Business Risk in FMCG Companies in India during the Post-liberalization Era: An Empirical Analysis

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ABSTRACT

The FMCG industry in India has been making significant contribution towards developing the economy not only by providing a large number of consumer goods but also by generating a considerable amount of employment in India. In the environ of diverse challenges in India arising out of the liberalisation measures taken by the Government of India, FMCG companies have also made remarkable changes in their business policies. It has resulted in considerable changes in the pattern of business risk associated with the Indian FMCG companies. In this backdrop, the present paper seeks to analyse the business risk associated with 20 selected companies in the Indian FMCG sector during the period 1995-96 to 2011-12.

Key Words: *Post-reform era, Business risk analysis, FMCG industry.*

I. INTRODUCTION

Business firms do at all times undertake risks owing to threats from its economic, social, political and natural environment where they are embedded and struggle to exist and grow. The risks may come out of macro-level intimidation or micro-level limitations, may be external or internal to the firm, may be controllable or uncontrollable, but each of these risks has its own substance and strength to scale down the financial stability of business firms. Hence, studying risks is fundamental because if they are not treated appropriately and minimized they can cause serious damage to the financial health of business bodies.

Business risk arises out of the randomness in company's real returns in contrast to its projected returns. The class and size of business risk depends on a number of factors, internal or external, associated with the company's operations and marketing activities. Business risk is central to business firms because it influences the operation or the profitability of a company to an enormous extent. Though business risks may take place in different forms and in different magnitude depending upon the nature and mass of the business, generally it is composed of three basic kinds of risk, which are, one, *economy- specific risk,* two, *industry-specific risk* and third, the final, *company-specific risk*. *Economy-specific risk*, generally beyond the control of a capitalist or a corporate, affecting all the sectors of an economy, arises out of the events like inflationary tendency in the economy, rising unemployment, fluctuations in the world economy, price fluctuations, changes in tastes and preferences of the consumers and changes in income, output or trade cycles, fluctuations in foreign exchanges, concentration of revenue, imports, etc. Natural calamities like volcanic activity, torrent, famine, cyclone, lightening etc. which cause loss of life and property may also be included in this category of risk. For example, the massacre of a vast area in and around Kedarnath Temple

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following the devastating Uttarakhand Flood of 2013 caused irretrievable damage not only to the lives and livelihood of a large number of people but it adversely affected the whole economy of the State. Political factors like fall or change in the Government, communal violence or riots, civil war as well as hostilities with the neighbouring countries, changes in Government policies and regulations, changes in industrial policy and trade policy, annual budget amendments …. All these have an important influence on the functioning of a business, both in the short run and in the long. *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 category. *Company-specific risks* are explicit to the affairs of the company concerned with such as human factors like managerial competence, talent management, strikes, technological factors like emerging technologies; physical factors like failure of machines, fire or theft; operational factors like access to credit, cost cutting, cost structure, asset composition, advertisement, organizational culture, ethical values and so on. The C*ompany risk* emanates from precariousness in one or more fronts of the company, important of which are instability in cost behaviour pattern, dispersion of revenue generating capability 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 (Sur & Mitra, 2011). There is almost no scope to exercise control over the economy risk and industry risk while it is, to some extent, possible to have power over the company risk. Theoretically, it is expected that high risk can be rewarded by higher risk premium i.e. higher return. It will be hard to a company with high risk-low return profile to run its operating wheel in the long run. However, the issue relating to the nature and degree of association between risk and return is a controversial one. The findings of the relevant studies carried out so far are conflicting and inconclusive in nature. One school of thought argues that there is a high degree of positive affiliation between risk and return (Cootner & Hollant, 1970) while the other provides exactly the opposite argument (Bettis & Mahajan, 1985; Singh, 1986; and Mallik & Sur, 2009). However, there exists a third alternative view which suggests that risk and return are influenced by various industry conditions and business strategies, but not by each other (Oriatt and Bauershmidt, 1991)

II. REVIEW OF EXISTING LITERATURE

Since a long period of time a good number of scholars have made notable contribution to the literature of corporate finance by conducting empirical research studies on business risk associated with the companies at both domestic and global levels. Some of the worth mentioning scholarly research studies are reviewed as below which can throw some light to estimate the research gap.

