



RISK ANALYSIS OF DEMERGER: EVIDENCE FROM INDIAN CORPORATE SECTOR

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Abstract

This paper examines the effect of demerger on the risk position of demerged companies with the help of standard deviation and coefficient of variation. A sample of 18 demerged companies have taken for my research work. The list of demerged companies was identified first from Bombay Stock Exchange (BSE) and National Stock Exchange web sites then finally from proweiss 3.1. In order to analyze the data, student's t-test is used to evaluate the statistical significance of differences in paired means of financial variables computed for two sample groups, namely pre- demerger period and post demerger period. Pre and post demerger average ratios are calculated to measure the improvement in financial position. Then their significance is tested with the help of t- test and p- value. On the whole Demergers have significant effect on the risk position of the firm. In nutshell after demerger have significant effect on Risk position of demerged companies.

Keywords: Demerger, abnormal returns, window period, clean period, Announcement date

Introduction

The Indian corporate is going not only with mergers and acquisitions but also with demergers. Companies are demerging divisions to bring sharper focus to their business. Demergers have also been into the limelight because of ongoing bull market. Promoters can command high valuation for the demerged entity due to favorable market conditions. Companies like Arvind Ltd, Ceat Ltd., Crompton Ltd. Dabur India Ltd., HMT Ltd., JK Synthetics Ltd., Nirma Ltd., Raymonds Ltd., and Voltas Ltd. are the examples, which have used demerger as a tool to maximize focus and create value. According to Hari Shankar Singhania, Chairman, JK Industries(2004) "This is a forward looking strategic step for the company by creating strong business focused entities, which will be able to leverage their core competency in the competitive business environment both in the domestic as well as global markets". Demergers, which typically involve the spin-off by a company to its shareholder certain of its activities and a listing on public markets of separate business, provide a means to enhance shareholder value, focus business activities and/or divest control of non-core assets to a third party.

An Analyst in The Economic Times, April, (2006)⁵ said "Historically demergers have enhanced shareholders value. Whether it is the demerger of Reliance Industries or Larson and Turbo, which hived off cement division, or demerger of Godrej Soap into Godrej Consumer and Godrej Industries, Investors have benefited hugely as the demerged entities have created substantial wealth." Reliance Communication has separated its wireless tower business and transferring it to Reliance Telecom Infrastructure. After completion of the process, there are two independent legal entities with focus on two different businesses: telecom services and wireless tower infrastructure strategy and its implementation. Besides the de-merged entity can raise financial resources on its own and does not have to depend on the parent for monetary support. Dabur hived off the research-intensive pharmaceutical business, requiring continuous investment, into Dabur Pharma. This move has given financial leeway to both the companies. Companies also hive off the not-so-profitable businesses proving a drag on the overall profitability of the company, adversely impacting its market value. Such companies command lower valuation compared with their competitors. Sunil Duggal, CEO, Dabur India said (2004)⁶ "Going forward, it (demerger) will improve the fortunes of both these entities because both companies will develop specific product lines,

with better capabilities in each segment. The sum will be greater than the parts.” The parent company can sell-off the loss-making de-merged entity to generate cash to be used for its core business. Indo Rama Textiles was de-merged from Indo Rama Synthetics in 2003. Subsequently, the Indo Rama group sold its stake to Spentex. Whatever the reason, de-mergers are normally beneficial for investors as they lead to unlocking of value hidden in business divisions. De-merged entities also become easy to analyze and to accord valuation.

Sedodia (2001)⁹ expresses that now a days core competency is emerging as a new mantra for growth. Corporates are either abandoning the peripheral business or demerging them in order to remain focused. When there was a sharing of common interest between different businesses of a group, diversification emerged as a better strategy for growth. However with the difference between various businesses now standing out more clearly than ever before, demerger has evolved a better strategic tool in the corporate survival game. In this competitive global market landscape where factors like investment requirement, business cycle and economics determine the fate of the corporate, demerger is very effective.

