CHAPTER – VI

ANALYSIS OF CAPITAL STRUCTURE

ANALYSIS OF CAPITAL STRUCTURE

6.1 INTRODUCTION:

In the preceding chapter profile of all companies in terms of various ratios is given, along with their Averages and variations over a period of time for companies and for a given year between the companies. In the present chapter an attempt is made to identify the relationships between various ratios and dependence of particular ratio on other ratios or set of ratios. Mainly an attempt is made to examine the dependence of capital structure on asset structure, size and profitability. As indicators of capital structure, Debt-Equity[1] (D/E) ratio, Long-term Debt to Total Assets[2] (LTD/TA) ratio, Total Debt to Total Assets[3] (TD/TA) ratio and Total Equity to Total Assets[4] (TE/TA) ratio are selected.

On survey of available literature it was found that the studies are conducted, wherein, asset structure and/or profitability and/or size is/are taken as determinants of capital structure. As indicators of assets structure GFA/TGA and NFA/TNA[5] are taken. This indicates the proportion of Fixed Assets to Total Asset, on gross and net basis respectively. As indicators of profitability, OPI/TGA, PBT/TNA and OPI/Sale[6] are taken, and as indicator of size Average assets[7] are taken. Selection of variables is based on the available literature. While discussing the Pecking order and Trade-off theory in Chapter III, the determinants of capital structure are discussed. According to trade-off theory, "Companies with safe, tangible assets and plenty of taxable income to shield

ought to have high target ratios"[8]. On the other hand "The Pecking Order explains why the more profitable firms generally borrow less not because they have low target debt-ratios, but because they don't need outside money"[9]. Thus, whereas the Trade-off theory links the capital structure to both profit and asset structure, the Pecking Order theory links capital structure to profit. Hence, various measures of profitability and asset structure as stated in preceding para are selected. Moreover the survey of literature also revealed that size has the effect on capital structure. Measure is available to indicate the size, viz, Average size. For the purpose of the study Average of assets over respective period is taken as an indicator of size. To examine the effect of size, if any on capital structure, size is also taken as one of the independent variable.

Thus to examine the relationships if any between the dependent variables, viz, D/E, LTD/TA, TD/TA, TE/TA ratios and the independent variables, viz, GFA/TGA, NFA/TNA, OPI/TGA, OPI/Sale, PBT/TNA ratios and Average size regression analysis and correlations are used. The chapter is divided into 3 sections.

Section - I examines the effect of independent variables on dependent variables (indicating capital structure), taking Average of 16 years (45 companies) and 19 years (28 companies), both by running simple and multiple regressions.

Section - II carries out the above exercise on year to year base.

Section - III examines the effect, if any, of reforms on the relationship, using dummy variables, taking pre-reform and post reform era.

SECTION - I

Based on discussion in the foregoing para this section tries to examine the effect of independent variables on the ratios indicating capital structure.

6.2 REGRESSION ANALYSIS FOR 45 COMPANIES WITH 16 YEARS DATA:

To examine the existence of Pecking order theory or Trade-off theory or impact of other factors on capital structure an attempt is made to examine the relationship of debt-equity ratio with various ratios as discussed in the foregoing para the variables selected are GFA/TGA, NFA/TNA, OPI/TGA, OPI/Sale, PBT/TNA and Average size. To have an overall view, an overall analysis is carried out for this purpose. The Average of the ratio for a given company is taken over a period of time, both for dependent and independent variables. As discussed above, as indicator of capital structure 4 dependent variables namely (1) Debt-Equity Ratio, (2) Long-term Debt to Total Assets Ratio, (3) Total Debt to Total Assets Ratio, and (4) Total Equity to Total Assets ratio are selected.

