

## **INVESTORS PREFERENCE TOWARDS ACQUIRER COMPANY BEFORE DECIDING ABOUT THEIR MERGER-BASED INVESTMENT**

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### **Abstract**

This study attempts to find the investors' preference towards acquirer company before deciding about their merger-based investment. This study also measures the association between investors preference towards industry and acquirer company. Finally, this study analyses the influence of investors expectation about pattern of return on their preference towards acquirer company. This study is based on primary data. Data has been collected from equity investors in Puducherry and Chennai. The statistical packages of Microsoft Excel, SPSS 19, STATA 10 and SmartPLS have been utilized to analyze the collected data. This study reveals that investors wish to invest in shares of acquirer companies striking merger deals with profit making target companies. This study also finds that there is a significant association between investors' preference of industry for merger-based investment and selection of acquirer company. Finally, this study reveals that the investors expectation about pattern of return is strongly influencing their preference towards acquirer company.

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## **Introduction**

The important strategy used by business entities is mergers. Merger is a legal combination of two or more companies. The company which is buying another company is the “Acquirer”, while the company which is sold is termed as “Target Company”.

Acquirer company is one of the parties to merger deal, which purchases the target company. Acquirer company is also referred to as bidder. Bidder takes possession of shares of the target company during the merger process to gain its control. The acquirer company has to plan and execute the merger deal rationally, which begins with the proper selection of target company. Target company play a vital role in the acquirer company gaining value through the merger deal. Investors aspiring to invest in acquirer company which has struck merger deal shall analyze different features of the target company such as cash position, profitability, assets, new venture, length of existence, etc. before proceeding on with their investment decision. This study throws light on investors’ preference towards acquirer company before deciding about their merger-based investment.

## **Review of Literature**

Wörtche & Nguyen (2011) have studied the impact of merger and acquisition deals on target companies in the countries of Austria and Switzerland by using event study methodology. This study has used the three models of market model, constant mean model and market-adjusted model and has found that the market reacts differently to two different investors.

Ramakrishnan (2010) has examined the impact of merger deals on wealth of shareholders of target and acquirer companies engaged in such deals. The study was conducted on 34 pairs of acquirer and target companies of India which were parties to merger deals, executed during 1996 to 2002. The study used standard event study methodology (10 days before and after announcement of merger deals) and applied the market-adjusted model to calculate shareholders wealth. Results reveal that shareholders of acquiring companies are not amassing any wealth during the window period of 21 days while the case in respect of shareholders of acquired companies is exactly the opposite.

Ismail, Davidson & Frank (2009) focused on operating performance of European banks during post-merger period by considering M&A deals during January 1992 to December 1997. The study used the variables of return on average assets (ROAA), return on average equity (ROAE), total capital ratio, equity by deposits, equity by total customer loans, capital by assets ratio, loan loss reserve by gross loans, loan loss provision by net interest revenue, non-performing loans by gross loans, total customer loans by deposits, non-interest expenses by average assets, interest expenses by average assets, non-interest expenses by interest expenses, other operating income by average assets, other operating income by interest income, personnel expenses by average assets, other administrative expenses by average assets, cost by income ratio, net interest revenue by earning assets, cash and due from banks by total assets, net loans by total assets and liquid assets by total deposits and borrowings. The study revealed that profitability and capitalization of the banks have fallen while cost efficiency has improved during the post-merger phase.

Syrjälä & Takala (2008) have observed the ethical aspects involved in Electro-business merger deals by analyzing the opinion of 35 employees during the initial stage, four years following the initial stage and one year prior to the final stage of the deal. The study reveals that there is a change in the moral attitude of employees during the process of mergers. Galpin (2008) has itemized the do's and don'ts for companies engaging in M&A deals.

Lowe (1998) has analysed the bank relationship remodeling in post-merger phase. Based on interview with 12 board members and employees of the banks which were involved in merger deals very recently, the study has revealed that banks redesign their model in the post-merger phase.

