

Business Risk in Tyre Industry: A Study of Select Companies in India

Sourav Sarkar

Research Scholar Department of Commerce, the University of Burdwan, West Bengal, India

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ABSTRACT: The present paper attempts to analyse the company-specific components of business risk, such as liquidity risk, cost structure risk and capital productivity risk of the selected Indian tyre companies during the period 2008-2009 to 2017-2018. The sample size of the study consists of top ten companies (based on market capitalization as per BSE on 31.03.2019) from the Indian tyre industry. The business risk and its company-specific components associated with the selected companies have been measured using Ginni's coefficient of concentration. While tackling the issue analyzed in this study relevant statistical technique like Pearson's simple correlation analysis, Spearman's rank correlation analysis, analysis of Kendall's coefficient of concordance, multiple correlation analysis and multiple regression analysis and statistical tests like t test, F test and Chi-square test have been applied at appropriate places.

Key words: Business risk, Liquidity risk, Cost structure risk, Capital productivity risk, Return.

I. INTRODUCTION:

Business risk is fluctuating in operating profitability of a company. Managing business risk is an essential task for a company to stabilize its earnings and to add value to owners' wealth. So in today's challenging and competitive environment, the matter of designing appropriate strategies for managing business risk in accomplishing the wealth maximisation objective of corporate is of utmost important. Business risk arises out of the randomness in the company's real returns in contrast to its projected ones. The degree of business risk depends on several factors like economy-specific factors, industry-specific factors and company-specific factors. Economy-specific factors, beyond the control of a corporate, affecting all the sectors of an economy, are fluctuations in foreign exchanges, competitions, concentration of revenues, inflation, imports, restrictive regulations etc. Industry-specific factors relate to the industry to which the company belongs. Changes in demand for the product, increased competition for the

product, special status enjoyed by the industry, growth prospects of the output produced or service rendered by the industry in the market and so on are included in this factor. Company-specific factors relate to the affairs of the company concerned with such as human factors. Managerial competence, talent management, strikes, technological factors like emerging technology, physical factors like failure of machines, fire or theft, operational factors like access to credit, cost cutting, cost structure, asset composition, advertisement, organizational culture and so on. Business risk arising out of economy-specific, industry-specific and company-specific factors are considered as economy risk, industry risk and company risk respectively. The company risk arises from precariousness in one or more fronts of the company, important of which are instability in cost behaviour pattern, dispersion of revenue generating capacity using long term funds and variability in short term debt paying capability. These weaknesses lead to cost structure risk, capital productivity risk and liquidity risk (Ghosh, 1997). There is almost no scope to exercise control over the economy risk and industry risk while it is, to some extent, possible to have over company risk. Several studies on risk analysis have been carried out in India and abroad. But no significant study on the analysis of business risk associated with the Indian tyre industry has been made. In this paper, therefore, an effort has been framed to the analysis of business risk in the Indian tyre industry during the period 2008-2009 to 2017-2018.

The remainder of this paper is organized as follows. Section II deals with the review of related literature. Section III narrates the objectives of the study. Section IV explains the methodology adopted in this study. In Section V the limitations of the study are mentioned. Section VI highlights on the results and discussions. Section VII deals with the concluding observations.

II. REVIEW OF RELATED LITERATURE:

The following in this section present a brief description of some of the notable studies carried out in India and abroad on the topic addressed in the present paper and the last paragraph of this section deals with the identification of research gap.

Amit and Wernerfelt (1990) in their study attempted to identify the reasons for firms' intention to reduce business risk. In this study two empirical tests designed to disentangle firms' motives for reducing business risk were carried out. The study revealed that low business risk allowed firms to acquire factors of production at lower cost, to operate more efficiently or both. These findings were consistent with theories assuming both value maximization and efficient capital markets.

Blacker (2000) conducted a study to identify the ways of mitigating operational risk in British retail banks and formed a theoretical framework based on the emerging core practices of the banks under study.

Sur (2007) made an attempt to make a comparative analysis in respect of business and financial risks of NTPC Ltd. in the pre-liberalization and post-liberalization periods. The study showed that both the business and financial risks associated with the company reduced notably due to a significant decrease in its total risk profile during the post-liberalization period. The study also revealed that as NTPC Ltd. enjoyed almost monopoly power in the Indian power sector throughout the study period (1982-83 to 2005-06), two major components of business risk, such as economy risk and industry risk did not increase during the post-liberalization era. Rather the company risk reduced significantly during the same period.