1. DEBT-EQUITY RATIO:

A. SIMPLE REGRESSIONS:

Considering the D/E ratio to be a dependent variable, 6 regressions are run individually on variables mentioned above. The results of the regressions are presented in Table VI.1. In Jayant for

the years 1981 (30.6.81) and 1982 (30.6.83) the net worth figures are -3.45 lakhs and -41.07 lakhs. This seems to be abnormal. No explanation is available for decrease in net worth. On account of this the D/E ratio is negative, that too by higher tune, for 1982 and 1983. To nullify the effect of this observation while running the regression data for Jayant are omitted. Thus data are taken for 44 companies only. From the Table it can be observed that for the regression of D/E ratio on GFA/TGA, R^2 is found to be 0.0820, and the coefficient is found to be -2.0276. The value of t*, -1.937 indicates the significant negative effect of GFA/TGA on debt-equity ratio at 5% level of significance*. Similar observation is found while running the regression of D/E ratio on NFA/TNA, where R^2 is found to be 0.0486 and the coefficient is found to be -1.6264. The value of t, -1.465 indicates the significant negative effect of NFA/TNA on D/E ratio at 10% level of significance. Both above findings tend to suggest that as GFA/TGA or NFA/TNA increases, D/E ratio goes down. This finding does not support Trade-off Theory. For the regression of D/E ratio on OPI/TGA, R^2 is found to be 0.0046 with the coefficient value of 0.0009. The value of t is 0.441. This indicates the insignificant effect on OPI/TGA on D/E ratio. For the regression of D/E ratio on OPI/Sale, R^2 is found to be 0.0966 with the coefficient value of -0.0537. The value of t is -2.119. For the regression of D/E ratio on PBT/TNA, R^2 is found to be considerably high 0.3199

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*t_{tab} for 43 d.f. at 1%=2.418, at 5%=1.682, at 10%=1.302
t_{tab} for 42 d.f. at 1%=2.420, at 5%=1.683, at 10%=1.302
t_{tab} for 41 d.f. at 1%=2.421, at 5%=1.683, at 10%=1.303
t_{tab} for 40 d.f. at 1%=2.423, at 5%=1.684, at 10%=1.303

with the coefficient value of -0.1204. The value of t is -4.445. Both these coefficients are found to be negative and significant at 5% and 1% (respectively) level of significance. This tends to suggest that as OPI/Sale or PBT/TNA increases, D/E ratio decreases. This supports pecking order theory according to, which profitable companies need to borrow less. The findings from the regression on Average size, R^2 is found to be 0.0344 and the coefficient is found to be -0.0000. The value of t, -1.223 indicates the insignificant effect of Average size on D/E ratio. Thus out of, 6 variables selected for the analysis, four variables, viz, GFA/TGA, NFA/TNA, OPI/Sale, and PBT/TNA are found to have negative significant impact on D/E ratio.

B. CORRELATIONS:

The Table VI.2 shows the correlation matrix of D/E ratio with other ratios and among themselves. The correlation coefficient of D/E ratio with GFA/TGA is -0.2864, with NFA/TNA is -0.2205, with OPI/TGA is 0.0678, with OPI/Sales is -0.3107, with PBT/TNA is -0.5656 and with Average size is -0.1855. Thus five correlations are negative. This indicates that as these ratios increase, the D/E ratio decreases. The correlation coefficient of GFA/TGA ratio with NFA/TNA is 0.9233, with OPI/TGA is 0.0710, with OPI/Sale is 0.4334, with PBT/TNA is -0.2552 and with Average size is 0.2418. The negative correlation between GFA/TGA and PBT/TNA indicates that as GFA/TGA increases, PBT/TNA decreases.

The correlation coefficient of NFA/TNA ratio with OPI/TGA is 0.0005, with OPI/Sale is 0.5413, with

PBT/TNA is 0.2700 and with Average size is 0.2250. The correlation of PBT/TNA is negative indicates that as these ratio increase, NFA/TNA ratio decreases. Thus relationships of both GFA/TGA and NFA/TNA with OPI/TGA and PBT/TNA suggest that as proportion of fixed assets in total assets (either on gross or net base) increases, profitability of company is affected in negative manner.

The correlation coefficient of OPI/TGA ratio with OPI/Sale is -0.1445, with PBT/TNA is -0.2190 and with Average size is 0.0050. The negative correlations of OPI/Sale and PBT/TNA indicates that as this ratio increases OPI/TGA ratio decreases, while the positive correlations indicates that as Average size increases OPI/TGA increases.

The correlation coefficient of OPI/Sale ratio with PBT/TNA is 0.2274 and with Average size is 0.2477. The positive correlations indicate that as these ratios increase, the OPI/Sale ratio also increases.