The seminal contribution to the corporate finance literature in regard to leverage and firm's value was made by Modigliani and Miller (1958). With some restrictive conditions they for the first time coined the irrelevance theory of capital structure decision on firm's value. Modigliani and Miller (1963) later added corporate taxes to their model and then established that earnings and market value of the firm can only be maximized by 100% levered firm.

The study conducted by Lev (1974) on risk and leverage documented empirical evidence that of positive association between market risk and operating leverage.

Gahlon and Gentry (1982) analyzed the interrelationship between firms' real asset risk and their market risk. The outcome of the investigation exhibited the coefficient of variation of profits as a function of coefficient of variation of revenue and leverage.

Rhee (1986) carried on a research work where he tried to decompose beta or systematic risk associated with a firm and he found out that business risk, operating risk, and financial risk are three major dynamics of beta.

Prezas (1987) conducted a study to examine the impact of change in the capital structure on business and financial risk. The result of the study suggested that DOL and DFL will both be affected when the firm's capital structure changes and the changes in DOL and DFL depend on the relative sizes of the debt elasticity of real capital and contribution margin.

The result of the study conducted by Huffmen (1989) on US manufacturing firms during the study period 1966-1985 revealed that there existed a positive relationship between systematic risk and the degree of financial leverage and as well a negative relationship was observed between systematic risk and the degree of operating leverage. But the result of his study was exactly opposite of the findings of negative correlation between DOL and DFL observed by Mandelker and Rhee (1984).

The study conducted by Li and Henderson Jr. (1991) showed that interactions between investment and financing can either increase or decrease the impact of leverage on stock risk. Total leverage, estimated without regard to levels of its operating and financing components can better explain risk associated with the stock.

The empirical work of Ang (1992) suggested that there exists complex and contradictory relationship between the firm size and leverage.

Dugan et al. (1994) conducted an empirical research study on trade-off between operating and financial risk to manage the overall risk at an optimum level. He observed that two types of firms that are levered and non-levered ones differ significantly with regard to certain financial ratios, though the results are case sensitive to the selection of estimation technique for calculating the DOL and DFL coefficients.

Huo & Kwansa (1994) made an attempt to determine the significance of leverage on risk associated with the firm on firms belonging to hotel and restaurant industries during the recessionary period of 1990 to 1991. The result of the study suggested that the restaurants are riskier relative to the market and hotels are less risky as compared to the market, both are riskier relative to the utility industry during a recession.

Hatfield et al. (1994) conducted a study on the determination of optimal capital structure. The result of the study recommended that the market did not appear to consider the relationship between a firm's leverage ratio and the industry's leverage ratio important. This finding was in conformity with original Modigliani and Miller (1958) proposition that financial leverage is irrelevant to the value of the firm

Larry et al., (1995) conducted a study on leverage investment and growth of the firm. They reported significant negative relationship between leverage and future growth potential. The result of the study also reinforced the fact that leverage does not reduce the growth of the firms having better earning potential.

Rajan and Zingales (1995) in their study observed that firms' size, asset tangibility, profitability and growth prospects, can significantly explain the variation in firms' leverage and this relationships was found to hold good for all the firms of the seven countries despite their institutional differences.

Lord (1996) looked into theoretical model relating the operating characteristics of a firm to the total, systematic, and unsystematic risk of its equity. The empirical findings of the study suggested that the degree of operating leverage, net profits to firm value, and the variability of unit output were all found to be positively correlated with each of the three risk measures. The degree of financial leverage, while positively related to total and unsystematic risk, did not appear to be related to systematic risk.

Griffin and Dugan (2003) conducted a study on systematic risk and revenue volatility. They have used degree of economic leverage (DEL) to explain the change in systematic risk. The result of the study documented that DEL have a significant impact on systematic risk and revenue volatility.

Mseddi and Abid (2004) looked into the association between firm value and risk. They utilized panel data to analyze the impact of operating and financial leverage levels on the value of the firm for 403 non-financial US corporations during the period 1995 to 1999. They documented that both financial and operating risk have a notable positive influence on the firm's value.

Ruland and Zhou (2005) documented a significantly strong positive relationship between leverage and the values of diversified firms

Moon and Tandon (2007) examined the impact of growth opportunities on the relationship between equity ownership and leverage and found that the association between equity ownership and leverage is significant for low-growth firms, but the same is not true for high-growth firms.

Li and Tang (2007) in their study of corporate governance evaluation and performance observed that low levels of financial leverage positively influenced the profitability, stock expansion ability and market value of listed firms.

