A Study on the Investor's Perception about Mergers

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Abstract

Merger is an expansion strategy whereby corporates engage in buying other companies in related or unrelated industries to enhance their value. This study discusses different sources of information about merger deals. This present study also analyses the investor's perception about mergers. This study is based on primary data. Data has been collected from 513 equity investors. The statistical tools such as simple mean, frequency analysis, cluster analysis, discriminant analysis, chi-square test, correspondence analysis, ANOVA, post-hoc analysis and canonical correlation have been applied to analyse the data. This study reveals that the non-shareholder acquires information about mergers through print and electronic media. This study also reveals that investors feel that merger deals are absolutely necessary. The number of family members who have invested in share market exercises the maximum influence on investors' perception about mergers.

Keywords: Investors, Mergers, Media, Motives.

1. Introduction

Merger symbolises legal combination of two or more corporates engaged in related or unrelated business. Acquisition signifies the corporate action of a company gaining control over assets and management of another corporate entity. Generally, companies engage in mergers and acquisitions (M&A) with the following objectives:

1. To face cut-throat competition prevalent in the related market;
2. To minimise risk;
3. To bring about changes in activities of the firms;
4. To utilise surplus finance available with companies by investing in profitable projects.

Though M&A is an old phenomenon prevalent in India from the age old days, its popularity was overshadowed. Very few business entities in the past undertook M&A deals and those who succeeded in striking such a deal accomplished it through friendly acquisition deals struck to take advantage of taxation laws. This trend continued till 1991 as the Indian corporates were under the strict preview and control of the Indian Government till then. Their corporate restructuring decisions were strictly monitored and controlled by the Government through various legislations. However, the liberalisation era sparkled since 1991 and the subsequent liberal industrial policy of the Government paved the way for M&A waves in India (Vyas et al. 2012).

2. Review of Literature

Namvar & Phillips (2013) have examined the cross sectional variation determinants in the performance of mutual fund mergers and have found that mutual fund merger yields benefits. Mann & Kohli (2012) have examined the impact of brand acquisition on wealth of shareholders of Indian acquiring companies belonging to FMCG and pharmaceutical industry. Forty-eight brand acquisitions which took place during the period of 1 April, 1997 to 31 December, 2008 were considered for this study and standard event study method has been used for measuring abnormal returns using the event period of -50 to +50 days. Results indicate that shareholders of acquiring company have gained because of brand acquisitions.

Shook & Roth (2010) have examined the perception of 13 HR practitioners on M&A and downsizing strategies. The study reveals that HR practitioners are in no way related with M&A and downsizing decisions. Chovwen & Ivensor (2009) have examined the motivation level and feeling of job insecurity among female employees of eight Nigerian banks which were involved in M&A deals. Based on the response of 283 female employees of both the merged and acquired banks, the study revealed that organizational justice and job characteristics significantly influence the employees' perception about motivation and feeling of job insecurity.

Lau, Proimos & Wright (2008) analysed the corporate level success of merger deals by considering 72 Australian deals struck during 1999-2004. The study has compared the operating performance of companies during 2 years before and 3 years after merger deals. The study has assessed operating performance using profitability measures, cash flow measures, efficiency measures, leverage measures and growth measures. The study has revealed that operating performance of companies in the post-merger phase is on the rise. Siegel & Simons (2007) focused on the influence exerted by M&A deals on workers, plant productivity and firm performance. The study has found that productivity of plant has increased while firm performance has not declined due to the corporate restructuring strategy. However, change in ownership has led to optimum utilization of workers and plant capacity.

3. Research Methodology

This study is descriptive in nature, based on primary data. Initially, the researcher has conducted pilot study by administering the schedule to 59 equity investors. This feasibility study has enhanced the simplicity. Based on the data collected from feasibility study, the sample size has been arrived at using the formula

$$n = \left(\frac{\sigma * 1.96}{\mu * 0.05}\right)^2$$

Where, n - Sample Size; ó - Standard Deviation; ì - Mean;

The ideal sample size arrived at is 447. Finally, the researcher has collected data from 513 equity investors. The statistical tools such as simple mean, frequency analysis, cluster analysis, discriminant analysis, chi-square test, correspondence analysis, ANOVA, post-hoc analysis and canonical correlation have been applied to analyse the collected data.