The correlation coefficient of PBT/TNA with Average size is -0.0199. The negative correlation indicates that as Average size increases, PBT/TNA decreases.

C. MULTIPLE REGRESSIONS:

In the foregoing para, for running the regression only one variable is taken at a time. However, one may also take more than one variable simultaneously to examine its simultaneous effect on dependent variable. For this purpose multiple regression are run. Out of total 6 independent variables, there are some which cannot be taken simultaneously. Hence if one is selected other is to be dropped out e.g. GFA/TGA and

NFA/TNA. Basically both ratios indicate the same thing, the proportion of fixed assets to total assets; one is on gross base and other on net base. Hence these two ratios cannot be taken simultaneously. Similarly, OPI/TGA and PBT/TNA basically explain the proportion of profits to total assets one on gross base and the other on net base. Considering these points these two variables are kept exclusive with other similar variables. Thus the groups selected for these multiple regression are:

1. GFA/TGA and OPI/TGA,
2. GFA/TGA, OPI/TGA and Average size,
3. GFA/TGA, OPI/Sale and Average size
4. GFA/TGA, OPI/TGA, OPI/Sale and Average size,
5. NFA/TNA and PBT/TNA,
6. NFA/TNA, PBT/TNA and Average size
7. NFA/TNA, OPI/Sale and Average size
8. NFA/TNA, PBT/TNA, OPI/Sale and Average size.

In addition to computation of R^2, $\bar{R}^2$ is also computed because R^2 can be looked upon as a 'better' estimate of model of goodness of fit. Unlike R^2, it does not inevitably increase as the number of included explanatory variable increases[10].

The results of these multiple regressions taking D/E as dependent variable are presented in Table VI.3. From the Table it can be observed that when the regression is run of D/E ratio on GFA/TGA and OPI/TGA, R^2 is found to be 0.0898 and $\bar{R}^2$ is found to be 0.0454 indicating thereby that out of total changes in D/E ratio 4% changes are explained by change in GFA/TGA and OPI/TGA and the coefficients are found to be -2.0721 and 0.0012 respectively. The t value for GFA/TGA, -1.959

TABLE - VI.1
REGRESSION OF DEBT-EQUITY RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Intercept	3.0415	2.6529	2.0942	2.7118	3.2472	2.2397
Coefficient	-2.0276	-1.6264	0.0009	-0.0537	-0.1204	-0.0000
	(-1.937)**	(-1.465)***	(0.441)	(-2.119)**	(-4.445)*	(-1.223)
R-square	0.0820	0.0486	0.0046	0.0966	0.3199	0.0344

*,**,*** indicates significance at 1%, 5% and 10% levels respectively.

TABLE - VI.2
RESULTS OF CORRELATIONS

	D/E	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
D/E	1.0000						
GFA/TGA	-0.2864	1.0000					
NFA/TNA	-0.2205	0.9233	1.0000				
OPI/TGA	0.0678	0.0710	0.0005	1.0000			
OPI/SALE	-0.3107	0.4334	0.5413	-0.1445	1.0000		
PBT/TNA	-0.5656	-0.2552	-0.2700	-0.2190	0.2274	1.0000	
AVG Size	-0.1855	0.2418	0.2250	0.0050	0.2477	-0.0199	1.0000

TABLE - VI.3
MULTIPLE REGRESSION OF DEBT-EQUITY RATIO ON VARIOUS EXPLANATORY VARIABLES

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Intercept	3.0355	3.0225	3.1428	3.1333	4.4483	4.4493	2.8175	4.5130
GFA/TGA	-2.0721	-1.8619	-1.2157	-1.2749				
	(-1.959)**	(-1.700)**	(-1.038)	(-1.065)				
OPI/TGA	0.0012	0.0012		0.0007				
	(0.593)	(0.580)		(0.340)				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.793)	(-0.592)	(-0.592)		(-0.978)	(-0.710)	(-1.095)
OPI/Sale			-0.0369	-0.0350			-0.0434	0.0232
			(-1.290)	(-1.185)			(-1.400)***	(0.868)
NFA/TNA					-2.9696	-2.7698	-0.4412	-3.3870
					(-3.409)*	(-3.095)*	(-0.335)	(-2.958)*
PBT/TNA					-0.1435	-0.1424		-0.1538
					(-5.711)*	(-5.660)*		(-5.408)*
R-square	0.0898	0.1039	0.1325	0.1351	0.4701	0.4825	0.1116	0.4923
F-value	(2.023)	(1.546)	(2.036)	(1.522)	(18.187)*	(12.431)*	(1.675)	(9.455)*
R-bar sqr	0.0454	0.0637	0.0674	0.0463	0.4442	0.4437	0.0450	0.4402