Mallik and Sur (2009) conducted a study to analyse the business and financial risks in the Indian corporate sector during the period 1995-96 to 2006-07 and also to examine whether its findings conformed to the theoretical arguments taking fifty selected companies from Indian manufacturing industry. The study observed that no strong evidence of positive or negative relationship between business and financial risk associated with the selected companies was noticed during the study period.

In the study conducted by **Sur and Mitra** (2011), business risk was analyzed taking seventeen selected companies in Indian IT sector during the period 1999-2000 to 2008-2009 using Ginni's coefficient of mean difference for measuring business risk and its company-specific components associated with the sample companies

in the study. The study reveals that there was a lack of uniformity in respect of risk-return trade-off among the selected IT companies during the study period.

Gupta and Sur (2013) conducted a study to analyse the business and financial risks associated with Hindustan Unilever Ltd. and examine the relationship between risk and return of the company. The study observed that no strong evidence of positive relationship between risk and return.

Another study was conducted by **Gupta and Sur** (2015) in which the business risk associated with ten selected industries in India during 2001-02 to 2010-11 was evaluated by considering ten companies from each of selected industries. This study also examined whether the operating profitability of the selected industries reacted to the changes in business risk. A strong evidence of negative association between business risk and operating profitability was observed in this study though a positive relationship between them is theoretically desirable.

From the literature till reviewed it have been found that a number of literature has been conducted on same issue relating to the Indian corporate sector. Negligible number of work has been considered for analyzing the financial risk and return of Indian tyre industry. But no study has been considered on analysis of business risk and company-specific components of business risk associated with the Indian tyre industry in depth using Ginni's coefficient of concentration as a reliable measure of risk. Therefore, to fill up the gap the study has considered the issue relating to the analysis of business risk in Indian tyre industry applying Ginni's coefficient of concentration.

III. OBJECTIVES OF THE STUDY:

The present study takes its attempt to

- i) measure the business risk (BR) associated with each of the selected companies.
- ii) ascertain the company-specific components of BR associated with each of the selected companies and test whether there was any uniformity the trends in such components.
- iii) find the relative risk-return status of selected companies.
- iv) analyse the closeness of association between BR and return of the selected companies.
- v) assess the joint effect of the company-specific components of BR associated with the selected companies on their returns.
- vi) examine whether the findings of the study conform to the theoretical arguments.

IV. METHODOLOGY OF THE PRESENT STUDY:

The study is based on top ten companies (based on market capitalization as per BSE on 31.03.2019) which were taken from Indian tyre industry adopting purposive sampling procedure. The selected ten companies under Indian tyre industry for the study are listed in Appendix 1. The data of the selected companies for the period 2008-2009 to 2017-2018 used in this study were taken from secondary sources i.e. Capitaline Corporate Database of Capital Market Publishers (I) Ltd. Mumbai. While measuring business risk and its company-specific components of each of the selected companies Ginni's coefficient of concentration was used. For making analysis of the computed values of risks, statistical techniques like Pearson's simple correlation analysis, Spearman's rank correlation analysis, analysis of Kendall's coefficient of concordance, multiple correlation analysis and multiple regression analysis and statistical tests like t test, F test and Chi-square test have been applied at appropriate places.

V. LIMITATIONS OF THE STUDY:

- i) The data used for the present study were taken from published financial statements only.
- ii) Only the company risk associated with the selected companies was considered in this study. The economy risk and industry risk were not considered in this study.
- iii) The issue relating to minimization of cost structure risk through forex management was ignored in this study.

VI. EMPIRICAL RESULTS AND DISCUSSION:

A. In Table 1, an attempt was made to measure the BR associated with each of the selected companies during the period under study using Ginni's coefficient of concentration of its average operating profit to capital employed ratio (OPCE). Table 1 represents that the degree of BR was the highest in Krypton, followed by Govind Rubber Ltd, CEAT Ltd, JK Tyres and Industries Ltd, TVS Srichakra Ltd, Apollo, Goodyear India Ltd, Balkrishna Industries Ltd, MRF Tyres Ltd and PTL Enterprises respectively in that order. The companies, namely JK Tyres and Industries Ltd, CEAT Ltd, TVS Srichakra Ltd, Govind Rubber Ltd and Krypton were placed in the 'Business Risk above the Indian Tyre Industry Average' category while the remaining five companies under study were able to find place in the category of 'Business

Risk below the Indian Tyre Industry Average' during the study period.

