A STUDY OF GLOBAL CRISES AND ITS IMPACTS ON INDIAN AUTOMOBILE INDUSTRY

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ABSTRACT

The global financial crisis in 2008 was a great event in the history of world economy. Rare is a crisis of such scale. It's easily the worst financial crisis the world has ever seen since the Great Depression in 1930s. Global crises has had a negative effect on India – Share market, Real estate IT and Industrial sector leading to increased lay-offs, automobile industry, unemployment etc. In India as in many other countries, the auto industry is one of the largest industries. It is one of the key sectors of the Indian economy. This paper examines the impacts of global crisis on profitability and liquidity performance of 6 selected units of Indian auto mobile industry. In this paper, the author has attempted to study the impact of global crisis / recession on profitability and liquidity performance of selected units, by using management accounting technique—Ratio Analysis—Profitability & liquidity position of the selected units have been traced.

I. INTRODUCTION

Anyone watching the world economy is now pretty sure it is in recession. The US is going through tough times as they find their large financial institutions collapsing. The government has decided to spend more than 700 billion dollars trying to revive the economy, but nothing seems to be working yet. The large multi-lateral institutions like the World Bank and the International Monetary Fund are clueless and don't really know what went wrong or what would make things improve. Where does this leave India?

In simple words recession means a period of general economic decline, specifically a decline in GDP for two or more consecutive quarters. A recession would be indicated by a slowing of a nation's production, rising unemployment and falling interest rates, usually following a decline in the demand for money.

A global recession is a period of global economic slowdown. A definition of a global recession is provided by the International Monetary Fund (IMF), it considers a global recession to be occurring when the global growth rate moves below 3%.

FEATURES OF GLOBAL CRISIS

1.   Declining GDP
2.   Reduced Industrial output
3.   Unemployment
4.   Reduced spending from the common public
5.   Liquidity crunch - Non availability of loans

GLOBAL CRISIS AND AUTOMOBILE INDUSTRY

In India as in many other countries, the auto industry is one of the largest industries. It is one of the key sectors of the economy. The industry comprises of automobile and the auto component sectors and encompasses commercial vehicles, multi utility vehicles passenger's cars, two-wheelers, three-wheelers, tractors and related auto components. The industry has shown great advances since opening up of the sector to foreign direct investment (FDI) in 1993. It has deep forward and backward linkages with the rest of the economy and hence has a strong multiplier effect. This result in the auto industry being the driver of economic growth. India is keen to use it as a lever of accelerated growth in the country. In India since the early 1940s, when the auto industry rolled out first passenger car its significance in the economy has progressively increased.

Indian Automobile industry is feeling the heat of the global recession. Recession and financial crisis has made consumers to postpone their decision on buying new vehicles. This got reflected in the performance of companies across industries. Cars segment saw sales of 76,221 for the half yearly as against 82,780 last year, decline of 7.9%.

The domestic market sales of passenger cars see a marginal growth of 3.5% but the biggest worry being the exports which saw a slump of -20.2%. The industry has seen negative growth for continuous 3 three months June, July and August 2008-09.

In November, the sales of passenger cars plunged from 103,031 to 83,079, while truck sales dropped by half, the worst in 10 years. In fact, the Japanese auto firms like Toyota (TM) and Honda (HMC) has cut on their sales projections, which resulted in the former slashing its production by 30 percent since November. The firm's Indian arm which is based in Bangalore has halted production for eight days a month at its plant. At Chennai in southern India, Hyundai Motors has also begun keeping its factory closed for a day every week to rationalize production costs.

Moreover, as banks are not in the lending mood, the interest rate on car loans is hovering at around 14 percent to 18 percent, up from 10 percent to 12 percent. So, it takes a huge toll on the buyer's capacity, which has been the driving force of the industry. "It is not just the availability, but the better cost of finance which is the main problem," said S.M. Bafna, Head of Bafna Motors, a leading Mumbai auto dealer for Honda, Tata Motors, and Toyota to Business Week. In India so many automobile manufacturers are playing important role in growth of economy.

Here for the study the researcher has selected 6 leading units of Indian auto mobile industry are as follows:

- Maruti Udyog Ltd.
- Hindustan Motors Ltd.
- Eicher Motors Ltd.
- Tata Motors Ltd.
- TVS Motors Ltd.
- Bajaj Auto Ltd.

II. LITERATURE REVIEW

1. As Nikolson, 2008 recognized that financial crisis which initiated in United States has now become a global phenomenon. At present, not only in United States but across Asia and Europe, stock exchanges crashed; collective losses of the London, Paris and Frankfurt markets alone amounted to more than 350 billion Dollars. Stock Exchange 100 index closed more than 323 points down in January2008 (Times online 2008). This crisis apart from affecting the capitalist economies has distressed the Socialist economy like Russia as well; in May 2008 Russian stock market was fallen by 50% and the Russian central bank had to buy rouble in massive amount to prevent the severe falling against US Dollarand Euro (Erkkilä, 2008).