*,**,*** indicates significance at 1%, 5% and 10% levels respectively.

indicates the significant negative effect on D/E ratio at 5% level of significance. The t value for OPI/TGA is 0.593. This indicates the insignificant impact on D/E ratio. The F* value is 2.023 and is insignificant. This tends to suggest that the variations in the D/E ratio are due to factors other than variables included in the model. The other variables are taken care of and explanation follows in the latter pages.

When the regression is run of D/E ratio on GFA/TGA, OPI/TGA and Average size, R^2 is found to be 0.1039, $\bar{R}^2$ is found to be 0.0637 and the coefficients are found to be -1.8619, 0.0012 and -0.0000 respectively. The t value for GFA/TGA is -1.700. This indicates the significant negative impact on D/E ratio at 5% level of significance. The t value for OPI/TGA 0.580, indicates insignificant impact. The t value for Average size is -0.793, also indicates the insignificant impact of Average size on D/E ratio. This tends to suggest that as the proportion GFA/TGA increases the D/E ratio reduces. The F value is 1.546 and is insignificant. This implies that the variations in D/E ratio are due to factors other than variables included in the model. The other variables are taken care of in the following lines.

When the regression is run of D/E ratio on GFA/TGA, OPI/Sale and Average size, R^2 is found to be 0.1325, $\bar{R}^2$ is found to be 0.0674 and the coefficients are found to be -1.2157, -0.0369 and -0.0000 respectively. The t value for GFA/TGA is -1.038, for

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*F_{tab} for (2,42) d.f. at 1%=5.16, at 5%=3.22
F_{tab} for (3,41) d.f. at 1%=4.30, at 5%=3.83
F_{tab} for (4,40) d.f. at 1%=3.83, at 5%=2.61

OPI/Sale is -1.290 and of Average size is -0.592. All these three values indicate the insignificant effect on D/E ratio. The F value of 2.036 is also insignificant. This implies that variables selected do not help in explaining the changes in D/E ratio.

When the regression is run of D/E ratio on GFA/TGA, OPI/TGA, OPI/Sale and Average size, R^2 is found to be 0.1351, $\bar{R}^2$ is found to be 0.0463 and the coefficients are found to be -1.2749, 0.0007, -0.0350 and -0.0000 respectively. The t values are found to be -1.065, 0.0340, -1.185, -0.592 respectively and are insignificant. The F value is 1.522 and is insignificant. This tends to suggest that the variations in the D/E ratio are due to factors other than variables included in the model.

In the following 4 multiple regressions OPI/TGA and GFA/TGA are excluded and PBT/TNA and NFA/TNA are taken in their place.

When the regression is run of D/E ratio on NFA/TNA and PBT/TNA, R^2 is found to be 0.4701, $\bar{R}^2$ is found to be 0.4442 and the coefficients are found to be -2.9696 and -0.1435. The t value for NFA/TNA is found to be -3.407 and is negative significant at 1% level of significance. For PBT/TNA it is found to be -5.711 indicating the negative significant effect of PBT/TNA on D/E ratio at 1% level of significance. This supports the pecking order theory. This tends to suggest that as NFA/TNA and PBT/TNA ratios increase the D/E ratio reduces. The F value is 16.744 and is significant at 1% level of significance. This implies that the model fits well for predicting the behaviour of D/E ratio.

When the regression is run of D/E ratio on NFA/TNA, PBT/TNA and Average size, R^2 is found to be 0.4825, $\bar{R}^2$ is found to be 0.4437 and the coefficients are found to be -2.7698, -0.1424, and -0.0000 respectively. The t values are found to be -3.095, -5.660 and -0.978 respectively. The t values indicate that coefficients of NFA/TNA and PBT/TNA are significant at 1% level of significance. This tends to suggest that as PBT/TNA and NFA/TNA ratios increase, the debt-equity ratio decreases. The PBT/TNA supports the pecking order theory. The F value is 11.308 and is significant at 1% level of significance. This implies that selection of these 3 variables in model to predict effect on D/E ratio fits well.