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 revealed that there were considerable decreasing trends in both the business and financial risks associated with the company which resulted in a significant decline in its total risk profile during the post- liberalization period.

Mallik and Sur (2009) carried out 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. While making this study fifty companies were selected by taking the top five companies (based on net sales revenue) from each of the ten selected manufacturing industries and coefficient of variation was used as the measure of risk . The study observed that no strong evidence of positive or negative relationship between business and financial risks associated with the selected companies was noticed during the study and high risk was not at all compensated by high risk premium during the same period.

Bhatti et al., (2010) conducted a study to examine the impact of leverage on the stock return and risk of companies belonging to eight different industries listed in Karachi Stock Exchange of Pakistan during the study period 2005-2009. The result of the study confirmed that, generally high degree of leverage resulted in high level of systematic risk and consequently high volatility in stock prices.

Saleem et al. (2011) conducted a study to analyze and understand the effect of leverage on the profitability of the oil and gas sector of SAARC countries during the period 2001 to 2010. The result of the study suggested that there was a significant relationship between DFL, DOL and ROA and therefore, fixed operating expenses and the financing mix decisions of the firm can significantly affect the earning capacity the firm.

Sur and Mitra (2011) in their study attempted to make business risk analysis of seventeen selected companies in Indian IT sector during the period 1999-2000 to 2008-09. While measuring business risk and its company-specific components associated with the sample companies in their study Ginni's coefficient of mean difference was used. The study revealed that there was a lack of uniformity in respect of risk-return trade-off among the selected IT companies during the study period. Another notable outcome of the study was that high risk was not at all compensated by high risk premium in the selected companies during the period under study.

The study conducted by Prasetyo (2010), using samples of 225 public companies in Indonesia from the year of 2000 to 2009 provided strong evidence to the hypothesis that in the long run, there was a negative relationship between financial leverage and capital intensity

In the Indian context, Pachori and Totala (2012) conducted an empirical research on the impact of financial leverage on shareholders return and market capitalization on automotive cluster companies of Pithampura, M.P. The result of the study suggested no significant impact of financial leverage on return to owners and market capitalization.

Nimalathasan and Pratheepkanth, (2012) conducted a study on the impact of systematic risk management on profitability of select Srilankan financial institutions during 2007 to 2011. The result of the study confirmed a positive association between systematic risk and profitability. Further the research outcome revealed that Systematic risk management was amplified by DFL and DOL where the beneficial impacts were observed on profitability.

In recent times a study was conducted by Azhagaiah and Sathia (2012) on corporate leverage and financial decision on 25 firms listed in BSE belonging to Indian textile industry during 2004 to 2008. The findings of the study confirmed that eight firms out of 25 selected ones registered significant growth rate in financial, operating and combined leverages.

Though a large number of studies on risk analysis have been carried out in India and abroad during the last few decades and a considerable number of studies on the issue relating to financial risk analysis have also been conducted in India during the post-liberalisation period, but no significant study on the analysis of business risk of the Indian FMCG sector has so far been made during the post-liberalisation era despite the fact that the FMCG sector in India has been playing a vital role in developing its economy not only by providing a large number of consumer goods necessary for carrying on day-to-day activities of the general people but also by generating a considerable amount of employment in India. The income as well as the consumption patterns of the people of India has marked notable changes in the post-liberalisation period. As a result, the companies belonging to the FMCG sector have also changed their business policies to face the diverse challenges emanated from the liberalisation measures taken by the Government of India. It leads to considerable changes in the pattern of business risk associated with the Indian FMCG companies. By a careful scrutiny of the studies of business risk analysis in Indian corporate sector it can be inferred that no in-depth study on this issue in connection with the FMCG sector in India considering the effects of the above mentioned changes in Indian business environment has been made. Moreover, Ginni's coefficient of concentration is presently recognised as a reliable measure of risk. But no study on business risk analysis in Indian FMCG sector has been carried out using such a coefficient. It is, therefore, high time to deal with the issue relating to the analysis of business risk in the Indian FMCG sector during the post-liberalisation period applying Ginni's coefficient of concentration.