B. Table 2 shows that, ranks of company-specific components of BR, namely liquidity risk (LR), cost structure risk (CSR) and capital productivity risk (CPR) of the selected tyre companies in India. Before ascertaining the ranks, the LR, CSR and CPR of each of the selected companies were measured by Ginni's coefficient of concordance of working capital ratio, that of variable cost to total cost ratio and that of capital turnover ratio respectively. In this table, in order to examine whether there was any uniformity among the trends in LR, CSR and CPR of the selected companies Kendall's coefficient of concordance (W) was computed. For testing the significance of such coefficient, Chi-square test was applied. Table 2 reveals that the risk in respect of short term debt paying capability was the maximum in PTL Enterprises, followed by Goodyear India Ltd, Balkrishna Industries Ltd, CEAT Ltd, MRF Tyres Ltd, Apollo, Govind Rubber Ltd, Krypton, JK Tyres and Industries Ltd and TVS Srichakra Ltd respectively in that order. Out of ten selected companies, four were placed in the category of 'LR above the Indian tyre industry average' and remaining six companies found place in 'LR below the Indian tyre industry average'. In respect of CSR, Govind Rubber Ltd occupied the top most position and the next positions were captured by PTL Enterprises, Balkrishna Industries Ltd, Krypton, Apollo, JK Tyres and Industries Ltd, TVS Srichakra Ltd, CEAT Ltd, Goodyear India Ltd and MRF Tyres Ltd respectively in that order. Three companies found place in the category of 'CSR above the Indian tyre industry average' and the remaining seven companies were placed in the category of 'CSR below the Indian tyre industry average'. PTL Enterprises maintained the highest level of risk of not getting stable turnover by utilizing long term funds during the period under study, followed by JK Tyres and Industries Ltd, Goodyear India Ltd, Govind Rubber Ltd, MRF Tyres Ltd, Apollo, Balkrishna Industries Ltd, TVS Srichakra Ltd, Krypton and CEAT Ltd respectively. Out of ten selected companies, four companies were placed in the category of 'CPR above the Indian tyre industry average' while remaining six companies found place in 'CPR below the Indian tyre industry average'. It is, generally, accepted that disparity among the nature of instability in short term debt paying capability, cost behaviour pattern and capital productivity is obvious. Thus, lack of uniformity among the trends in LR, CSR and CPR in different companies is a natural phenomenon. But, uniformity among the

trends in LR, CSR and CPR was observed during the period under study. Table 2 shows that the computed value of Kendall's coefficient of concordance was 0.790 which was found to be statistically significant at 1% level.

C. In Table 3.1, risk – return status of the selected companies in India was ascertained with reference to BR and ROCE. It is observed from Table 3.1 that TVS Srichakra Ltd and Goodyear India Ltd were in the moderate risk-high return class. CEAT Ltd was placed in the high risk-moderate return combination. Apollo company found place in the moderate risk-moderate return cell. MRF Tyres, Balkrishna Industries Ltd and PTL Enterprises were able to maintain a low risk-moderate return combination. Govind Rubber Ltd and Krypton were placed in the worst category i.e. high risk-low return category and a combination of moderate risk-low return was kept by JK Tyres during the period under study.

In Table 3.2, risk return profile of the selected companies was assessed on the basis of LR and ROCE. This table discloses that TVS Srichakra Ltd was the only company which found place in the most desirable category i.e. low risk-high return class. Apollo, MRF Tyres, CEAT Ltd and Balkrishna Industries Ltd maintained a balance between risk and return by occupying moderate risk-moderate return cell. PTL Enterprises maintained high risk-moderate return combination while Goodyear India Ltd was placed in the reversed category i.e. moderate risk-high return class. A blend of moderate risk and low return was adopted by Govind Rubber Ltd and Krypton. JK Tyres maintained a low risklow return combination.

In Table 3.3 an assessment of risk-return status of the selected companies was made by taking into account the combination of CSR and ROCE. This table reflects that TVS Srichakra Ltd and Goodyear India Ltd were placed in the most desirable category i.e. low risk-high return class whereas Govind Rubber Ltd was placed in the most undesirable class by maintaining a high risk-low return blend. A blend of low risk and moderate return was adopted by MRF Tyres and CEAT Ltd while JK Tyres and Krypton maintained the reverse combination i.e. moderate risk-low return combination. Apollo and Balkrishna Industries Ltd maintained a balanced between risk and return by capturing the moderate risk and moderate return cell. PTL Enterprises was placed in the cell representing a blend of high risk and moderate return.