### **Research Methodology**

This present study is descriptive in nature, fully based on primary data. Primary data have been collected from 513 equity investors by administering a well-structured interview schedule in Puducherry and Chennai. The desirable sample size has been arrived at using the following formula

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

Where,  $n$  - Sample Size;  $\sigma$  - Standard Deviation;  $\mu$  - Mean;

Based on the above formula, the ideal sample size arrived at for this study is 447. Reliability of data has been measured through Cronbach's alpha. Validity of data has been assessed through average variance extracted (AVE) value and composite reliability. The statistical tools of simple mean, cluster analysis, discriminant analysis, chi-square test, correspondence analysis, ANOVA, post-hoc analysis, canonical correlation and structural equation modeling (SEM) have been applied to analyse the data. The statistical softwares and packages of Microsoft Excel, SPSS 19, STATA 10 and SmartPLS have been used for this study.

### Preferred Acquirer Company

Investors were required to indicate their level of preference towards acquirer company before proceeding on with their merger-based investment in a Likert's five-point scale and the results have been discussed in the forthcoming paragraphs.

**Table 1: Mean Analysis and Rank Scores**

S. No.	Preferred Acquirer Company	Mean	Rank
1.	I will purchase the shares of the company which is merging with Cash rich company (Cash rich target)	3.47	2
2.	I will purchase the shares of the company which is merging with Profit making company (Profit making target)	3.57	1
3.	I will purchase the shares of the company which is merging with Asset rich company (Asset rich target)	3.17	4
4.	I will purchase the shares of the company which is merging with New venture company (New venture target)	3.04	5
5.	I will purchase the shares of the company which is merging with Solvency rich company (Solvency rich target)	3.35	3

Table 1 displays that the mean in respect of profit making target is the highest (3.57), followed by cash rich target (3.47), solvency rich target (3.35), asset rich target (3.17) and new venture target (3.04). Hence, it can be said that investors prefer to invest in shares of acquirer company which strikes merger deal with profit making companies while they accord least interest on acquirer companies merging with new venture target companies.

## Segmentation of Investors

Preference of investors may vary from investor to investor. K-means cluster analysis has been utilised to group investors based on their preference. Table 2 displays results of K-means cluster analysis.

**Table 2: Final Cluster Centers and ANOVA**

	Final Cluster Centers			ANOVA	
	1	2	3	F	Sig.
Cash rich target	2	4	4	113.927	0.000
Profit making target	2	4	5	231.404	0.000
Asset rich target	3	4	2	373.031	0.000
New venture target	3	3	3	7.674	0.001
Solvency rich target	2	4	3	131.583	0.000
Cases	150	264	99		

Table 2 displays the number of investors in different groups formed by cluster analysis, mean scores and ANOVA results. Cluster analysis has grouped the investors into three clusters. The first group has been labeled as “Low influence of target performance” because the mean in respect of all the factors for this group is less than four. This group engulfs 150 investors, who show least importance about performance of target companies while deciding about making merger-based investments. The second group has been branded as “Asset and solvency rich” because the mean in respect of asset rich target and solvency rich target items for this group is four. This group encompasses 264 investors who are interested in analyzing the asset and solvency position of target company before making merger-based investment. The Third group has been designated as “Cash rich and profit making” because the mean in respect of cash rich target and profit making target for this group is four. This segment consists of 99 investors.

The F value in respect of asset rich target is the highest (373.031), followed by profit making target (231.404), solvency rich target (131.583), cash rich target (113.927) and new venture target (7.674). All the values are significant at one percent level, suggesting that all the items contribute to the segmentation process, though the largest contribution is made by asset rich target.

### Reliability of Segmentation

Discriminant analysis has been utilised to test the dependability of segmentation. Cash rich target, profit making target, asset rich target, new venture target and solvency rich target have been considered as independent variables while cluster membership scores of investors preference towards acquirer company is taken as grouping variable.

**Table 3: Eigen Value and Wilks' Lambda**

Function	Eigenvalue	Canonical Correlation	Wilks' Lambda	Chi-square	Sig.
1	2.079	0.822	0.117	1087.969	0.000
2	1.765	0.799	0.362	516.703	0.000

Table 3 displays Eigen values of the two functions as 2.079 and 1.765 which are greater than unity. Function one possess maximum spread of group means. Canonical correlation of function one (0.822) and two (0.799) exhibit good relationship between items related to preference towards acquirer company and the two functions. Wilks' lambda of function one (0.117) and two (0.362) illustrates good distance between the two functions. The values are significant at one percent level. These confirm good consistency of segmentation.