III. OBJECTIVES OF THE STUDY

The objective of the present study is to analyse the business risk of the selected FMCG companies during the post-liberalization period. In specific terms, the objectives are:

1. To measure the degree of business risk associated with each of the selected FMCG companies and to compare the same with the Indian FMCG industry average.
2. To assess the company-specific components of business risk associated with each of the companies under study and to test whether there was any uniformity among such components.
3. To analyze the relationship between business risk and its company-specific components of the selected companies.
4. To study the relative risk-return status of the selected companies.
5. To evaluate the nature and extent of the relationship between risk and return of the selected companies.
6. To examine whether the findings of the study conform to the theoretical arguments.

IV. FMCG SECTOR IN INDIA: A BRIEF PROFILE

FMCG sector is the fourth largest in the Indian economy and has a market size of $13.1 billion. This industry primarily concerns with the production, distribution and marketing of consumer packaged goods, that is, those categories of products which are consumed by people at regular intervals. The sector is growing at a rapid pace with well-established distribution networks and intense competition between its organized and unorganized segments. It has a strong and competitive MNC presence across the entire value chain. The FMCG's promising market includes middle class and the rural segments of the Indian population, and give brand makers the opportunity to convert their produce to branded products. It includes food and beverage, personal care, pharmaceuticals, cosmetics, plastic goods, paper and stationery and household products etc.

India, Asia's third largest economy, saw urban consumers spend less in calendar year 2012 due to high inflation, muted salary hikes, and slowing economic growth that affected both real wages and sentiment. During 2012, the overall slowdown in the economy has begun to affect the FMCG sector with companies posting deceleration in volume growth in the recent quarterly results. Discretionary spending has been hit severely due to the ongoing slowdown. The prevailing high inflation level is also a cause of concern for the sector. The trends seen in 2012 are likely to accelerate in 2013. Growth will come from rural dwellers that are expected to see a rise in disposable incomes due to the direct cash transfer scheme, while urban consumers will continue to be affected by the macroeconomic environment.

V. METHODOLGY OF THE STUDY

The study is based on twenty companies which were taken from the top twenty five FMCG companies in India (based on the sum of total income and total assets) following purposive sampling procedure. The selected twenty companies are listed in Appendix 1. Thus selection was made considering 'The BW Real 500' published by the Business World, Vol. 30 Issue 24, Kolkata, November 1, 2010. The data of the selected companies for the period 1995-96 to 2011-12 used in this study were collected from secondary source i.e. Capitaline Corporate Database of Capital Market Publishers (I) Ltd., Mumbai. As the liberalization process started in India during the financial year 1991-92, it is obvious that the effect of it could not be reflected immediately after its inception. Thus, in this study the financial year 1995-96 was considered as the initial year of the post-liberalization period. For measuring the business risk and its company-specific components

associated with the selected companies using Ginni's coefficient of concentration was used. While making the analysis of the computed values of risks, statistical techniques, such as analysis of Kendall's coefficient of concordance, Pearson's simple correlation analysis, Spearman's rank correlation analysis, Kendall's correlation analysis and statistical tests like t-test and $\chi 2$ were applied at appropriate places.

VI. LIMITATIONS OF THE STUDY

1. While carrying out the study the data disclosed in the published financial statements of the selected companies were used.
2. Only the company-specific components of the business risk associated with the selected companies were analysed in this study. The analysis of economic-specific and industry-specific components of business risk was not made in this study.
3. The issue relating to the minimization of cost structure risk through forex management was not taken into consideration in this study.

VII. EMPIRICAL FINDINGS

1. In Table 1, an attempt was made to measure the degree of business risk (BR) associated with the selected companies in Indian FMCG industry during the study period. The BR of each of the selected companies was ascertained by Ginni's coefficient of concentration of operating profit to capital employed (OPCE) ratio. Table 1 shows that the degree of BR was the highest in Colgate, followed by Godfrey, ATFL, Nestle, KSOL, HUL, TTL, Cadbury, ITC, Marico, Uflex, Dabur, Ruchi, VST, GAEL, Nirma, BIL, P&G, Glaxo and GRSL respectively in that order. The degree of BR associated with HUL, Nestle, TTL, KSOL, Godfrey, Colgate, Cadbury and ATFL was far above the Indian FMCG industry average while that of the remaining twelve companies under study was below the industry average.