4. Sources of Information about Merger Deals

Companies formulate and execute different corporate strategies such as mergers, acquisitions, dividend announcements etc. with different motives. They spread information about these strategies to their shareholders through different sources such as print media and electronic media. Media plays a significant role in facilitating shareholders acquiring knowledge about corporate events. This section shall throw light on sources of information available to shareholders to gain knowledge about corporate events of their respective companies.

Table 1

Frequency Analysis

Sl. No.	Sources of Information	Frequency	%
1.	Newspaper	394	76.8
2.	Stock Exchange bulletin	220	42.9
3.	SEBI website	195	38.0
4.	Magazine	113	22.0

Table 1 indicates that majority of the investors as non-shareholders (394) acquire information about merger deals through newspapers, followed by stock exchange bulletins (220), SEBI website (195) and magazines (113). Hence, it can be observed that investors as non-shareholders gain information about corporate events through the print as well as electronic media, though print media seems to dominate.

5. Investors Perception about Merger

There are many purposes for which corporates strike merger deals and this study endeavours to throw light on investors' perception about corporates striking merger deals. Towards this direction, investors were asked to indicate their opinion about their perception about merger announcements of corporates in a Likert's five-point scale and their responses have been displayed in Table 2.

Table 2
Mean Analysis and Rank Scores

Sl. No.	Perception	Mean	Rank
1.	Merger is necessary (Merger)	3.31	1
2.	Companies should merge with different industry group (Conglomerate merger)	3.27	2
3.	Company should grow on their own (Merger should be avoided)	3.07	3
4.	Frequent merger should be avoided (Frequent merger should be avoided)	3	6
5.	Companies are having some hidden agenda to go for M&A (Hidden agenda)	2.82	7
6.	Merger & Acquisition will have same effect (Same effect)	3.07	3
7.	Companies should disclose the motive of merger to public (Motives should be disclosed)	3.01	5

It can be inferred from Table 2 that merger has the highest mean value of 3.31, followed by conglomerate merger (3.27), merger should be avoided (3.07), same effect (3.07), motives should be disclosed (3.01), frequent merger should be avoided (3) and hidden agenda (2.82). It can be observed from the table that investors are of the perception that merger deals are necessary in the corporate world.

6. Segmentation of Investors Based On Their Perception about Merger

All investors may not have the same perception about mergers. Hence K-means cluster analysis has been used to group the investors based on their perception about merger deals. Table 3 displays results of cluster analysis

Table 3
Final Cluster Centers and ANOVA

Perception	Final Cluster Centers			ANOVA	
	1	2	3	F	Sig.
Merger	4	4	3	91.182	0.000
Conglomerate merger	4	3	3	4.557	0.011
Merger should be avoided	2	4	3	64.845	0.000
Frequent merger should be avoided	2	4	2	227.563	0.000
Hidden agenda	4	3	2	182.884	0.000
Same effect	3	3	3	9.269	0.000
Motives should be disclosed	2	4	3	96.842	0.000
Cases	121	205	187		

Table 3 displays the mean scores, results of ANOVA and number of investors constituting each of the clusters. The first cluster has been designated as "Positive perception" because mean scores of merger, conglomerate merger and hidden agenda for this cluster gyrate around the four mark. This cluster related to 121 investors who have positive perception about merger deals and who are of the opinion that no hidden agenda should prevail behind merger deals. The second cluster has been labeled as "Negative perception" because the mean in respect of merger and frequent merger should be avoided for this cluster hover around the four mark. This group encompasses 205 investors who are least interested in merger deals. The third group has been branded as "Moderate" because the mean values of majority of the items for this cluster revolve around the three mark. This group consists of 187 investors.

The F value in respect of frequent merger should be avoided is the highest (227.563), followed by hidden agenda (182.884), motives should be disclosed (96.842), merger (91.182), merger should be avoided (64.845), same effect (9.269) and conglomerate merger (4.557). All the F values are significant at 1 per cent level. Hence, all these items contribute to the segmentation process, though the item of frequent mergers should be avoided makes the maximum contribution as its F value is the highest.