2. About the cause of current crisis Bartlett (2008) said that crisis was started with the downfall of US sub-prime mortgage industry , the intensity of this collapse was significant; "Mark-to-market losses on mortgage-backed securities, collateralized debt obligations, and related assets through March 2008 were approximate $945 billion." He further stated that it is "The largest financial loss in history", as compared to Japan's banking crisis in 1990 about $780 billion, losses stemming from the Asian crisis of 1997-98 approx. $420 billion and the $380 billion savings and loan crisis of U.S itself in 1986-95.

3. Rasmus (2008) has the same thoughts; he, while discussing the reasons of economic recession of U.S said "The 'real' ailments afflicting the US economy for more than a quarter-century now include sharply rising income inequality, a decades-long real pay freeze for 91 million non-supervisory workers, the accelerating collapse of the US postwar retirement and healthcare systems, the export of the US economy's manufacturing base, the near-demise of its labor unions, the lack of full time permanent employment for 40 per cent of the workforce, the diversion of massive amounts of tax revenues to offshore shelters, the growing ineffectiveness of traditional monetary and fiscal policy, and the progressive decline of the US dollar in international markets."

4. When we look for the literature with reference to the impact of financial crises on Pakistan, Sheikh and Gopang (2009) analyzed the impact of global financial crisis 2008 on the poverty in rural part of Sindh province of Pakistan and compared it with other provinces. Moreover, Haque (2010) described the causes of financial distress in Pakistan and steps taken for the economic management of this catastrophe. Both of these papers are limited to the global financial crisis of 2008 only so there is a need to study the impact of other financial crises on Pakistan's economy.

III. RESEARCH METHODOLOGY

The methodology used for this study is classified in sub categories as under:

Research Objectives
The main objective of the study is to measure the impacts of global crisis on the profitability and liquidity performance of selected units. To make conclusion on the basis of study regarding the impact of global crisis on profitability and liquidity position of selected units. Other objective of the study is to measure the impacts of global crises on automobile industry.

Methodology
The data was collected for selected units for a period of three years before global crises and three years after global crises. Using t-test (Paired two samples for means), the pre global crises and post global crises performance was tested.

Research Hypothesis
On the basis of data collection, the researcher has identified the following broader hypothesis for the study:

H0   There would be no significant difference in financial performance of selected units, before and after global crises (Ho = μ1 = μ0).

H1   There would be significant difference in financial performance of selected units, before and after global crises (H1 = μ1 ≠ μ0).

Tools of Analysis:
The present study has analyzed the financial performance of selected units. In order to evaluate the financial performance tools like, ratio analysis, mean, standard deviation and student paired "t" distribution test has been used.

$$\overline{D} = \frac{\sum D}{n}, \quad \dagger \; \text{diff} = \sqrt{\frac{\sum D^2 - (\overline{D})^2 \;(n)}{n-1}}, \quad tc = \frac{\left|\overline{D} - 0\right|}{\dagger \; \text{diff}/\sqrt{n}}$$

Period of the Study:-
The present study is mainly intended to examine the financial performance of selected automobile units three years before global crises (1-4-2005 to 31-03-2008) and three years after global crises (1-4-2008 to 31-03-2011).

Data Collection
Data on key financial ratios depicting the profitability performance and liquidity performance for before and after global crises was extracted from the website money control and capitaline. The data regarding the selected units is obtained from the quarterly reports of the selected units. And all the data relating to history, growth and development of selected units will be collected mainly from the books and magazine relating to the industry and published papers, reports, articles and from the various newspapers.

Data Analysis
Before global crises and after global crises performance ratios were estimated and the averages computed for the selected units, during three years before global crises and three years after global crises. Average before global crises and after global crises financial performance ratios were compared to see if there was any statistically significant change in financial performance due to global crises, using Student paired "t" distribution test

IV. FINANCIAL ANALYSIS
The profitability performance and liquidity performance of selected units is as shown in Table 1.1.

The operating profit of Bajaj Ltd. is showing the highest before and after the global crises. HM Ltd. is highly affected by global crises in respect of profitability. The operating profit ratio of TVS Ltd. before crises is 6.56% and after crises is 2.96%, it decreased by 3.60% during the study period. The EICHER Ltd. is less affected by crises during the study period in respected of profitability. In respected of liquidity management the Bajaj Ltd. is highly affected by global crises during the study period. Liquidity position of EICHER Ltd. and TVS Ltd. is became very strong after crises.

The impacts of global crises on profitability performance and liquidity performance and research analysis are as shown in Table 1.2.

In the table 1.1, the researcher has calculated profitability ratios and liquidity ratios of selected units for three years before global crises and three years after global crises. In the table 1.2, the researcher has calculated, averages, standard deviation of different profitability and liquidity ratios.