TABLE I
Ranks of Business Risk of the selected companies in Indian FMCG Industry

Serial No.	Company	Business Risk	Status	Rank
1	ITC Ltd.(ITC)	0.152	B	9
2	Hindustan Unilever Ltd (HUL)	0.173	A	6
3	Ruchi Soya Industries Ltd. (Ruchi)	0.142	B	13
4	Nirma Ltd. (Nirma)	0.131	B	16
5	Nestle India Ltd (Nestle)	0.252	A	4
6	Tata Tea Ltd. (TTL)	0.172	A	7
7	Uflex Ltd. (Uflex)	0.148	B	11
8	Britannia Industries Ltd. (BIL)	0.128	B	17
9	KS Oils Ltd. (KSOL)	0.195	A	5
10	Dabur India Ltd. (Dabur)	0.147	B	12
11	GlaxoSmithKline Consumer Healthcare Ltd. (Glaxo)	0.112	B	19
12	Gujrat Ambuja Exports Ltd. (GAEL)	0.132	B	15
13	Gokul Refoils & Solvent Ltd. (GRSL)	0.097	B	20

14	Godfrey Philips India Ltd. (Godfrey)	0.278	A	2
15	Colgate –Pamolive (India) Ltd. (Colgate)	0.371	A	1
16	Cadbury India Ltd.(Cadbury)	0.162	A	8
17	Marico Ltd. (Marico)	0.151	B	10
18	VST Industries Ltd. (VST)	0.137	B	14
19	Agro Tech Foods Ltd.(ATFL)	0.265	A	3
20	P & G Hygiene And Healthcare Ltd. (P & G)	0.117	B	18
Indian FMCG Industry Average		0.161		
'A'A'denotes 'Business Risk above the Indian FMCG Industry Average' and 'B' denotes 'Business Risk below the Indian FMCG Industry Average'				
SoSource: Compiled and computed from 'Capitaline Corporate Database' of Capitaline Market Publishers (I) Ltd., Mumbai.				

2. In Table 2, three major company specific components of business risk, namely Liquidity risk (LR), Cost structure risk (CSR) and capital productivity risk (CPR) of each of the selected companies were measured by Ginni's coefficient of concentration of working capital ratio, that of variable cost to total cost ratio and that of capital turnover ratio respectively. In order to examine whether there was any uniformity among LR, CSR and CPR of the selected companies, Kendall's coefficient concordance (W) was used. For testing the significance of such coefficient chi-square ($\chi 2$) test was applied. Table 2 discloses that the risk in respect of short term debt paying capability was the maximum in Godfrey, the next five positions were occupied by Colgate, ATFL, KSOL, Nestle and HUL respectively while the degree of LR was the least in GRSL. Ruchi, Nirma, BIL, Glaxo, GRSL and P & G were placed in the category of ' LR below the Indian FMCG industry average' whereas the remaining fourteen companies found place in the ' LR above the Indian FMCG industry average' category. In respect of CSR, ATFL captured the topmost position and the next five positions were occupied by Colgate, Godfrey, Nestle, KSOL and HUL respectively whereas the degree of CSR was the minimum in GRSL. In eleven selected companies namely ITC, HUL, Nestle, TTL, Uflex, KSOL, Godfrey, Colgate, Cadbury, Marico and ATFL the CSR was higher as compared to the industry average while the remaining nine companies were placed in the ' below the industry average' category. KSOL maintained the highest level of risk of not getting stable turnover by utilizing average long term funds, followed by HUL, Colgate, Nestle, ATFL, ITC and so on while the degree of CPR was the least in Dabur. Based on the CPR was Ruchi, Nirma, BIL, Dabur, Glaxo, GRSL, Marco, VST and P & G were placed in the 'below the industry average' category whereas the remaining eleven companies found place in the category of 'CPR above the Indian FMCG industry average'. At a glance, uniformity among LR, CSR and CPR of the selected companies was observed during the period understudy. Table 2 also reveals that the computed value of W was 0.836 which was found to be statistically significant at 0.01 levels. It confirms the existence of uniformity among the selected company. Specific components of business risk associated with the companies understudy during the study period.