7. Reliability of Segmentation

Discriminant analysis has been conducted to assess the consistency of segmentation. The items of merger, conglomerate merger, merger should be avoided, frequent merger should be avoided, hidden agenda, same effect and motives should be disclosed are considered as independent variables while cluster membership scores of investors perception about mergers has been taken as grouping variable

Table 4
Eigen Value and Wilks' Lambda

Function	Eigenvalue	Canonical Correlation	Wilks' Lambda	Chi-square	Sig.
1	1.861	0.807	0.156	943.275	0.000
2	1.246	0.745	0.445	410.302	0.000

Eigen values of the two functions are 1.861 and 1.246 respectively, which are in excess of unity. Canonical correlation of first function is 0.807 while that of the second function is 0.745, which approves the existence of excellent relationship between the items of investors' perception about merger and the two functions. Wilks' lambda value of function one is 0.156 and that of the second function is 0.445 which exhibits good difference between the two functions. The values are significant at 1percents level. Hence, good consistency of segmentation has been confirmed.

Table 5
Structure Matrix

Perception	Function	
	1	2
Frequent merger should be avoided	0.675*	-0.187
Same effect	0.110*	0.105
Hidden agenda	0.367	0.612*
Motives should be disclosed	0.316	-0.394*
Merger	0.300	0.390*
Merger should be avoided	0.246	-0.338*
Conglomerate merger	-0.001	0.120*

Table 5 shows standardized beta scores which explain characteristics of population. The two functions formed are

Z1 = 0.675 * Frequent merger should be avoided + 0.110 * Same effect

Z2 = 0.612 * Hidden agenda - 0.394 * Motives should be disclosed + 0.390 * Merger - 0.338 * Merger should be avoided + 0.120 * Conglomerate merger

Fig. 1
Group Centroids

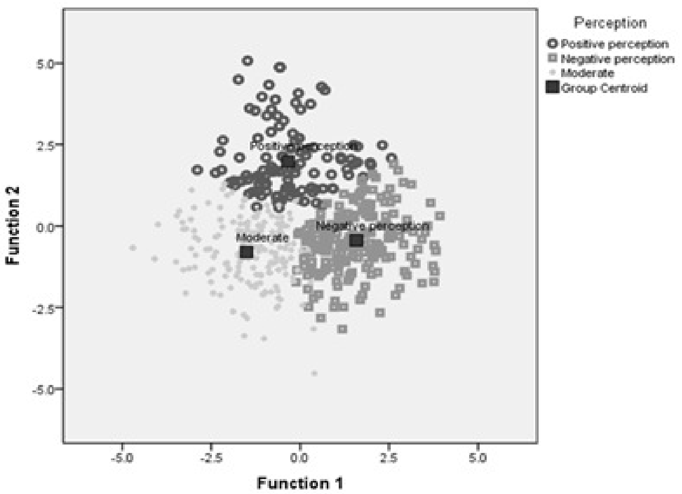

Figure 1 portrays the group centroids of the three clusters. It can be observed from the figure that the group centroids are positioned in three different locations. Hence, proper alignment of the investors in every group has been established.

Table 6
Extent of Correct Classification

Perception about Merger		Predicted Group Membership			Total
		Positive perception	Negative perception	Moderate	
Count	Positive perception	117	3	1	121
	Negative perception	0	201	4	205
	Moderate	7	3	177	187
%	Positive perception	96.7	2.5	0.8	100.0
	Negative perception	0.0	98.0	2.0	100.0
	Moderate	3.7	1.6	94.7	100.0

Table 6 displays that 98 percent of investors are correctly grouped in “negative perception”, followed by “positive perception” (96.7 percent) and “moderate” (94.7 percent). Hence, it can be said that the segmentation process has been done quite accurately.

8. Relationship between Profile of Investors and Perception about Mergers

Relationship between investors’ profile and their perception about merger has been tested using chi-square test, ANOVA and independent samples t-test. Table 7 displays results of chi-square analysis.

Table 7
Association between Personal Profile and Perception about Mergers

Personal Profile	Perception about Mergers	
	Value	Sig.
Gender	1.870	0.393
Age	8.445	0.207
Educational qualification	5.559	0.697
Occupation	17.861	0.213
Monthly income	9.643	0.291
Family members	25.505	0.001
Dependents	17.933	0.056
Income earning members	11.550	0.073
Family members in share market	11.863	0.065
Savings	20.665	0.008

It can be inferred from Table 7 that only two profile variables of family members and savings have significance value of less than 0.05, suggesting that investors’ perception about merger deals lack significant association with their profile.