In Table 3.4 risk-return status of the selected companies was measured with reference to

CPR and ROCE. This table discloses that Goodyear India Ltd was placed in the high risk-high return class whereas Krypton maintained a combination of low risk and low return. PTL Enterprises maintained high risk-moderate return combination while TVS Srichakra Ltd was placed in reversed category i.e. moderate risk-high return class. A blend of low risk and moderate return was adopted by CEAT Ltd. JK Tyres and Govind Rubber Ltd were placed in the most undesirable class by maintaining a high risk –low return blend. Apollo, MRF Tyres and Balkrishna Industries Ltd maintained a balance between risk and return by occupying the cell representing moderate risk and moderate return.

D. In Table 4 it was attempted to assess the extent of relationship between BR and return and that between each of the company-specific components of BR and return of the selected companies through correlation coefficients between the selected measures of risks and return taking into account their magnitudes (i.e. Pearson's simple correlation coefficient) and ranking of their magnitudes (i.e. Spearman's rank correlation coefficient). In order to test whether these coefficients were statistically significant or not, t-test was used. This table shows that both the correlation coefficients between BR and ROCE were negative and found to be statistically significant at 0.05 level. Likewise, both the correlation coefficients between CSR and ROCE were negative but the coefficients were not found to be statistically significant even at 0.05 level. All the remaining four correlation coefficients between ROCE and rest two company-specific components(LR and CPR) were positive but the coefficients were not found to be statistically significant even at 0.05 level.

E. In Table 5, multiple correlation analysis and multiple regression analysis were made to investigate the joint effect of LR, CSR and CPR on the return of the selected companies during the period under study. The partial regression coefficients and the multiple regression coefficients were tested using t test and F test respectively. The regression equation that was fitted in this study is: $ROCE = b_0 + b_1.LR + b_2.CSR + b_3.CPR + e$ where b_0 is the intercept, b_1 , b_2 and b_3 are the partial regression coefficients and e is the error term. Table 5 reveals that for one unit increase in each LR and CPR, the ROCE increased by 49.356 units and 46.437 units respectively which were not found to be statistically significant even at 0.05 level. ROCE decreased by 927.588 units for one unit increase in CSR which was not found to be statistically significant even at 0.05 level. It indicates that the outcome mismatches with the

generally accepted principle that the higher the CSR, the higher the return. Table 5 also shows that the multiple correlation coefficient of ROCE on LR, CSR and CPR was 0.748 which was not found to be statistically significant even at 0.05 level. This table also represents that the selected influencing factors LR, CSR and CPR explained 55.90 % of the total variation in the ROCE.

VI. CONCLUDING OBSERVATIONS:

I) The highest volatility in operating profitability was observed in Krypton while PTL Enterprises enjoyed the least risk associated with its overall business operation during the period under study. 50 per cent of the selected companies maintained their BR at the level 'below the Indian tyre industry average' whereas the remaining 50 per cent of the selected ones kept themselves at the level 'above the Indian tyre industry average'.

II) 60 per cent, 70 per cent and 60 per cent of the selected companies maintained their LR, CSR and CPR respectively at the levels 'below the Indian tyre industry average' while the remaining 40 per cent, 30 per cent and 40 per cent kept themselves at the level 'above the Indian tyre industry average' during the period under study.

III) PTL Enterprises was able to find place almost on the front-benches by occupying the first, second and first ranks in respect of LR, CSR and CPR respectively. Govind Rubber Ltd faced the highest risk in respect of cost structure while the seventh and fourth ranks were occupied by it in respect of LR and CPR respectively during the period under study. Apollo captured the sixth, fifth and sixth ranks in respect of LR, CSR and CPR respectively. TVS Srichakra Ltd was placed on the back-benches by occupying the tenth rank in respect of LR, seventh rank in respect of CSR and eighth rank in respect of CPR. MRF Tyres Ltd enjoyed the lowest risk in cost structure front by occupying tenth rank whereas the fifth highest volatility was found in both liquidity and capital productivity fronts during the period under study. JK Tyres and Industries Ltd faced the high degree of risk in respect of liquidity while the sixth and second ranks were occupied by it in respect of CSR and CPR respectively. Similarly, CEAT Ltd bore the maximum risk on capital productivity front while in respect of CSR and LR the company was able to find place the eighth and fourth ranks respectively during the study period.