TABLE II
Ranks of Company-Specific Components of Business Risk of the Selected Companies in Indian FMCG Industry

TABLE III
Analysis of correlation between Business Risk and its company-specific components of the selected companies in Indian FMCG Industry

Sl No.	Com-pany	Liquidity Risk (LR)			Cost structure Risk (CSR)			Capital Productivity Risk (CPR)		
		LR	Status	Rank	CSR	Status	Rank	CPR	Status	CPR
1	ITC	0.171	A	10	0.070	A	9	0.190	A	6
2	HUL	0.187	A	6	0.080	A	6	0.215	A	2
3	Ruchi	0.141	B	14	0.052	B	15	0.132	B	16
4	Nirma	0.139	B	15	0.058	B	14	0.129	B	17
5	Nestle	0.198	A	5	0.088	A	4	0.198	A	4
6	TTL	0.177	A	8	0.065	A	11	0.180	A	8
7	Uflex	0.167	A	11	0.068	A	10	0.182	A	7
8	BIL	0.124	B	17	0.035	B	19	0.140	B	15
9	KSOL	0.241	A	4	0.082	A	5	0.225	A	1
10	Dabur	0.165	A	12	0.060	B	13	0.099	B	20
11	Glaxo	0.119	B	18	0.050	B	16	0.121	B	18
12	GAEL	0.132	A	16	0.062	B	12	0.172	A	9
13	GRSL	0.103	B	20	0.03	B	20	0.117	B	19
14	Godfrey	0.265	A	1	0.090	A	3	0.170	A	10
15	Colgate	0.262	A	2	0.092	A	2	0.201	A	3
16	Cadbury	0.182	A	7	0.072	A	8	0.162	A	11
17	Marico	0.175	A	9	0.078	A	7	0.160	B	12
18	VST	0.153	A	13	0.042	B	17	0.147	B	14
19	ATFL	0.251	A	3	0.098	A	1	0.192	A	5
20	P & G	0.111	B	19	0.040	B	18	0.152	B	13
Indian FMCG Industry Average		0.152			0.066			0.161		
'A' denotes 'LR/CSR/CPR above the Indian FMCG Industry Average' and 'B' denotes 'LR/CSR/CPR below the Indian FMCG Industry Average'										
Kendall's coefficient of concordance among the selected company specific components of business risk (W) is 0.836 and chi-square ($\chi 2$) value of W is 47.652 being significant at 0.01 level.										
urcSource: Compiled and computed from 'Capitaline Corporate Database' of Capitaline Market Publishers (I) Ltd., Mumbai.										

Correlation Coefficient between / Correlation Measure	Business Risk and Liquidity Risk	Business Risk and Cost structure Risk	Business Risk and Capital Productivity Risk
Pearson	0.827**	0.767**	0.500*
Spearman	0.877**	0.869**	0.656**
Kendall	0.768**	0.726**	0.495**
***Significant at 5% level, **Significant at 1% level Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers (I) Ltd., Mumbai.**			

3. In Table 4.1 risk-return status of the selected companies in Indian FMCG industry was ascertained with reference to BR and overall profitability. The return on capital employed (ROCE) was taken as the overall profitability indicator in this analysis. Table 4.1 discloses that only Nestle and Colgate were the two companies among the selected ones which maintained a high risk-high return combination whereas ATFL was placed in the most undesirable category i.e. high risk-low return class. BIL, Glaxo, GAEL, GRSL, VST and P & G maintained a combination of low risk and moderate return whereas Ruchi, TTL and Uflex found place in the moderate risk-low return class. The cell indicating high risk and moderate return was occupied by Godfrey while a blend of moderate risk and high return was maintained by HUL, Dabur and Marico. Nirma was placed in the category of low risk- low return. A balance between risk and return was maintained by ITC, KSOL and Cadbury by capturing moderate risk-moderate return cell.

TABLE IV (4.1)

Risk-return Status of the selected companies in Indian FMCG Industry based on the combination of Business Risk and Overall Profitability

ROCE / BR	High (≥ 40%)	Moderate (>20% but<40%)	Low (≤ 20%)
High (≥ 0.20)	Nestle, Colgate	Godfrey	ATFL
Moderate (>0.14 but<0.20)	HUL, Marico	ITC, KSOL, Cadbury	Ruchi, TTL, Uflex
Low (≤ 0.14)	-	BIL, Glaxo, GAEL, GRSL,VST,P&G	Nirma
Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers (I) Ltd., Mumbai.			