Fig. 2 (a)
Family Members & Perception

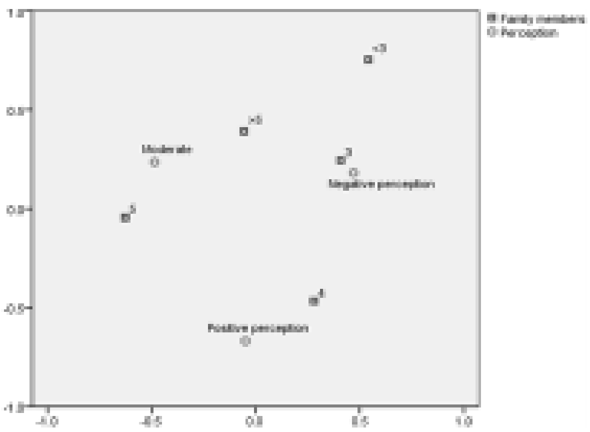

Fig. 2 (b)
Savings & Perception

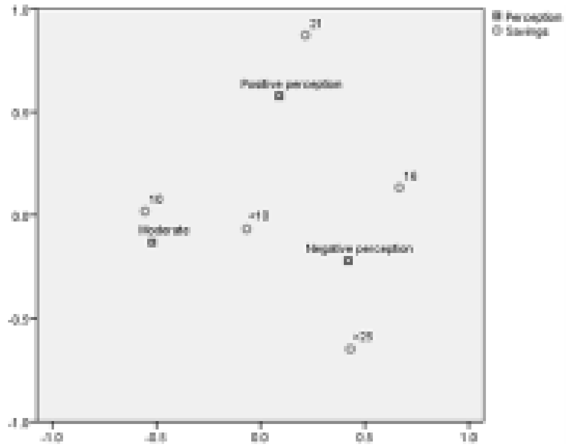

Fig. 2: Association between Personal Profile and Perception about Mergers

Figure 2 displays that investors with three family members have negative perception about mergers while those with savings of 10-15 percent have a moderate opinion about mergers.

Proceeding further, all the profile variables with insignificant association with investors' perception about mergers have been tested with ANOVA and the results have been displayed in Table 8.

Table 8

Relationship between Personal Profile and Perception about Mergers

Personal Profile	1 F (Sig.)	2 F (Sig.)	3 F (Sig.)	4 F (Sig.)	5 F (Sig.)	6 F (Sig.)	7 F (Sig.)
Gender	0.244 (0.808)#	0.933 (0.351)#	-0.748 (0.46)#	-2.348 (0.024)#	-1.011 (0.319)#	1.008 (0.321)#	-0.942 (0.353)#
Age	2.691 (0.046)	2.649 (0.048)	0.5 (0.683)	2.179 (0.09)	1.982 (0.116)	0.722 (0.539)	0.127 (0.944)
Educational qualification	2.563 (0.038)	0.542 (0.705)	0.531 (0.713)	1.597 (0.174)	1.56 (0.184)	1.138 (0.338)	0.672 (0.612)
Occupation	0.877 (0.524)	1.529 (0.155)	0.309 (0.95)	2.216 (0.032)	1.238 (0.28)	1.313 (0.242)	1.64 (0.122)
Monthly income	0.831 (0.506)	4.213 (0.002)	1.213 (0.304)	1.986 (0.095)	1.752 (0.137)	1.86 (0.116)	1.394 (0.235)
Dependents	1.41 (0.219)	2.563 (0.026)	0.631 (0.676)	2.042 (0.071)	2.081 (0.066)	1.092 (0.364)	0.917 (0.47)
Income earning members	1.927 (0.124)	0.521 (0.668)	0.474 (0.7)	1.714 (0.163)	0.384 (0.765)	1.414 (0.238)	1.058 (0.367)
Family members in share market	0.634 (0.593)	0.697 (0.554)	0.198 (0.898)	0.181 (0.909)	5.795 (0.001)	0.65 (0.583)	0.734 (0.532)

 # indicates t value and its significant level.

1 - Merger; 2 - Conglomerate Merger; 3 - Merger Should Be Avoided; 4 - Frequent Merger Should Be Avoided; 5 - Hidden Agenda; 6 - Same Effect; 7 - Motives Should Be Disclosed;

Table 8 displays that majority of the profile variables have significance value of less than 0.05. Gender of investors influences their perception about frequent merger should be avoided while age influences perception about merger and conglomerate merger, educational qualification influences perception about merger, occupation influences perception towards about frequent merger should be avoided, monthly income and number of dependents influence perception about conglomerate merger and number of family members engaged in share market influences perception about hidden agenda.