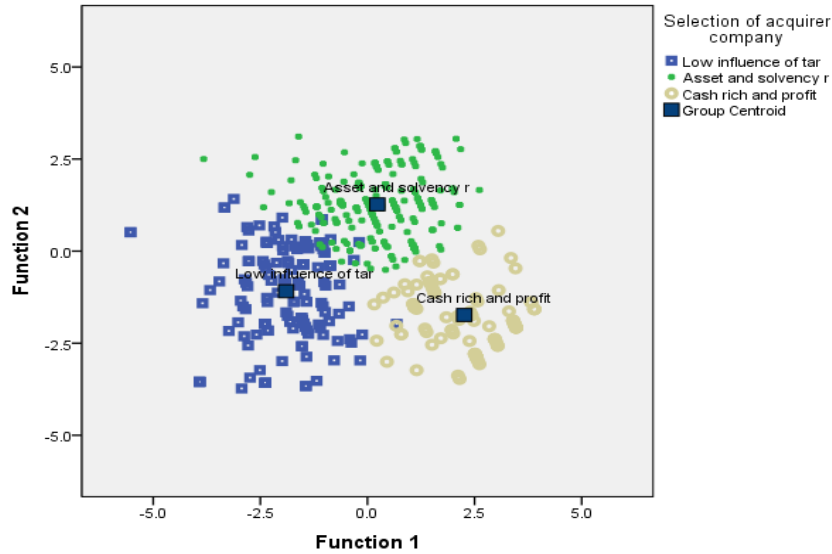
**Table 4: Structure Matrix**

	Function	
	1	2
Profit making target	0.647*	0.145
Cash rich target	0.459*	0.069
New venture target	0.108*	0.057
Asset rich target	-0.198	0.885*
Solvency rich target	0.337	0.398*

Table 4 shows standardized beta scores which explain characteristics of population. The two functions formed are

$$Z_1 = 0.647 * \text{Profit making target} + 0.459 * \text{Cash rich target} + 0.108 * \text{New venture target}$$

$$Z_2 = 0.885 * \text{Asset rich target} + 0.398 * \text{Solvency rich target}$$



**Fig. 1: Group Centroids**

Figure 1 displays the group centroids of the three clusters. It is observed from the figure that group centroids are located in different places. This confirms good alignment of investors.

**Table 5: Extent of Good Classification**

	Preferred Acquirer Company	Predicted Group Membership			Total
		Low influence of target performance	Asset and solvency rich	Cash rich and profit making	
Count	Low influence of target performance	142	7	1	150
	Asset and solvency rich	7	256	1	264
	Cash rich and profit making	1	0	98	99
%	Low influence of target performance	94.7	4.7	0.7	100.0
	Asset and solvency rich	2.7	97.0	0.4	100.0
	Cash rich and profit making	1.0	0.0	99.0	100.0

Table 5 shows 99 percent of investors are correctly grouped in “cash rich and profit making”, followed by “asset and solvency rich” (97.0 percent) and “low influence of target performance” (94.7 percent). Hence, it can be concluded that investors have been segmented with good degree of accuracy.

### **Relationship between Profile of Investors and Preferred Acquirer Company**

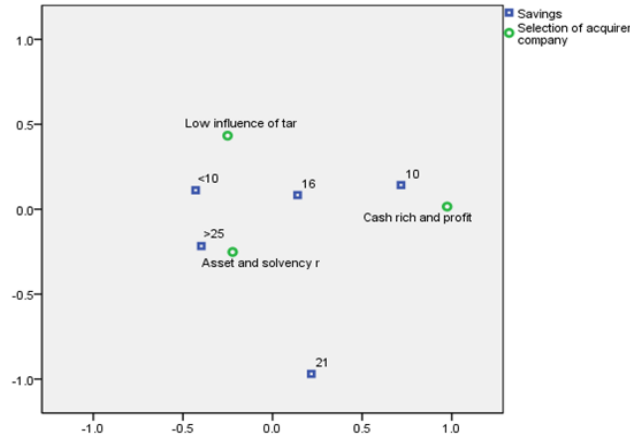
Chi-square test, ANOVA and independent samples t-test have been utilized to test the prevalence of relationship between profile of investors and their preference towards acquirer company while deciding about merger-based investments. Table 6 displays results of chi-square analysis.