4. In Table 4.2 risk-return profile of the selected companies was assessed on the basis of LR and ROCE. It is observed from the table that Colgate was the only company among the selected ones which maintained a high risk-high return blend whereas Nirma was the only company which found place in the low risk-low return class. HUL, Nestle, Dabur and Marico maintained a moderate risk-high return combination whereas KSOL and Godfrey were placed in the cell indicating a blend of high risk and moderate return. BIL, Glaxo, GAEL, GRSL and P & G found place in the low risk-moderate return category while the reverse combination i.e. moderate risk-low return blend was maintained by Ruchi, TTL and Uflex. ITC, Cadbury and VST maintained a balance between risk and return by placing themselves in the moderate risk-moderate return cell. ATFL was placed in the most undesirable class i.e. high risk-low return class.

TABLE 4.2

Risk-return Status of the selected companies in Indian FMCG Industry based on the combination of Liquidity Risk and Overall Profitability

ROCE / LR	High (≥ 40%)	Moderate (>20% but<40%)	Low (≤ 20%)

High (≥ 0.20)	Colgate	KSOL, Godfrey	ATFL
Moderate (>0.14 but<0.20)	HUL, Marico, Dabur, Nestle	ITC, Cadbury, VST	Ruchi, TTL, Uflex
Low (≤ 0.14)	-	BIL, Glaxo, GAEL, GRSL, P&G	Nirma
Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers (I) Ltd., Mumbai.			

5. In Table 4.3 an assessment of risk-return status of the selected companies was made by taking into account the combination of CSR and ROCE. This table depicts that HUL, Nestle, Dabur, Marico and Colgate were placed in the cell representing a blend of high risk and high return whereas TTL, Uflex, and ATFL found place in the most undesirable class i.e. high risk-low return class. ITC, KSOL, GAEL, Godfrey and Cadbury maintained a combination of high risk and moderate return. A blend of low risk and moderate return was adopted by BIL, GRSL and P & G while Ruchi and Nirma maintained the reverse combination i.e. moderate risk-low return combination. Glaxo and VST maintained a balance between risk and return by capturing the moderate risk-moderate return cell.

TABLE 4.3

Risk-return Status of the selected companies in Indian FMCG Industry based on the combination of Cost Structure Risk and Overall Profitability

ROCE / CSR	High (≥ 40%)	Moderate (>20% but<40%)	Low (≤ 20%)
High (≥ 0.060)	Colgate, HUL, Marico, Dabur, Nestle	KSOL, Godfrey, ITC, GAEL, Cadbury	ATFL, TTL, Uflex
Moderate (>0.040 but<0.060)	-	Glaxo, VST	Ruchi, Nirma
Low (≤ 0.040)	-	BIL, GRSL, P&G	-
Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers (I) Ltd., Mumbai.			

6. In Table 4.4 risk-return status of the selected companies was measured with reference to CPR and ROCE. This table discloses that HUL, Nestle and Colgate were placed in the high risk-high return class whereas Ruchi and Nirma maintained a combination of low risk and low return. While ITC and KSOL found place in the high risk-moderate return cell, Marico was the only company among the selected ones which was placed in the class indicating the reverse blend i.e. moderate risk-high return combination. BIL, Glaxo and GRSL maintained a combination of low risk and moderate return whereas the reverse combination i.e. moderate risk-low return blend was maintained by TTL and Uflex. Dabur was the only company which was placed in the most desirable class i.e. low risk-high return category whereas ATFL found place in the most undesirable class i.e. the class indicating combination of high risk-low return GAEL, Godfrey, Cadbury, VST and P & G maintained a balance between risk and return by occupying the cell representing moderate risk and moderate return.

TABLE 4.4

Risk-return Status of the selected companies in Indian FMCG Industry based on the combination of Capital Productivity Risk and Overall Profitability

ROCE / CPR	High (≥ 40%)	Moderate (>20% but<40%)	Low (≤ 20%)
High (≥ 0.19)	Colgate, HUL, Nestle	KSOL, ITC	ATFL
Moderate (>0.14 but<0.19)	Marico	VST, GAEL, Godfrey, Cadbury, P&G	TTL, Uflex
Low (≤ 0.14)	Dabur	BIL, GRSL, Glaxo	Ruchi, Nirma

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

7. In Table 5 an attempt was made to assess the degree of relationship between business risk and overall profitability and that between each of the company-specific components of business risk and overall profitability of the selected companies by using correlation measures, namely Pearson's simple correlation, Spearman's correlation and Kendall's coefficient of correlation. In order to test whether these coefficients are statistically significant or not t-test was used. This table shows that all the three correlation coefficient between BR and ROCE were positive, out of which one coefficient was found to be statistically significant at 0.05 levels. All the nine correlation coefficients between ROCE and the selected company-specific components of BR were positive but were not found to be statistically significant even at 0.05 levels. Thus, out of the twelve correlation coefficients (as shown in Table 6) only one was positive as well as found to be statistically significant. So, the study made in Table 6 fails to provide strong evidence of positive relationship between BR or its company-specific components and return. The net outcome derived from the analysis, therefore, mismatches with the theoretical argument that the higher the instability in operating profitability, the higher is the risk premium.