When the regression is run of D/E ratio on NFA/TNA, OPI/Sale and Average size, R^2 is found to be 0.1116, $\bar{R}^2$ is found to be 0.0450 and the coefficients are found to be -0.4412, -0.0434 and -0.0000 respectively. The t values are found to be -0.335, -1.400 and -0.710 respectively between D/E ratio. The coefficient of OPI/Sale is significant at 10% level of significance. This supports the pecking order theory. The F value is 1.675 and is insignificant. This tends to suggest that the variations in the D/E ratio are due to factors other than variables included in the model.

When the regression is run of D/E ratio on NFA/TNA, PBT/TNA, OPI/Sale and Average size, R^2 is found to be 0.4923, $\bar{R}^2$ is found to be 0.4402 and the coefficients are found to be -3.3870, -0.1538, 0.0232 and -0.0000 respectively. The t values are found to be -2.958, -5.408, 0.868 and 1.095 respectively. The NFA/TNA and PBT/TNA ratios are negative and significant

at 1% level of significance. This tends to suggest that as the proportion of NFA/TNA and PBT/TNA ratios increase the D/E ratio decreases. So the PBT/TNA supports the pecking order theory. The F value is 9.455 and is significant at 1% level of significance. This suggests that selection of these four variables as determinants of D/E ratio fits well.

Thus out of 8 runs for 3 runs it is observed that the model fits well. These three runs are with NFA/TNA, PBT/TNA; NFA/TNA, PBT/TNA and Average size, and NFA/TNA, PBT/TNA, OPI/Sale and Average size.

2. LONG-TERM DEBT TO TOTAL ASSETS RATIO:

A. SIMPLE REGRESSIONS:

Considering the LTD/TA to be a dependent variable, 6 regressions are run individually on variables mentioned above. The results of the regressions are presented in Table VI.4. In Searle for the year 1982 (31.12.82), the long-term debt is -4853.63. This is abnormal. No explanation is available for decrease in deferred liability and increase in current liability. On account of this LTD/TA ratio is negative, that too by a higher tune, for years 1982 and 1983, as 31.12.82 has effect on 2 years 31.3.82 and 31.3.83. Hence in computation of Average LTD/TA ratio, (taking all years together for each company separately), Searle is omitted and observations are taken of 44 companies only. From the Table it can be observed that for the regression of LTD/TA on GFA/TGA, R^2 is found to be 0.5156, and the coefficient is found to be 0.3484. The value of t is 6.687. This indicates the significant positive effect of GFA/TGA on LTD/TA at 1% level of significance. This supports trade-off theory. Similar

observation is found while running the regression of LTD/TA ratio on NFA/TNA, where R^2 is found to be 0.6336 and the coefficient is found to be 0.3915. The value of t is 8.522. This indicates the positive significant impact of NFA/TNA on LTD/TA at 1% level of significance. This supports trade-off theory. For the regression of LTD/TA ratio on OPI/TGA, R^2 is found to be 0.0095 with the coefficient value of -0.0000. The value of t is -0.634. This is insignificant. For the regression of LTD/TA ratio on OPI/Sale, R^2 is found to be 0.2490 with the coefficient value of 0.0061. The value of t is 3.731. This indicates the positive significant impact of OPI/Sale on LTD/TA at 1% level of significance. This supports trade-off theory. For the regression of LTD/TA on PBT/TNA, R^2 is found to be 0.0974 with the coefficient value of -0.0048. The value of t is -2.129. Thus the coefficient is found to be negative and statistically significant at 5% level of significance. This tends to suggest that as the PBT/TNA increases, the LTD/TA decreases. This supports pecking order theory, which shows that first priority for expansion/ capital investment is retained earnings leading to low LTD/TA ratio. It is really a surprise that when as indicator of profitability OPI/Sale is taken, it supports trade-off theory and when PBT/TNA is taken as indicator of profit, it supports pecking order theory. The findings from the regression on Average size, R^2 is found to be 0.0004 and the coefficient is found to be -0.0000. The value of t is -0.124. This is insignificant. Thus out of 6 variables selected for the analysis, three variables, viz, GFA/TGA, NFA/TNA and OPI/Sale are found to have positive significant impact

on LTD/TA ratio and PBT/TNA show the negative significant effect on LTD/TA ratio.