Table 9

Post Hoc Analysis

Monthly Income	Conglomerate Merger 1	Conglomerate Merger 2
45001-60000	2.50	
>60000	2.83	2.83
<15000	3.03	3.03
30001-45000		3.28
15001-30000		3.41

Table 9 highlights that investors with monthly income of Rs. 45,001-60,000 have different perception about conglomerate merger.

Table 10

Association between Investment-Related Factors and Perception about Mergers

Investment-Related Factors	Perception about Mergers Value	Perception about Mergers Sig.
Investment avenues	12.586	0.013
Period of investments	3.209	0.782
Equity investment avenues	25.011	0.002
Money in equity	11.654	0.167

Table 10 shows that only two investment-related factors have significance value of less than 0.05. This implies that weak association prevails between investment-related variables of investors and their perception about merger deals.

Fig. 3 (a)
Investment Avenues & Perception

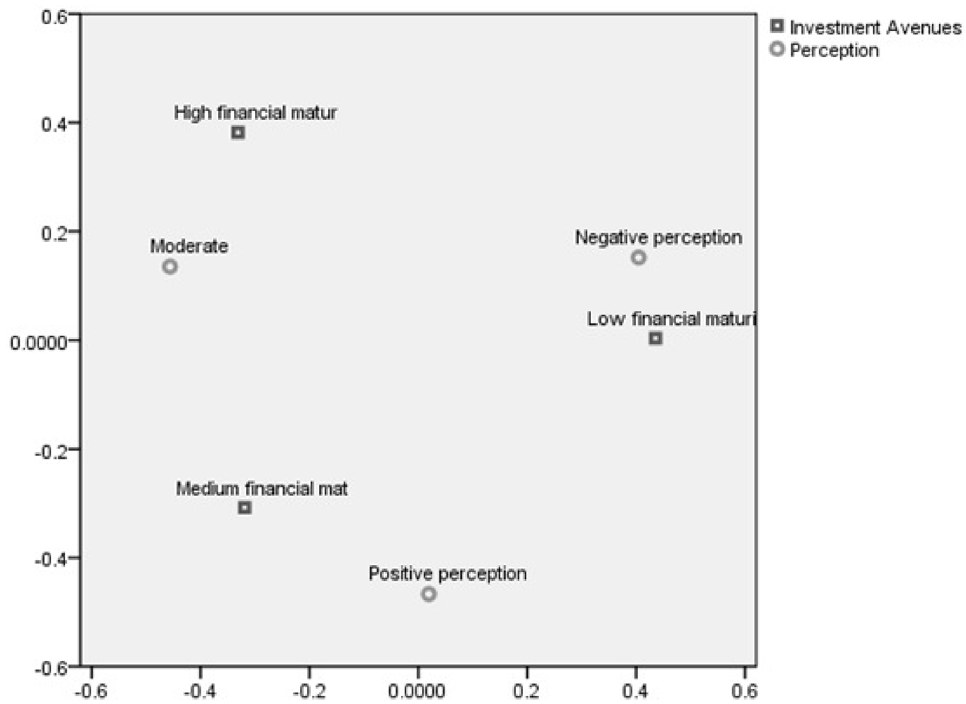

Fig. 3 (b)
Equity Investment Avenues & Perception

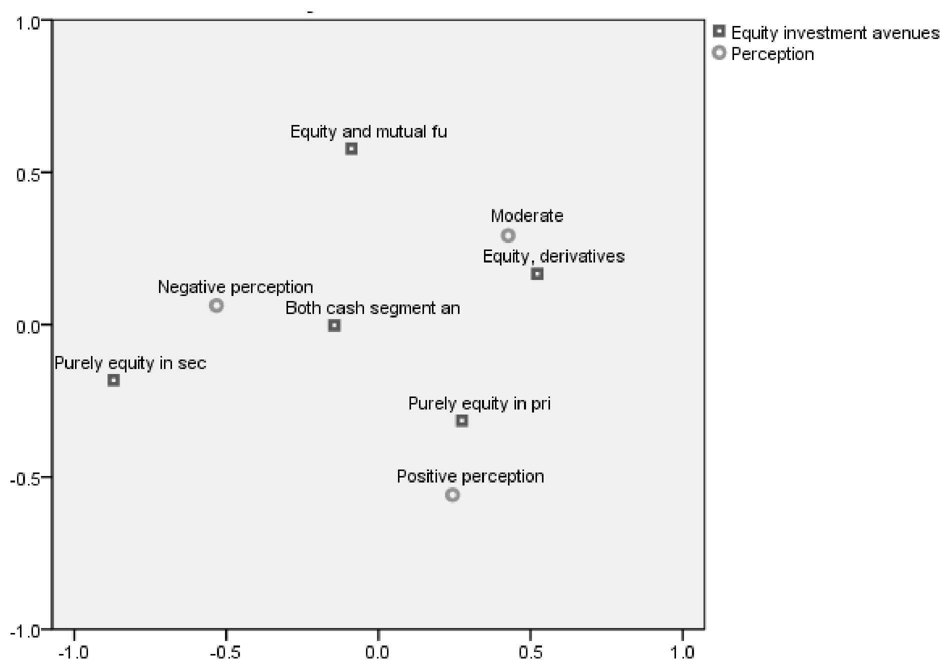

Fig. 3: Association between Investment-Related Factors and Perception about Mergers

Figure 3 describes that investors with low financial maturity and those who have invested in both cash segment and derivatives have negative perception about merger while those who have invested in equity, derivatives and mutual fund have moderate view about merger.

Table 11
Relationship between Investment-Related Factors and Perception about Mergers

Investment-Related Factors	1 F (Sig.)	2 F (Sig.)	3 F (Sig.)	4 F (Sig.)	5 F (Sig.)	6 F (Sig.)	7 F (Sig.)
Period of investments	0.552 (0.647)	1.425 (0.235)	0.269 (0.848)	1.986 (0.115)	0.146 (0.932)	2.507 (0.058)	0.549 (0.649)