**Table 6: Association between Personal Profile and Preferred Acquirer Company**

	Preferred Acquirer Company	
	Value	Sig.
Gender	5.612	0.060
Age	8.025	0.236
Educational qualification	12.536	0.129
Occupation	11.337	0.659
Monthly income	10.523	0.230
Family members	12.941	0.114
Dependents	15.736	0.107
Income earning members	8.994	0.174
Family members in share market	3.545	0.738
Savings	30.354	0.000

It can be inferred from Table 6 that just a solitary profile variable of savings has significant value of less than 0.05. Hence, it can be said that there is no significant association between personal profile of investors and their preference towards acquirer company.





**Fig. 2: Association between Personal Profile and Preferred Acquirer Company**

Figure 2 illustrates that investors with greater than 25 percent of savings prefer shares of acquirer which strikes merger deal with asset and solvency rich target companies. Investors with savings of 10-15 percent prefer to invest in shares of acquirer which manages to strike merger deal with cash rich and profit making target companies.

ANOVA has been applied to explore the presence of significant relationship between all the profile variables but for savings level of investors and their preference towards acquirer based on features of target company and the results have been displayed in Table 7.

**Table 7: Relationship between Personal Profile and Preferred Acquirer Company**

	Cash Rich Target F (Sig.)	Profit Making Target F (Sig.)	Asset Rich Target F (Sig.)	New Venture Target F (Sig.)	Solvency Rich Target F (Sig.)
Gender	-0.046 (0.963)#	1.529 (0.135)#	0.047 (0.963)#	-1.459 (0.154)#	0.363 (0.719)#
Age	0.718 (0.541)	0.762 (0.516)	0.54 (0.655)	1.022 (0.383)	0.076 (0.973)
Educational qualification	3.903 (0.004)	1.391 (0.236)	2.178 (0.07)	0.388 (0.817)	0.275 (0.894)
Occupation	1.976 (0.056)	0.732 (0.645)	0.64 (0.723)	2.024 (0.05)	1.378 (0.212)
Monthly income	0.165 (0.956)	1.346 (0.252)	0.831 (0.506)	1.502 (0.2)	2.253 (0.062)

Family members	0.714 (0.582)	0.383 (0.82)	0.706 (0.588)	0.012 (1.000)	3.314 (0.011)
Dependents	0.981 (0.429)	0.75 (0.586)	2.973 (0.012)	1.058 (0.383)	2.01 (0.076)
Income earning members	1.059 (0.366)	1.636 (0.18)	1.06 (0.366)	2.527 (0.057)	0.547 (0.65)
Family members in share market	0.059 (0.981)	1.293 (0.276)	0.837 (0.474)	0.526 (0.665)	0.457 (0.712)

# indicates t value and its significant level.

It can be inferred from Table 7 that educational qualification induces investors to invest in shares of acquirer which strikes merger deal with cash rich targets, while occupation of investors influences them to invest in shares of acquirer striking merger deal with new venture target, while number of family members inspires investors to invest in shares of acquirer striking merger deal with solvency rich target companies and number of dependents in family influences investors to invest in shares of acquirer entering into merger deals with asset rich target companies.

**Table 8: Post Hoc Analysis**

Educational Qualification	Cash Rich Company		Family Members	Solvency Rich Company		
	1	2		1	2	3
8th STD or less	1.75		3	3.00		
SSLC		3.15	<3	3.11	3.11	
HSC		3.28	4	3.34	3.34	3.34
Graduate		3.46	5		3.43	3.43
Professional		3.72	>5			3.58

Table 8 highlights that investors with low education do not prefer to invest in acquirer company striking merger deal with cash rich target companies. Investors having more than five family members prefer to invest in shares of acquirer striking merger deal with solvency rich target companies.

**Table 9: Association between Investment-Related Factors and Preferred Acquirer Company**

	Preferred Acquirer Company	
	Value	Sig.
Investment avenues	22.831	0.000
Period of investments	13.529	0.035
Equity investment avenues	11.997	0.151
Money in equity	9.732	0.284

Table 9 depicts that two out of the four items have significance value of less than 0.05. Hence, it can be said that weak association prevails between investors' preference towards acquirer company and investment-related factors.