B. CORRELATIONS:

The Table VI.5 shows the correlation matrix of LTD/TA with other ratios and among themselves. The correlation coefficient of LTD/TA ratio with GFA/TGA is 0.7181, with NFA/TNA is 0.7960, with OPI/TGA is 0.0973, with OPI/Sale is 0.4990, with PBT/TNA is -0.3121 and with Average size is -0.0191. Thus two correlations, viz, PBT/TNA and Average size are negative. This indicates that as these ratios increase, the LTD/TA ratio decreases. Other correlations, viz, GFA/TGA, NFA/TNA, OPI/TGA and OPI/Sale are positive. This indicates that as these ratios increase, the LTD/TA ratio also increases. The correlation coefficient of GFA/TGA ratio with NFA/TNA is 0.9243, with OPI/TGA is 0.0624, with OPI/Sale is 0.4643, with PBT/TNA is -0.2585 and with Average size is 0.2126. The correlation of PBT/TNA is negative, indicates that as this ratio increases, GFA/TGA ratio decreases.

The correlation coefficient of NFA/TNA ratio with OPI/TGA is -0.0092, with OPI/Sale is 0.5640, with PBT/TNA is -0.2815 and with Average size is 0.1848. The correlation of PBT/TNA is negative, indicates that as this ratio increases, NFA/TNA ratio decreases.

The correlation coefficient of OPI/TGA ratio with OPI/Sale is -0.1471, with PBT/TNA is -0.2221 and with Average size is 0.0069. The negative correlation of OPI/Sale ratio indicates that as this ratio increase OPI/TGA ratio decreases.

The correlation coefficient of OPI/Sale ratio with PBT/TNA is 0.1016 and with Average size is 0.2509. The

positive correlations indicate that as these ratios increase, the Average size also increases.

The correlation coefficient of PBT/TNA with Average size is 0.0123. The positive correlation indicates that as the ratio increases, the Average size increases.

C. MULTIPLE REGRESSIONS:

The purpose of running multiple regression is to find out the combined/ Joint effect of more than one variable taken together on LTD/TA ratio. The results of these multiple regressions are presented in Table VI.6. From the Table it can be observed that when the regression is run of LTD/TA ratio on GFA/TGA and OPI/TGA, R^2 is found to be 0.5359 and $\bar{R}^2$ is found to be 0.5133 indicating thereby that out of total changes in LTD/TA 51% changes are explained by change in GFA/TGA and OPI/TGA. The coefficients are found to be 0.3527 and -0.0001 respectively. The t value for GFA/TGA, 6.820 indicates the significant positive effect of GFA/TGA on LTD/TA at 1% level of significance. This tends to suggest that as the proportion of GFA/TGA increases the LTD/TA ratio increases. This supports trade-off theory. The t value for OPI/TGA, -1.338 indicates the significant negative impact of OPI/TGA on LTD/TA at 10% level of significance. This tends to suggest that as OPI/TGA ratio increases, LTD/TA ratio decreases. This supports pecking order theory. The F value is 23.671 and is significant at 1% level of significance. This implies that the selection of these two variables in model fits well for prediction of LTD/TA.

TABLE - VI.4
REGRESSION OF LONG-TERM DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Intercept	-0.0645	-0.0356	0.0990	0.0298	0.1412	0.0979
Coefficient	0.3484	0.3915	-0.0000	0.0061	-0.0048	-0.0000
	(6.687)*	(8.522)*	(-0.634)	(3.731)*	(-2.129)**	(-0.124)
R-square	0.5156	0.6336	0.0095	0.2490	0.0974	0.0004

*,**,*** indicates significance at 1%, 5% and 10% levels respectively.