Money in equity	4.802 (0.001)	3.532 (0.007)	0.037 (0.997)	2.371 (0.051)	1.463 (0.212)	0.895 (0.467)	0.489 (0.744)

1 - Merger; 2 - Conglomerate Merger; 3 - Merger Should Be Avoided; 4 - Frequent Merger Should Be Avoided; 5 - Hidden Agenda; 6 - Same Effect; 7 - Motives Should Be Disclosed;

Table 11 shows that the significance value in respect of proportion of money invested in equity is less than 0.05, suggesting that proportion of money invested by investors in equity influences their perception about merger, conglomerate merger and frequent merger should be avoided.

Table 12
Post Hoc Analysis

Money in Equity	Conglomerate Merger			Merger	
	1	2	3	1	2
More than 80 percent	2.00			1.40	
60-80 percent	2.40	2.40			3.00
41-60 percent		3.15	3.15		3.04
<20 percent		3.22	3.22		3.43
21-40 percent			3.40		3.24

Table 12 highlights that investors who have invested more than 80 per cent of their money in equity have different perception about merger and conglomerate merger.

9. Influence of Profile of Investors on Perception about Mergers

Results of chi-square test, ANOVA and independent samples t-test have approved the existence of significant relationship between investors perception about mergers and 12 profile related variables of gender, age, educational qualification, occupation, monthly income, number of family members, number of dependents, number of family members engaged in share market, savings, investment avenues, equity investment avenues and money in equity. Canonical correlation has been employed to unearth the most influencing profile variable. For the purpose of performing canonical correlation, cluster score has been taken as set one while the 12 profile related variables have been considered as set two.