In view of the above reasons I considered Demerger a most relevant topic for my research. Now a day, it has become a demanding and focus area of research. It is a sample study consisting of companies demerged in India and the analysis is only from parent company’s point of view. I tried to examine the impact of demerger from risk point of view both in pre and post demerger period.

Objectives of the Study

To analyze the pre-demerger and post-demerger scenario of demerged companies in terms of their risk characteristic;

Scope of the Study

The sample companies for the present study have been selected in two stages. First, about 70 demergers during 1996 to 2006 were taken from Prowess 3.1; a database developed by Centre for Monitoring Indian Economy. Subsequently the companies whose announcement date of demerger is not given were left out.

In the second stage those companies were excluded whose Stock Price Data for two years before announcement of demerger and two years after the announcement is not available. This exercise leaves me with a sample of 18 demerged companies which I have taken for my research work. The list of demerged companies was identified first from Bombay Stock Exchange (BSE) and National Stock Exchange web sites then finally from prowess 3.1.

Sources of Data

Besides reputed books and journals, the study is based on data taken from Prowess 3.1; a database developed by Centre for Monitoring Indian Economy (CMIE), company reports and Capitaline data basis. Web sites like bseindia.com, nseindia.com, moneycontrol.com, indiainfoline.com have also been extensively consulted.

Research Methodology

The first objective of this part is to discuss in detail the methodology used for the research. Before conducting actual research work, the researcher prepares a full detail of information about the overall work to be done. This enables the researcher to save time and energy and to conduct the study step-wise and systematically. Such sequential steps adopted by the researcher in studying a problem with certain objectives are called research methodology. Discussion of research methodology at this stage is appropriate as it has a direct bearing on the collection, analysis, interpretation of the data and reporting of results about various aspects of phenomenon under study. Accordingly the following issues have been discussed.

Tools used

The research tools used are as under:

- Mean
- Standard Deviation

- Coefficient of Variation
- F-test
- T-test

Statistical Techniques Used

In order to analyze the data, student's t-test is used to evaluate the statistical significance of differences in paired means of financial variables computed for two sample groups, namely pre- demerger period and post demerger period. Pre and post demerger average ratios are calculated to measure the improvement in financial position. Then their significance is tested with the help of t- test and p- value.

Event Definition and Date of Announcement

For the purpose of this study the first date of media announcement of the demerger has been taken as the event date (day zero). Table 1 enumerates the date of announcement of the demergers. The first possible date when the news of the demerger was made public has been used. The same has been obtained from PROWESS 3.1; a data based software developed by Center for Monitoring Indian Economy (CMIE), company's reports, Capitaline, ISI Emerging Markets and web sites of Securities and Exchange Board of India (SEBI), Bombay Stock Exchange (BSE) and National Stock Exchange (NSE).

Window Period and Clean Period Data

Seiler (2004) explained that event study is composed of three frames.

1. Estimation Window (- 240 to -41)
2. The Event Window (-40 to +40)
3. Post Event Window (41 to 240)

Table 1-Date of Announcement of Demerged companies

Sr. No.	Company Name	Company Name	First Media Announcement date
1.	CEAT LTD	CEAT	MAY 18, 1999
2.	CROMPTON GREAVES LTD	CROMPT	JULY 7, 2000
3.	DABUR INDIA LTD	DABUR	AUGUST 9, 1999
4.	GODREJ INDUSTRIES LTD	GODREJ	AUGUST 1, 2000
5.	GRASIM INDUSTRIES LTD	GRASIM	JANUARY 7, 2000
6.	HMT LTD	HMT	JULY 16,1999
7.	INFOSYS TECHNOLOGIES LTD	INFO	JUNE 30, 2000
8.	J.K. SYNTHETICS LTD	JKSYNT	OCTOBER 14, 2000
9.	KESORAM INDUSTRIES LTD	KESO	JULY 7, 2000
10.	KODAK INDIA PRIVATE LTD	KODAK	NOVEMBER 1, 1999
11.	LARSON AND TOUBRO LTD	LARSON	JANUARY 19, 2000
12.	NIRMA LTD	NIRMA	JUNE 30, 2000
13.	RAYMOND LTD	RAYMD	MAY 25, 1999
14.	STEEL AUTHORITY OF INDIA LTD	SAIL	DECEMBER 8,1999
15.	TATA COMMUNICATION LTD	TATA	OCTOBER 21, 1999
16.	VOLTAS LTD.	VOLTAS	JUNE 19, 2000
17.	WIPRO LTD.	WIPRO	AUGUST 19, 1999
18.	ZEE ENTERTAINMENT ENTERPRISES LTD	ZEE	JULY 5, 1999