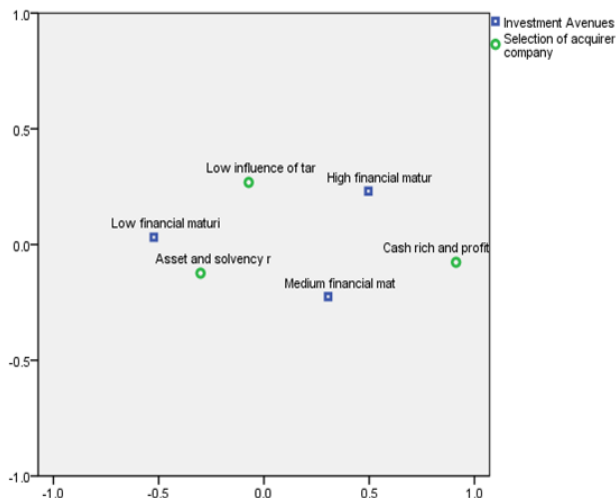
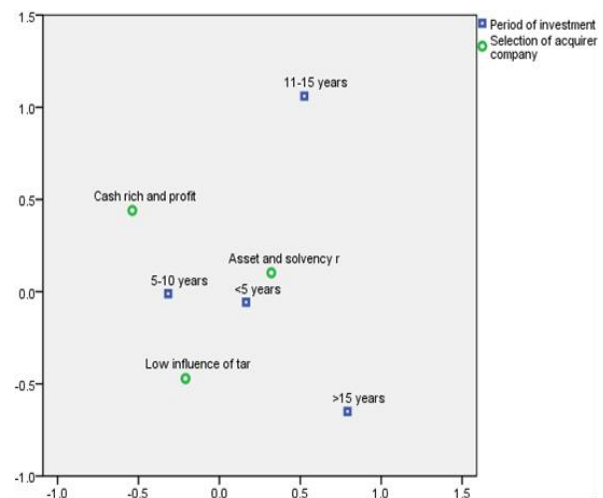
**Fig. 3 (a): Investment Avenues & Preferred Acquirer Company****Fig. 3 (b): Period of Investment & Preferred Acquirer Company****Fig. 3: Association between Investment-Related Factors and Preferred Acquirer Company**

Figure 3 portrays that investors with low financial maturity and those with less than five years' experience in share market prefer to invest in shares of acquirer which strikes merger deal with asset and solvency rich target companies. Hence, the level of financial maturity among investors is primarily associated with their preference towards investing in acquirer company.

**Table 10: Relationship between Investment-Related Factors and Preferred Acquirer Company**

	Cash Rich Target F (Sig.)	Profit Making Target F (Sig.)	Asset Rich Target F (Sig.)	New Venture Target F (Sig.)	Solvency Rich Target F (Sig.)
Equity investment avenues	1.318 (0.262)	0.228 (0.923)	0.551 (0.698)	0.9 (0.464)	1.848 (0.118)
Money in equity	0.876 (0.478)	0.818 (0.514)	0.754 (0.555)	1.491 (0.204)	0.379 (0.823)

Table 10 displays that values of significance in respect of equity investment avenues and proportion of money invested in equity exceed the 0.05 limit, suggesting that there is no relationship between these investment-related variables and investors' preference towards investing in shares of acquirer company.

### **Influence of Profile of Investors on Preferred Acquirer Company**

Results of chi-square test, ANOVA and independent samples t-test have established the prevalence of significant relationship between investors' preference towards acquirer company and seven profile variables of education, occupation, number of family members, number of dependents, savings, investment avenues and period of investments. Canonical correlation has been employed to unearth the most influencing profile variable of the eight variables. Canonical correlation measures relationship between two sets. Cluster score has been considered as set one while the seven profile variables have been taken as set two. Table 11 displays the results of canonical correlation.

### **Table 11: Canonical Correlation**

		Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
<b>u1</b>	acc	<b>1.44878</b>	<b>.3471217</b>	<b>4.17</b>	<b>0.000</b>	<b>.7668221</b>	<b>2.130738</b>
<b>v1</b>	eduq	.5274253	.3168723	1.66	0.097	-.0951046	1.149955
	occu	.0180299	.137962	0.13	0.896	-.2530114	.2890713
	fm	.5045121	.238701	2.11	0.035	.0355581	.9734661
	dep	.1022767	.2371725	0.43	0.666	-.3636742	.5682277
	sav	.2370793	.185805	1.28	0.203	-.1279548	.6021134
	inav	.5832043	.3089033	1.89	0.060	-.0236697	1.190078
	per	-.2336984	.3005452	-0.78	0.437	-.824152	.3567552

(Standard errors estimated conditionally)

