
2004-05	81.00	62.00
2005-06	72.30	55.50
2006-07	51.60	38.30
2007-08	49.00	35.50
2008-09	50.90	37.80
2009-10	76.40	61.40
2010-11	62.30	60.00
2011-12	58.90	65.60
2012-13	47.80	45.60
2013-14	52.70	39.80
2014-15	57.40	39.30
2015-16	60.70	43.20
2016-17	49.18	35.65
2017-18	47.94	33.80
Average of Whole period (2002-03 to 2017-18)	63.13	50.15
Average of 1st Sub-period (2002-03 to 2009-10)	71.65	54.94
Average of 2nd Sub-period (2010-11 to 2017-18)	54.62	45.37

Source: Published Annual Reports of the Selected Company.





According to Table-II, Figure-1 and Figure-2, it is observed that ROACE moves between 47.80% in the year 2012-13 and 99% in the year 2002-03 with a whole period average of 63.13%. On the other hand, ROAE varies from 33.80% in the year 2017-18 to 76.00% in the year 2002-03 with a whole period average of 50.15%.

From the sub-period analysis, we found that the average ROACE (71.65%) in the first sub-period is higher than that of the average ROACE (54.62%) in the second sub-period. Similar result is observed in ROAE i.e., average ROAE (54.94%) in the first sub-period is found to be higher than that of the average ROAE (45.37%) in the second sub-period under study. These results suggest that equity restructuring in Hero MotoCorp Ltd. lead to the decrease in profit rate performance as measured by ROACE and ROAE during the period under study.

8.3 Impact of Equity Restructuring on Profit Rate Performance

To statistically examine the results as observed above, paired t test has been applied in the study.

Table-III: Paired t-test with respect to Profit Rate Performance

	ROACE	ROAE
Average of 1st Sub-period (2002-03 to 2009-10)	71.65	54.94
Average of 2nd Sub-period (2010-11 to 2017-18)	54.62	45.37
Calculated value of t	2.47	2.36
Tabulated value of t (at 5% level)	2.13	2.13
Results	H_0 Rejected	H_0 Rejected

Source: Computed

Table – III reveals that the calculated value of t is greater than that of the tabulated value of t at 5% level for both ROACE and ROAE. This leads to the rejection of the null hypothesis of our study and thereby implies that equity change in the selected company has significant negative impact on its profit rate performance as measured by ROACE and ROAE. Moreover, these results corroborate to the results as obtained in section 8.2.

9. Conclusions

In relation to the main objective of the study, it may be concluded that Hero Moto Corp Ltd. has experienced negative impact of equity restructuring on its profit rate performance during the study period. This is further strengthened by the results of paired t test.

Despite this negative impact as observed from the above results, it is interesting to note that after the split, Hero MotoCorp Ltd. on the average has been able to sustain in the global competitive market by maintaining a moderate profit rate during the study period.

10. Limitation and Research Opportunities

The study is based on secondary data. So, it is subject to all the limitations that are inherent in secondary data. In spite of this limitation, further in-depth study may be undertaken by including other parameters of profit rate performance.

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