Table 2-Clean Period and Window period for the Study

Window Period	Clean Period	
	Before Demerger	After Demerger
-40 to 40 days	-240 days to- 41 days	41 days to 240 days

The share price data and market index (BSE 200) has been taken from Prowess 3.1; the database Software developed by CMIE and National Stock Exchange. Table 3 gives the date wise data used for clean and window periods for the demerged companies.

Table 3-Clean Period & Window Period Data for Demerged Companies

Sr. No	Name of Company	Data used for Clean Period (-240 to -41)		Data used for Window Period (-40 to 40)	
		Start Date	End Date	Start Date	End Date
1.	CEAT	May 25, 1998	March 11,1999	March 12, 1999	July 12,1999
2.	CROMP	July 22, 1999	May 11, 2000	May 12,2000	Sept 5,2000
3.	DABUR	Oct.22, 1998	June10, 1999	June11,1999	Sept 28,1999
4.	GODREJ	Aug.20, 1999	Feb.10,2000	Feb11,2000	May 8,2000
5.	GRASIM	March 15, 1999	Nov 10,1999	Nov 11,1999	Feb 28,2000
6.	HMT	May 26, 1998	May 19, 1999	May 20, 1999	Sept 14,1999
7.	INFO	July 15, 1999	May 4, 2000	May 5, 2000	Aug 28, 2000
8.	JKS	Oct.29, 2001	Aug13, 2002	Aug 14,2002	Dec 12, 2002
9.	KESO	July 22, 1999	May 11, 2000	May12, 2000	Sept 5, 2000
10.	KODAK	Nov.13, 1998	Sept.1, 1999	Sept.2, 1999	Dec 29,1999
11.	LARSON	Feb.2, 1999	Nov.19, 1999	Nov. 22,1999	March16,2000
12.	NIRMA	July15, 1999	May4, 2000	May 5, 2000	Aug 28, 2000
13.	RAYMD	June 2, 1998	March22, 1999	March23,1999	July22,1999
14.	SAIL	Dec.18, 1998	Oct 7, 1999	Oct 8,1999	Feb 4, 2000
15.	TATA	April 27, 1998	Aug 23, 1999	Aug 24,1999	Dec 20,1999
16.	VOLTAS	July 2, 1999	April 19, 2000	April 20, 2000	Aug 14,2000
17.	WIPRO	Aug.27, 1998	June.22, 1999	June23,1999	Oct.14,1999
18.	ZEE	July1 3,1998	May7, 1999	May10,1999	Aug30,1999

STATISTICAL SIGNIFICANCE OF EVENT RETURNS

The null hypothesis that there are no abnormal returns associated with the demerger announcement needs to be statistically tested. If the estimated value of t-statistic is greater than 1.64 but less than 1.96, it is significant at 10% level. If estimated value of t statistics is greater than 1.96 and less than 2.58, it is significant at 5% level. If its value exceeds 2.58, it is significant at 1% level. In the event of the t-statistic being significant, it implies that there are abnormal returns associated with the demerger announcements in India.