Canonical correlations:  
**0.1816**

Tests of significance of all canonical correlations

	Statistic	df1	df2	F	Prob>F
Wilks' lambda	.967034	7	505	2.4593	0.0173 e
Pillai's trace	.0329657	7	505	2.4593	0.0173 e
Lawley-Hotelling trace	.0340895	7	505	2.4593	0.0173 e
Roy's largest root	.0340895	7	505	2.4593	0.0173 e

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

Table 11 displays the canonical correlation value as 18 percent, which is significant at five percent level. Hence, significant relationship prevails between the two sets of variables. However, the profile variable of number of family members exerts the maximum influence as the significance value in respect of this variable is less than the 0.05 mark. Furthermore, it can be observed that investment-related variables are not casting any influence on investors' preference towards acquirer company.

### Preferred Industry for Investment on Merger Announcement

This section tries to measure the investor's preference towards different industries such as Banking, Insurance and other financial intermediaries, Infrastructure, Consumer durables, Information Technology, Electrical and electronics, Automobiles and Others while deciding about making merger-based investments. Mean analysis reveals that investors are highly interested in shares of companies in the Banking, Insurance and other financial intermediaries industry. Cluster analysis has segmented investors into three groups of influence of finance company, influence of consumer durables company and influence of all sector.

### Pattern of Return Expected By Investors

This construct includes variables of daily returns, short-term returns and consistent returns. Mean analysis reveals that investors are largely interested on consistent returns.

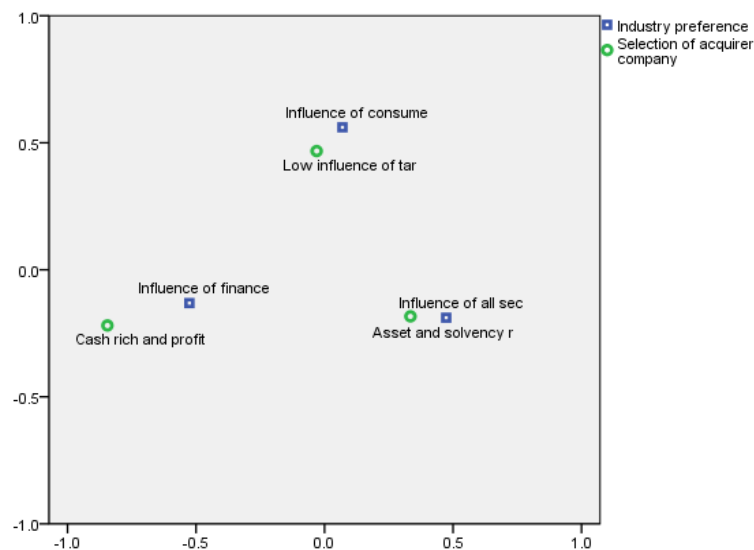
### Association between Investors Preference towards Industry and Acquirer Company

The association between investors preference of industry for merger-based investment and their selection of acquirer company has been tested using chi-square test. Cluster membership scores pertaining to the two constructs have been used for this analysis and the results have been displayed in Table 12.

**Table 12: Association between Investors Preference of Industry for Merger-based Investment and Selection of Acquirer Company**

	Preferred Acquirer Company	
	Value	Sig.
Preferred Industry	23.812	0.000

It can be inferred from Table 12 that there is a significant association between investors preference of industry for merger-based investment and selection of acquirer company at one percent level. The nature of such association has been explored using correspondence analysis and the results have been displayed in Figure 4.

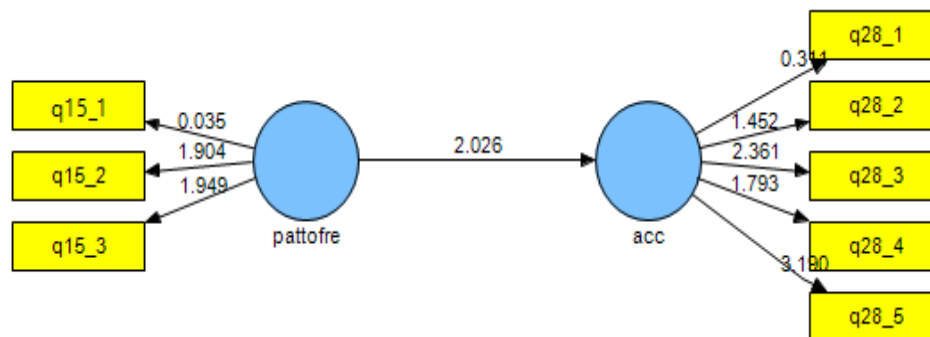


**Fig. 4: Association between Investors Preference of Industry for Merger-based Investment and Selection of Acquirer Company**

Figure 4 displays that investors preferring finance industry prefer to invest in shares of acquirer company striking merger deal with cash rich and profit making target company. Investors preferring consumer durables industry attach least importance to performance of target company while investors interested in all industries prefer to invest in shares of acquirer company striking merger deal with asset and solvency rich target company.