IV) TVS Srichakra Ltd was recognized in moderate risk-high return class in respect of BR as well as

CPR while it was placed in the most desirable category i.e. low risk-high return class in respect of LR and CSR during the period under study. Govind Rubber Ltd, bore high risk in respect of BR, CSR and CPR with low return. Therefore, this company should either re-examine their abilities to continue in the sector or think seriously about adopting any diversification strategy. Apollo company, found place in the moderate risk-moderate return category in all cases and Balkrishna Industries Ltd in almost all the cases. Goodyear India Ltd was recognized as a moderate risk taker and profit hunter as it found place in moderate risk-high return class in respect of BR and LR while it was risk adverse but profit hunter in respect of CSR and aggressive risk taker with high return in respect of CPR during the study period. PTL Enterprises found place in the high risk-moderate return category in respect of LR, CSR and CPR. MRF Tyres was placed in the moderate risk-moderate return category in respect of LR as well as CPR and in low risk-moderate return category in respect of BR and CSR. CEAT Ltd, bore moderate return with low risk in respect of CSR as well as CPR, with moderate risk in respect of LR and with high risk in respect of BR. JK Tyres and Krypton were placed in the low return class.

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Table 1 : Ranks of Business Risk of the Selected Tyre Companies in India

Serial No	Company Name	Business Risk	Status	Rank
1	Apollo	0.2147	B	6
2	JK Tyres and Industries Ltd	0.2367	A	4
3	MRF Tyres Ltd	0.1229	B	9
4	CEAT Ltd	0.2675	A	3
5	Balkrishna Industries Ltd	0.1262	B	8
6	TVS Srichakra Ltd	0.2298	A	5
7	Goodyear India Ltd	0.1571	B	7
8	Govind Rubber Ltd	0.2929	A	2
9	PTL Enterprises	0.1163	B	10
10	Krypton	0.3890	A	1
Indian Tyre Industry Average		0.2153		
'A' denotes 'Business Risk above the Indian Tyre Industry Average' and 'B' denotes 'Business Risk below the Indian Tyre Industry Average'				
Source: Compiled and computed from 'Capitaline Corporate Database' of Capitaline Market Publishers (I) Ltd., Mumbai.				

Table 2 : Ranks of Company-specific Components of Business Risk of the Selected Tyre Companies in India

Serial No.	Company	Liquidity Risk (LR)			Cost Structure Risk (CSR)			Capital Productivity Risk (CPR)		
		LR	Status	Rank	CSR	Status	Rank	CPR	Status	Rank
1	Apollo	0.0727	B	6	0.0065	B	5	0.1260	B	6
2	JK Tyres and Industries Ltd	0.0193	B	9	0.0056	B	6	0.2039	A	2
3	MRF Tyres Ltd	0.084	B	5	0.0027	B	10	0.1414	B	5
4	CEAT Ltd	0.1026	A	4	0.0040	B	8	0.0735	B	10
5	Balkrishna Industries Ltd	0.1379	A	3	0.0097	A	3	0.1220	B	7
6	TVS Srichakra Ltd	0.0163	B	10	0.0047	B	7	0.1154	B	8
7	Goodyear India Ltd	0.1388	A	2	0.0028	B	9	0.1844	A	3
8	Govind Rubber Ltd	0.0720	B	7	0.0227	A	1	0.1592	A	4
9	PTL Enterprises	0.3191	A	1	0.0190	A	2	0.2754	A	1
10	Krypton	0.0600	B	8	0.0071	B	4	0.0830	B	9
Indian Tyre Industry Average		0.1023			0.0085			0.1484		
'A' denotes 'LR/CSR/CPR above the Indian Tyre Industry Average' and 'B' denotes 'LR/CSR/CPR below the Indian Tyre Industry Average'										
Kendall's coefficient of concordance among the selected company-specific components of business risk (W) is 0.790 and Chi-square value is 15.800 being significant at 0.01 level										
Source: Compiled and computed from 'Capitaline Corporate Database' of Capitaline Market Publishers (I) Ltd., Mumbai.										