Review of literature:

Copeland, Lemgruber, and Mayers (1988) calculated the effects of announcements subsequent to the first (most firms had at least three or four announcements; one had thirteen). They explored that, excluding the ex-date from the estimate; the abnormal return for a firm which actually completes spin-off is 5.02 percent. They concluded that the first announcement return is not a good estimate of the effect of a completed spin-off because not all spin-offs are completed and that earlier studies had underestimated the wealth effect of a completed spin-off.

Glassman (1988) compared the two aspects spin-offs and spin-outs by taking the cases of different companies and explained that when a corporate securitization through spin-offs and spin-outs most likely to add value? The strategy was most effective when it removed a relatively small business from a bureaucracy whose focus is diffused throughout a conglomerate structure. Securitization made the spun-off business more valuable by, Revitalizing entrepreneurial initiative, Strengthening management incentives, Giving local management more autonomy in making investment decisions, Reducing the time required to make decisions and implement strategies and, Providing access to external financing.

Afshar (1992) examined for sample of 178 UK corporate sell-offs during 1985-86, whether the selling company shareholders earn risk-adjusted abnormal returns. They found that, on the day before the press announcement of the sell-off event, divestor shareholders earn 0.85 percent, which is statistically

significant. Thus it appeared that the stock market greets the sell-off announcement favourably. He also suggested that the stock market reaction is much more favourable - that is, divestor shareholders earn higher abnormal returns – the weaker the financial condition of the divestor. Financial condition was measured by the Z score, which was a weighted sum of four different financial ratios representing profitability, gearing, and liquidity and operating resource. The Z score was derived as a measure of the bankruptcy potential of a company.

Robert, Richard and Douglas (1994) studied that both inadequate governance and inappropriate strategy had been proposed as antecedents of the divestment activity of restructuring firms in the 1980s. They combined both views in a structural equation model in which divestment intensity is directly related to firm performance and strategy, which were in turn preceded by weak governance. Some supportive results indicated that block holder equity, a governance antecedent, and relative product diversification (strategy) had important indirect effects on divestment activity and that relative product diversification and relative debt had important direct effects. Unpredicted findings concerning board outsider equity and components of divestment intensity emerged. Also, market performance mediated the relationship between accounting performance and divestiture intensity.

Peel (1995) analyzed that on both sides of the Atlantic, corporate restructuring in its various forms has increased in intensity throughout the 1980's. After reviewing the relevant academic literature, this paper presented a detailed analysis of UK restructuring activity over the period 1980 to 1992. It provided new evidence which suggested that the different strategic restructuring options selected by managers may be linked at the macro (economy-wide) level. Although the strategic motives underpinning any particular restructuring transaction may be complex and varied, the paper concluded that companies may be at least partly responding to a common set of environment/macro factors, a finding consistent with recent strategic models which indicates that economy-wide variables, such as deregulation of markets and increasing global competition, were associated with strategic change and corporate restructuring. The paper concluded with an increase in corporate restructuring for management and employees.

Roni and Shaw (1995) in their findings analyzed how firms choose between a spin-off and an equity carve-out as a way to divest assets. A sample of 91 master limited partnerships that were issued to the public was used. They found that riskier, more leveraged, less profitable firms choose to divest through a spin-off. The spin-off firms are smaller and less profitable than the carve-out firms. This suggested that the choice was affected by a firm's access to the capital market: Greater scrutiny and more stringent disclosure are required in carve-out relative to spin-offs. They did not find support for the hypotheses that management attempts to leave undervalued assets in the hands of current shareholders or that parent organization's need for cash are the driving motives behind the divestiture choice. Little, if any, support is found for operating efficiencies as a reason for these transactions. Both spin-off and the carve-out firms underperform the market by a wide margin. The spin-off MLPs underperformed the market by almost 60% and their parents under perform by more than 100 %. While firms involved in the carve-out transactions experienced a significantly better future performance than those involved in the spin-off transactions, they still did not show any indication of significant efficiency gains. The parent corporations trailed the market by 3 % two years after the transaction (an insignificant difference). Even when we include the initial gain at the time of the announcement (0.4 %), the overall performance is not better than that of the market. The carve-out MLPs underperformed the market by 20 % in the first two years of operations.