### **Influence of Investors Expectation about Pattern of Return on Their Preference towards Acquirer Company**

Influence of investors expectation about pattern of return on their preference towards acquirer company is measured using path analysis. Investors expectation about pattern of return includes three variables of daily returns, short-term returns and consistent returns while preferred acquirer company includes the variables of cash rich target, profit making target, asset rich target, new venture target and solvency rich target. Figure 5 displays the results of path analysis.



**Fig. 5: Influence of Pattern of Returns on Preferred Acquirer Company**

Where, *acc* - preferred acquirer company; *q28\_1* - cash rich target; *q28\_2* - profit making target; *q28\_3* - asset rich target; *q28\_4* - new venture target; *q28\_5* - solvency rich target; *pattofre* - pattern of returns; *q15\_1* - daily returns; *q15\_2* - short-term returns; *q15\_3* - consistent returns;

It can be inferred from Figure 5 that the t value is 2.026, which is greater than 1.96, suggesting that investors expectation about pattern of return is influencing their preference towards acquirer company at five percent level.

### **Conclusion**

Preference of investors towards investing in shares of acquirer company based on features of target company may vary from investor to investor. Investor prefers to invest in shares of

acquirer companies striking merger deals with profit making target companies. This study has segmented the investors into three groups such as low influence of target performance, asset and solvency rich and cash rich and profit making. Existence of relationship between investors' preference towards acquirer company and their profile characteristics of education, occupation, number of family members, number of dependents, savings, investment avenues and period of investments has been affirmed. Number of members in family of investors is exerting paramount influence on their preference towards acquirer company.

This study also reveals that there is a significant association between investors' preference of industry for merger-based investment and selection of acquirer company. Finally, this study finds that investors expectation about pattern of return is influencing their preference towards acquirer company.

## References

1. Fung, S., & Tsai, S.-C. (2012). Institutional Ownership and Corporate Investment Performance. *Canadian Journal of Administrative Sciences*, 29(4), 348–365.
2. Galpin, T. (2008). From the deal world to the real world: maximizing M&A value after the deal is done. *Business Strategy Series*, 9(2), 57–64.
3. Ismail, A., Davidson, I., & Frank, R. (2009). Operating performance of European bank mergers. *The Service Industries Journal*, 29(3), 345–366.
4. Lanine, G., & Vander Vennet, R. (2007). Microeconomic determinants of acquisitions of Eastern European banks by Western European banks. *The Economics of Transition*, 15(2), 285–308.
5. Lowe, A. (1998). Managing the post-merger aftermath by default remodelling. *Management Decision*, 36(2), 102–110.
6. Pazarskis, M., Alexandrakis, A., Notopoulos, P., & Kydros, D. (2011). Are Acquiring Firms Better Off after an Acquisition? Evidence from a Knowledge-Intensive Industry in Greece. *International Research Journal of Applied Finance*, 2(7), 844–852.
7. Proctor, T. (2001). Corporate restructuring: The pitfalls of changing industry structure. *Management Decision*, 197–204.



8. Proimos, A. (2005). Strengthening corporate governance regulations. *Journal of Investment Compliance*, 6(4), 75–84.
9. Ramakrishnan, K. (2010). Redistribution of wealth on merger announcements in India. *Management Research Review*, 33(8), 798–810.
10. Syrjälä, J., & Takala, T. (2008). Ethical Aspects in Nordic Business Mergers: The Case of Electro-Business. *Journal of Business Ethics*, 80(3), 531–545.
11. Wörtche, G., & Nguyen, T. (2011). The impact of M&A transactions from private equity and hedge funds: Empirical evidence from Austria and Switzerland. *Journal of Financial Regulation and Compliance*, 19(1), 45–57.