Table 13
Canonical Correlation

	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
u1						
perc	1.307465	.2685773	4.87	0.000	.7798163	1.835114
v1						
gen	.3404509	.9295727	0.37	0.714	-1.485795	2.166697
age	.2718894	.3806596	0.71	0.475	-.4759575	1.019736
eduq	-.2890928	.2803438	-1.03	0.303	-.8398586	.2616729
occu	.0148389	.1312795	0.11	0.910	-.2430738	.2727517
monin	-.0327279	.3129803	-0.10	0.917	-.6476116	.5821557
fm	.1514688	.2115003	0.72	0.474	-.2640464	.566984
dep	.1423956	.2076014	0.69	0.493	-.2654597	.550251
fminsh	-1.211931	.4672921	-2.59	0.010	-2.129976	-.2938847
sav	-.2234151	.1646511	-1.36	0.175	-.5468899	.1000597
inav	.4712458	.3129003	1.51	0.133	-.1434807	1.085972
equin	.1834494	.1601072	1.15	0.252	-.1310986	.4979973
mone	.5644847	.3055019	1.85	0.065	-.0357068	1.164676

(Standard errors estimated conditionally)

Canonical correlations:
0.2105

Tests of significance of all canonical correlations

	Statistic	df1	df2	F	Prob>F	
Wilks' lambda	.955679	12	500	1.9324	0.0287	e
Pillai's trace	.0443213	12	500	1.9324	0.0287	e
Lawley-Hotelling trace	.0463768	12	500	1.9324	0.0287	e
Roy's largest root	.0463768	12	500	1.9324	0.0287	e

e = exact, a = approximate, u = upper bound on F

Table 13 shows canonical correlation value of 21 percent which is significant at 5 percent level. Hence, there is good correlation among the two sets. The significance value in respect of number of family members engaged in share market is less than 0.05, suggesting that this profile variable exerts maximum influence on investors' perception about mergers. Furthermore, it can be observed that investment-related variables are not influencing investors' perception about mergers.

10. Conclusion

This study reveals that a non-shareholder, endeavouring to invest in shares, acquires information about mergers through print and electronic media. Investors have expressed the strong perception that merger deals are absolutely necessary. Based on their perception about the importance of merger deals, investors have been grouped into three groups of positive perception, negative perception and moderate. The existence of significant relationship between investors perception about mergers and their profile characteristics of gender, age, educational qualification, occupation, monthly income, number of family members, number of dependents, number of family members engaged in share market, savings, investment avenues, equity investment avenues and money in equity has been established. Finally, this study finds that number of family members who have invested in share market is the profile variable which exerts the most influence on investors' perception about mergers.

References

1. Achleitner, A.-K., Braun, R., Hinterramskogler, B., & Tappeiner, F. (2011). Structure and Determinants of Financial Covenants in Leveraged Buyouts. *Review of Finance*, *16*(3), 647–684

2. Allio, R. J., & Randall, R. M. (1985). T. Boone Pickens Wildcats on Wall Street. *Strategy & Leadership, 13*(4), 6–11

3. Chovwen, C., & Ivensor, E. (2009). Job insecurity and motivation among women in Nigerian consolidated banks. *Gender in Management: An International Journal*, *24*(5), 316–326

4. Chun, R. (2009). A corporate's responsibility to employees during a merger: organizational virtue and employee loyalty. *Corporate Governance*, *9*(4), 473–483

5. Lau, B., Proimos, A., & Wright, S. (2008). Accounting measures of operating performance outcomes for Australian mergers. *Journal of Applied Accounting Research, 9*(3), 168-180

6. Mann, B. J. S., & Kohli, R. (2012). Do brand acquisitions create wealth for acquiring company shareholders? Evidence from India. *Journal of Product & Brand Management*, *21*(4), 265–274

7. Namvar, E., & Phillips, B. (2013). Commonalities in investment strategy and the determinants of performance in mutual fund mergers. *Journal of Banking & Finance*, *37*(2), 625–635

8. Shook, L., & Roth, G. (2010). Downsizings, mergers, and acquisitions: Perspectives of human resource development practitioners. *Journal of European Industrial Training*, *35*(2), 135–153

9. Siegel, D. S., & Simons, K. L. (2010). Research notes and commentaries assessing the effects of mergers and acquisitions on firm performance, plant productivity and workers: New evidence from matched employer-employee data. *Strategic Management Journal*, 903–916

10. Skehan, J., & Kleiner, B. H. (1996). New developments in re-engineering. *Work Study, 45*(1), 7–12

11. Wang, H., & Han, G. (2008). Local government's "black box" in small and medium-sized private enterprises' trans-ownership M&A failure: Chinese cases. *Journal of Small Business and Enterprise Development*, *15*(4), 719–732

12. Yocom, D., & Helms, M. M. (2001). Discharge in the electric industry. *European Business Review, 13*(3), 137–151