Kaiser Kavin (1995) presented preliminary evidence on stock market reaction to divestiture announcement by European firms. Included in their sample are divestitures by French, German and UK firms. Their findings include: (!) stock price reaction during initial announcements of domestic subsidiary sell-offs is positive and consistent (in size and direction) with the US evidence, (2) in contrast to evidence for sellers in US, the European evidence indicates the seller performance improves substantially for the 60 trading days following the event, (3) there appeared to be substantial information leakages in Continental European countries many trading days prior to the initial announcement of the event to the Press, (4) there appeared to be differences across countries in the way cumulative abnormal returns are distributed between sellers divesting domestic subsidiaries (positive effect) and sellers divesting foreign subsidiaries (ambiguous effect), and (5) the relative size of the divested unit explained a considerable portion of the variation in stock- price effects across firms.

Stonham (1997) in his paper studied the first demerger of one of its divisions in the United States in 1995, US Industries, and the Hanson conglomerate used the experience of this successful spin-off in preparation for its much larger and complete break-up planned for 1996, into four companies: Hanson, Energy, Imperial Tobacco and Millennium Chemicals. A sample of broker valuations, made in early 1996, is observed, where sum-of-the-parts valuations were used. These were compared to actual share trading performance between October 1996 and January 1997, and the divergence examined. He investigated legal ways of demerged in the UK and considers aspects of the 1995 USI demerger, which already showed some of the legendary Hanson skill in the management of restructuring. Academic evidence on the share performance of spin-offs in the US is considered. He finally examined Hanson's and its demerged companies' shares were justifiably over or under valued in the three months following the demerger and flotation.

Suryanarayana (2003) explained in his article that Grasim finally succeeded in getting hold of the cement capacities of L & T, which makes it the biggest player in the country. This acquisition has several interesting features like the business first being spun off with another company, sale of stake in that company and finally an offer for it. While for the buyer it was almost a dream comes true, for the seller it was a rectification of a mistake but without any punishment. He examined the L & T report and concluded that for L & T the movement in cement was unprofitable, right from the beginning. For fiscal 2002, its cement division was the poorest performer with both the operating margin and return on capital employed being the lowest among the segment of L & T.

Dixit and Pandey (2003) described real life situation faced, a decision or action taken by an individual manager or by an organization at the strategic, functional or operational levels. On March 23, 1995, Sandoz international Ltd – a Swiss multinational group with operations in pharmaceuticals, dyestuff, chemicals agricultural chemicals, and seeds businesses – announced the worldwide demerger of its chemicals business. The business was spun off into an independent company called Clariant international Ltd. The objective of demerger was to enable Sandoz to define and exploit opportunities in the global chemical sector without being constrained by the compulsions of other businesses of Sandoz. The new company was free to shape its future by seizing new opportunities and streamlining existing ones in the chemical sector. Rastogi reflected on the activities of his division, its relationship with Sandoz (India) Ltd's corporate office and another division, and the external developments.

Vyas Pavak (2015) examines that the demergers and the announcement period price reaction of demergers during the year 2012-2014. He studied total 51 demergers of companies listed in India and tried to establish that demergers results into abnormal returns for the shareholders of the parent company. Using event study methodology the authors have analyzed the security price performance of the announcement day effect 10 days prior to the announcement to 10 days post demerger announcement. He found significant out-performance of the security over the benchmark index post demerger announcement ranging from 1.74% average abnormal return for a demerger announcement to 0.16% average abnormal return 10 days following the announcement.