TABLE V

Analysis of correlation between Risk and Return of the selected companies in Indian FMCG Industry

Correlation Coefficient between / Correlation Measure	Business Risk and Return	Liquidity Risk and Return	Cost Structure Risk and Return	Capital Productivity Risk and Return
Pearson	0.507*	0.265	0.372	0.259
Spearman	0.230	0.174	0.236	0.243
Kendall	0.174	0.100	0.164	0.121

*Significant at 5% level

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

VIII. CONCLUDING OBSERVATIONS

1. The highest volatility in operating profitability was observed in Colgate while Godfrey enjoyed the least risk associated with its overall business operation during the study period. 60

percent of the selected FMCG companies maintained their BR at the level below the Indian FMCG industry average whereas the remaining 40 percent of the selected ones kept it at the level above the industry mean in the same period.

2. 30 percent, 45 percent and 45 percent of the selected FMCG companies maintained their LR, CSR and CPR respectively at the level below the Indian FMCG industry averages while the remaining 70 percent, 55 percent and 55 percent kept them at the levels above the industry average during the period under study.

3. Godfrey faced the highest risk in respect of liquidity while the third and tenth ranks were occupied by it in respect of CSR and CPR respectively during the study period. However, Colgate occupied the second rank in respect of both LR and CSR and third rank in respect of CPR in the same period. Similarly, ATFL bore the maximum risk on cost structure front and in respect of LR and CPR the company was placed on the front-benches by occupying the third and fifth ranks respectively. KSOL occupied the first, fourth and fifth ranks in respect of CPR, LR and CSR respectively. Nirma captured the fifteenth, fourteenth and seventeenth ranks in respect of LR, CSR and CPR respectively. GRSL was placed on the back-benches by occupying the twentieth rank in respect of both LR and CSR and ninetieth rank in respect of CPR. This kind of parity was observed in most of the companies understudy. So, uniformity among LR, CSR and CPR of the selected companies was noticed during the study period. The outcome of the analysis of Kendall's coefficient of concordance made this study provides evidence for the correctness of the above inference.

4. The analysis of correlation between BR and each of its company-specific components reveals that LR, CSR and CPR established themselves as significant contributors of the BR associated with the selected companies during the period under study.

5. The uniformity in respect of risk-return trade off among the selected FMCG companies was not at all present during the study period. Rather in many cases various peculiar blends of risk and return were observed. ATFL, bearing the high risk on the cost structure, liquidity and capital productivity front and yielding low return, faced a severe crisis in respect of controlling costs, payment of short term debt and generation of sales revenue during the study period. Therefore, the company should adopt appropriate measures to exercise control over its costs, liquidity and capital productivity for maintaining its company-risk within a reasonable limit. Nestle and Colgate established themselves as aggressive risk-taker as Colgate in all the cases and Nestle in almost all the cases were placed in the high risk-high return category. Although the levels kept by HUL, Dabur and Marico in respect of BR and its company-specific components fluctuated widely from low to high, they proved themselves as profit-hunter during the period under study. As BIL, Glaxo, GRSL and P& G found place in the low risk-moderate return category in almost all the cases, they were considered as risk averse but were not aggressive in generating operating surplus. High instability in cost behaviour pattern and moderate volatility in the operating profitability, short term debt paying capability and revenue generating capability of TTL and Uflex were not at all well compensated as they could not find place high or moderate return strata. Nirma was the only company among the selected ones which averse as well as reluctant to generate high return as it maintained a blend of low risk and low return during the study period.

6. Although a high degree of positive relationship between BR or its company-specific components and return is theoretically desirable, the analysis of interrelation between them made in this study by using three different correlation measures fails to provide strong evidence of positive relationship between them in almost all the cases. It reflects that high risk was not at all

compensated by high risk premium i.e. high return in the selected FMCG companies during the study period.

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