Table 3.1 : Risk-return Status of the Selected Tyre Companies in India based on combination of Business Risk and Return

ROCE \ Business Risk	High (≥25%)	Moderate (>15% but < 25%)	Low (≤15%)
High (≥0.25)		CEAT Ltd	Govind Rubber Ltd, Krypton
Moderate (>0.15 but < 0.25)	TVS Srichakra Ltd, Goodyear India Ltd	Apollo	JK Tyres
Low (≤0.15)		MRF Tyres, Balkrishna Industries Ltd, PTL Enterprises	

Source: Compiled and computed from 'Capitaline Corporate Database' of Capitaline Market Publishers (I) Ltd., Mumbai.

Table 3.2 : Risk-return Status of the Selected Tyre Companies in India based on combination of Liquidity Risk and Return

ROCE \ Liquidity Risk	High (≥25%)	Moderate (>15% but < 25%)	Low (≤15%)
High (≥0.15)		PTL Enterprises	
Moderate (>0.05 but < 0.15)	Goodyear India Ltd	Apollo, MRF Tyres, CEAT Ltd, Balkrishna Industries Ltd	Govind Rubber Ltd, Krypton
Low (≤0.05)	TVS Srichakra Ltd		JK Tyres

Source: Compiled and computed from 'Capitaline Corporate Database' of Capitaline Market Publishers (I) Ltd., Mumbai.

Table 3.3 : Risk-return Status of the Selected Tyre Companies in India based on combination of Cost Structure Risk and Return

ROCE \ CSR	High (≥25%)	Moderate (>15% but < 25%)	Low (≤15%)
High (≥0.01)		PTL Enterprises	Govind Rubber Ltd
Moderate (>0.005 but < 0.01)		Apollo, Balkrishna Industries Ltd	JK Tyres, Krypton
Low (≤0.005)	TVS Srichakra Ltd, Goodyear India Ltd	MRF Tyres, CEAT Ltd	

Source: Compiled and computed from 'Capitaline Corporate Database' of Capitaline Market Publishers (I) Ltd., Mumbai.

Table 3.4 : Risk-return Status of the Selected Tyre Companies in India based on combination of Capital Productivity Risk and Return

ROCE \ CPR	High (≥25%)	Moderate (>15% but < 25%)	Low (≤15%)
High (≥0.15)	Goodyear India Ltd	PTL Enterprises	JK Tyres, Govind Rubber Ltd
Moderate (>0.10 but < 0.15)	TVS Srichakra Ltd	Apollo, MRF Tyres, Balkrishna Industries Ltd	
Low (≤0.10)		CEAT Ltd	Krypton

Source: Compiled and computed from 'Capitaline Corporate Database' of Capitaline Market Publishers (I) Ltd., Mumbai.

Table 4 : Analysis of Relationship between Risk and Return of the Selected Tyre Companies in India

Correlation between Correlation Measure	Coefficient	Business Risk and Return	Liquidity Risk and Return	Cost Structure Risk and Return	Capital Productivity Risk and Return
Pearson		-0.729*	0.364	-0.370	0.296
Spearman		-0.758*	0.442	-0.430	0.273

*Significant at 0.05 level

Source: Compiled and computed from 'Capitaline Corporate Database' of Capitaline Market Publishers (I) Ltd., Mumbai.

Table 5 : Analysis of Multiple Regression and Multiple Correlation of Return on Company-specific components of Business Risk of the Selected Tyre Companies in India

Multiple Regression Equation of ROCE on LR, CSR and CPR: $ROCE = b_0 + b_1.LR + b_2.CSR + b_3.CPR + e$			
Variable	Partial Regression Coefficient		t Value
LR	49.356		1.410
CSR	-927.588	-2.387	
CPR	46.437	0.922	
Constant	15.253	2.468*	
Multiple Correlation Coefficient of ROCE on LR, CSR and CPR: $R_{P,LCC} = 0.748$ $R^2_{P,LCC} = 0.559$ $F = 2.537$			
*Significant at 0.05 level.			
Source: Compiled and computed from 'Capitaline Corporate Database' of Capitaline Market Publishers (I) Ltd., Mumbai.			

Appendix 1	
Sl. No	List of the selected companies
1	Apollo
2	JK Tyres and Industries Ltd
3	MRF Tyres Ltd
4	CEAT Ltd
5	Balkrishna Industries Ltd
6	TVS Srichakra Ltd
7	Goodyear India Ltd
8	Govind Rubber Ltd
9	PTL Enterprises
10	Krypton