Padmanabhan P.A (2018) analysed that demergers are emerging as one of the important forms of corporate restructuring. While there is extensive literature on demergers abroad, there is limited literature on demergers in the Indian context. he studied the impact of demerger announcements on shareholders' wealth is analysed using event study. He took demerger announcements made by 63 companies spread over 11 years from 2003 to 2014 . He applied Two different models, namely, mean-adjusted returns model and market model. Log returns are used in the study. The efficiency of the Indian stock market is also tested in the study. The results show positive abnormal returns during the event window under both mean-adjusted returns model and market model. The results also indicate that the Indian stock market exhibits semi-strong form efficiency.

Analysis and Interpretation

One of the most important reasons of demerger is that the company after demerger should improve in terms of its risk characteristic. This is only then the wealth of the shareholders can be maximized. The chapter examines the aspect that “Demergers do not result in changing the risk position of the demerged companies.”

The demerger is examined from risk and returns point of view both in pre- and post demerger period in respect of sample companies. The data of share prices have been collected for two different time

periods, namely, before demerger and after demerger. So this chapter aims to analyze the effect of demerger on risk of the selected companies.

RISK: Conceptual Framework

Risk in its simplest form may be stated as the variability of actual return from expected returns associated with a given investment. The greater the variability, the riskier the security (i.e. share) is said to be. The more certain the return from asset, the less is the variability and, therefore, the less the risk. Assessing risk and incorporating the same in the final decision is an integral part of financial analysis. In this part we analyze the risk position before and after demerger.

Effect of Demerger on Risk: Theoretical Consideration

Risk is calculated by taking the standard deviation of the returns calculated on continuous basis using log normal (LN) function of Excel. Risk refers to the dispersion of returns around an expected value. The most common statistical measure of risk of an asset is the standard deviation from the mean/expected value of the return. The greater is the σ of returns, the greater the variability/ dispersion of returns and greater the risk of the investment. Coefficient of variation is the measure of relative dispersion (risk) or a measure of risk per unit of expected return. It converts standard deviation of expected values into relative value to enable comparison of risks associated with assets having different expected values. The coefficient of variation (CV) is computed by dividing the expected value of average Return by standard deviation (σ).

$$CV = \frac{\bar{X}}{\sigma}$$

The higher the CV, the larger the relative risk of an asset. As a rule, the coefficient of variation is most appropriate for comparing asset risk since it considers the relative size of assets.

The period has been taken is 200 days before (-) 40th day and 200 days after 40th day. The 81 days (40 days before demerger and 40 days after demerger and one is the announcement day) has been left out because of abnormal fluctuations in the market price during this period. All the data related to risk calculation is shown in Table 4A and 4B in Appendix IV. The statistical tool F test is used to examine the risk factor involved in demerger for the company and shareholder. Risk has been calculated for all 18 companies selected under the study. All the results related to risk are presented in Table 4.4 to 4.8.

Standard deviation before and after and there difference is calculated in Table 4.4 and then f test is applied to check the significance level.

Table 4-F Test of Standard Deviation to check theRisk Position of Demerged Companies

Sr.No.	Company Name	Standard Deviation Before demerger	Standard Deviation after demerger	Increase/decrease in Std deviation	F- value	p-value
1	CEAT	0.0381	0.0502	0.0121	31.5970	0.0000*
2	CROMPT	0.0473	0.0330	-0.0143	30.6330	0.0000*
3	DABUR	0.0355	0.0390	0.0035	1.6120	0.2050****
4	GODREJ	0.0497	0.0289	-0.0208	56.8900	0.0000*
5	GRASIM	0.0410	0.0393	-0.0017	3.0980	0.0790***
6	HMT	0.0850	0.0711	-0.0138	4.8090	0.0290**
7	INFOSYS	0.0459	0.0422	-0.0037	5.3270	0.0220**
8	J.K.SYNT	0.0589	0.0548	-0.0041	0.0010	0.9760***
9	KESO	0.0513	0.0444	-0.0069	8.5470	0.0040*
10	KODAK	0.0334	0.0307	-0.0027	2.6780	0.1030****
11	LARSON	0.0351	0.0379	0.0028	0.0250	0.8740****
12	NIRMA	0.0452	0.0542	0.0090	0.1390	0.7100****
13	RAYMOND	0.0455	0.0422	-0.0032	1.2800	0.2590****
14	STEEL	0.0580	0.0342	-0.0239	17.7610	0.0000*
15	TATACOM	0.0384	0.0540	0.0156	22.2570	0.0000*