In the table 1.2 the researcher has calculated the T test for different ratios. In majority of profitability ratios the calculated value of T is higher than the table value of T, which indicates that there are significance impacts of global crisis on Profitability of the selected units.

But in the case of liquidity performance the calculated value of T is lower than the table value of T, which means there is no significance impact of global crisis on liquidity performance of the selected units.

V.   LIMITATIONS OF THE STUDY
1.   The study is based on secondary data collected from several websites. The limitations of secondary data, if any, will also influence study.
2.   The researcher has also modified some of the formula used in the study. The arbitrariness, if any, in the modification of the formula will also influence the study.
3.   The study is limited to three years before global crises and three years after global crises only.
4.   This study is related with six units. Any generalization for universal application cannot be applied here.

VI. CONCLUSION
The last two years have been the toughest for the Indian Automobile industry with the continuing slump in the profitability and in the market of commercial

vehicles. But as compare to profitability of the automobile industry the liquidity performance is less affected by global crises. The recession seems there to stay for a period of time and to ensure that the Indian Automobile industry does not succumb under the pressure it is important for the government to take immediate effective steps till the time the economy is back on the road of recovery.

ABBREVIATIONS

CR   : Current Ratio
DER   :   Debt Equity Ratio
DR   : Debtors Ratio
GPR   :   Gross Profit Ratio
ITR   : Inventory Turnover Ratio
NPR   :   Net Profit Ratio
OPR   :   Operating Profit Ratio
QR   : Quick Ratio
ROCE   : Return on Capital Employed
RONW   :   Return on Net Worth
MZ   :   Maruti Suzuki
HM   : Hindustan Motors

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TABLES

Table 1.1 (Ratio analysis)										
Ratio	**Profitability Ratios**					**Liquidity Ratios**				
	OPR	GPR	NPR	ROCE	RONW	CR	QR	DER	ITR	DR
MZ After	10	6.94	7.55	23.19	17.94	1.2	1	0.07	29.3	31.9
Before	12.8	9.36	8.43	27.54	19.91	1.5	1.2	0.09	24	18.9
TATA After	9.35	5.92	3.2	13.76	14	0.7	0.9	3.52	9.71	18.1
Before	12.8	10.11	6.89	27.01	28.39	1	0.9	0.65	11.8	12.8
TVS After	2.96	-0.77	0.04	4.38	2.15	1.3	0.7	1.57	11.9	28.3
Before	6.56	3.64	3.63	18.71	18.22	0.9	0.5	0.5	13.6	51
EICHER After	5.02	3.15	3.2	16.17	10.34	2	1.9	0.21	12.1	14
Before	5.52	3.41	5.75	13.15	29.95	0.9	0.8	0.51	14.7	13.7
HM After	-7.55	-10.4	-2.9	-2.9	-35.25	0.8	0.5	1.54	10.2	32
Before	-0.64	-3.81	1.12	-6.54	15.57	0.9	0.7	1.49	12.3	14.8
Bajaj After	16.1	14.71	12	49.6	52.4	0.8	0.7	0.57	28.3	38
Before	18.7	15.9	14.9	22.66	23.52	1.5	1.4	0.47	35.8	24.3

Table 1.2 (Research analysis)							
RATIO NAME	N	MEAN	S.D.	r	Tc	Tt	RESULT
PROFITABILITY:-							
1] OPR							
Before	6	9.29	2.09	0.971	3.909	2.57	H_1
After	6	5.98					
2] GPR							
Before	6	6.44	2.34	0.973	3.332	2.57	H_1
After	6	3.26					
3] NPR							
Before	6	6.79	1.11	0.981	6.3	2.57	H1
After	6	3.85					
4] ROCE							
Before	6	17.09	15.2	0.572	-0.45	2.57	H_0
After	6	17.37					
5] RONW							
Before	6	22.59	25.9	0.489	1.17	2.57	H_0
After	6	10.26					
LIQUIDITY:							
1]CR							
Before	6	1.13	0.67	-0.27	-0.43	2.57	H_0
After	6	1.14					
2] QR							
Before	6	0.9	0.61	-0.33	-0.11	2.57	H_0
After	6	0.93					
3] DER							
Before	6	0.62	1.19	0.375	-1.29	2.57	H_0
After	6	1.25					
4] ITR							
Before	6	18.68	4.08	0.906	1.05	2.57	H_0
After	6	16.93					
5] DR							
Before	6	22.56	14.7	0.304	-0.75	2.57	H_0
After	6	27.04					

ABOUT AUTHOR

Dr. Shailesh N. Ransariya is working as an assistant professor with SSP Jain Arts and Commerce College. He has very bright academic career. He has Ph. D degree in the area of accounting and finance. He has also cleared NET in faculty of Commerce at first attempt. He has total teaching experience of 9 years plus for graduate and post graduate students. He has attended more than 25 conferences at international, national and State levels. His current teaching and research interest includes Financial management, Financial accounting, cost accounting, management accounting and corporate accounting.