16	VOLTAS	0.0390	0.0351	-0.0039	5.7590	0.0170**
17	WIPRO	0.0350	0.0606	0.0256	74.9020	0.0000*
18	ZEE	0.0374	0.0575	0.0201	43.2360	0.0000*

For better interpretation of the data calculated in Table 4 another Table 5 has been prepared where the effect has been depicted in totality.

Table 5-Effect on Standard Deviation after Demerger

Results after demerger	Number of companies	In percentage terms
Increase in Standard deviation	7	39
Decrease in Standard deviation	11	61
Total	18	100

Further the effect is classified on the basis of significance level of the increased and decreased Standard deviation of the selected companies in the Table 6 based on values of Table 4 and 5.

Table 6-Classification on the basis of Significance level of increased and decreased Standard Deviation of Companies

Level of significance	Companies indicating an increase in Standard deviation		Companies indicating a decrease in Standard deviation	
	Number of companies	In percentage terms	Number of companies	In percentage terms
1%	4	57	3	27
5%	--	-	4	36
10%	-	-	1	09
More than 10%	3	43	3	27
Total	7	100	11	100

Table 7-The Effect of Demerger on Risk based on Coefficient of Variation

Sr.No.	Company Name	Coefficient of Variation Before demerger	Coefficient of Variation after demerger	Increase/decrease in Coefficient of Variation
1	CEAT	-6.9928	-2.6875	4.3053
2	CROMPT	-9.8085	-0.7626	9.0459
3	DABUR	9.6326	-7.3436	-16.9762
4	GODREJ	0.4963	12.0803	11.5840
5	GRASIM	12.8727	-2.1512	-15.0239
6	HMT	0.7582	-2.7498	-3.5081
7	INFOSYS	13.7355	-8.4816	-22.2171
8	J.K.SYNT	1.1499	6.4722	5.3223
9	KESO	-5.2359	2.0933	7.3292
10	KODAK	6.6408	-5.6347	-12.2755
11	LARSON	11.8549	-2.1281	-13.9830
12	NIRMA	-2.8471	-13.3554	-10.5083
13	RAYMOND	-7.5196	-2.7739	4.7457
14	STEEL	4.6865	-8.9765	-13.6630
15	TATACOM	3.6433	-8.9471	-12.5905
16	VOLTAS	-11.4075	3.9280	15.3354
17	WIPRO	11.2745	4.5112	-6.7634
18	ZEE	13.9314	0.5962	-13.3353

Coefficient of variation is the measure of relative dispersion (risk) or a measure of risk per unit of expected return. It converts standard deviation of expected values into relative value to enable comparison of risks associated with assets having different expected values.

Table 8-Classification on the basis of Increase and Decrease in Coefficient of Variation after demerger

Results after demerger	Number of companies	In percentage terms
Increase in CV	7	39
Decrease in CV	11	61
Total	18	100

Empirical Findings

Table 4 to 8 shows that Standard Deviation has increased in 39% cases and decreased in 61% cases. Decrease of 27% is significant at 1% and 36% companies is significant at 5% level of significance. Out of increased standard deviation 57% companies are significant at 1% level of significance. Ceat Ltd., Tata Communication Ltd, Wipro Ltd and Zee entertainment Enterprises Ltd have shown a significant increase in the risk position while Crompt, Godrej, HMT, Infosys, Kesoram SAIL, Voltas have shown a significant decrease in risk position after demerger. C.V. has increased in 39% cases and decreased in 61% cases. On the whole Demergers have significant effect on the risk position of the firm. In nutshell after demerger have significant effect on Risk position of demerged companies.

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