TABLE - VI.5
RESULTS OF CORRELATIONS

	LTD/TA	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
LTD/TA	1.0000						
GFA/TGA	0.7181	1.0000					
NFA/TNA	0.7960	0.9243	1.0000				
OPI/TGA	0.0973	0.0624	-0.0092	1.0000			
OPI/SALE	0.4990	0.4643	0.5640	-0.1471	1.0000		
PBT/TNA	-0.3121	-0.2585	-0.2815	-0.2221	0.1016	1.0000	
AVG Size	-0.0191	0.2126	0.1848	0.0069	0.2509	0.0123	1.0000

TABLE - VI.6
MULTIPLE REGRESSION OF LONG-TERM DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Intercept	-0.0636	-0.0636	-0.0723	-0.0709	-0.0176	-0.0171	-0.0371	-0.0115
GFA/TGA	0.3527	0.3714	0.3140	0.3221				
	(6.820)*	(7.176)*	(5.663)*	(5.749)*				
OPI/TGA	-0.0001	-0.0001		-0.0000				
	(-1.338)***	(-1.380)***		(-1.004)				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.698)**	(-2.107)**	(-2.076)**		(-1.793)**	(-2.017)**	(-2.062)**
OPI/Sale			0.0031	0.0028			0.0014	0.0023
			(2.200)**	(1.953)**			(1.021)	(1.567)***
NFA/TNA					0.3783	0.3950	0.3771	0.3348
					(7.897)*	(8.302)*	(6.967)*	(5.534)*
PBT/TNA					-0.0015	-0.0013		-0.0024
					(-0.981)	(-0.883)		(-1.480)***
R-square	0.5359	0.5671	0.5955	0.6057	0.6420	0.6686	0.6707	0.6882
F-value	(23.671)*	(17.467)*	(19.626)*	(14.975)*	(36.758)*	(26.899)*	(27.159)*	(21.522)*
R-bar sqr	0.5133	0.5346	0.5651	0.5652	0.6245	0.6437	0.6460	0.6562

*,**,*** indicates significance at 1%, 5% and 10% levels respectively.

When the regression is run of LTD/TA ratio on GFA/TGA, OPI/TGA and Average size, R^2 is found to be 0.5671, $\bar{R}^2$ is found to be 0.5346 and the coefficients are found to be 0.3714, -0.0001 and -0.0000 respectively. The t value for GFA/TGA is 7.176. This indicates the significant positive impact on LTD/TA ratio at 1% level of significance. This tends to suggest that as the proportion of GFA/TGA ratio increases, the LTD/TA ratio increases. This supports trade-off theory. The t value for OPI/TGA is -1.380. This indicates the significant negative effect on LTD/TA ratio at 10% level of significance. This supports pecking order theory. The t value for Average size, -1.698, indicates the significant negative impact on LTD/TA at 5% level of significance. This tends to suggest that as the proportion OPI/TGA and Average size increase the LTD/TA ratio reduces. The F value is 17.467 and is significant at 1% level of significance. This implies that the selection of these 3 variables for prediction of LTD/TA fits well.

When the regression is run of LTD/TA ratio on GFA/TGA, OPI/Sale and Average size, R^2 is found to be 0.5955, $\bar{R}^2$ is found to be 0.5651 and the coefficients are found to be 0.3140, 0.0031 and -0.0000 respectively. The t value for GFA/TGA, 5.663,indicates the significant positive impact of GFA/TGA on LTD/TA at 1% level of significance. The t value for OPI/Sale is 2.200 indicates the significant positive effect on LTD/TA ratio at 5% level of significance. This tends to suggest that as the proportion of GFA/TGA and OPI/Sale ratio increases, the LTD/TA ratio increases. These support trade-off theory. The t value for Average

size, -2.107, indicates the negative significant effect on LTD/TA ratio at 5% level of significance. This tends to suggest that as Average size increases, LTD/TA ratio decreases. The F value is 19.626 and is significant at 1% level of significance. This implies by selection of GFA/TGA, OPI/Sale and Average size, for prediction of LTD/TA model fits well.

When the regression is run of LTD/TA ratio on GFA/TGA, OPI/TGA, OPI/Sale and Average size, R^2 is found to be 0.6057, $\bar{R}^2$ is found to be 0.5652 and the coefficients are found to be 0.3221, -0.0000, 0.0028 and -0.0000 respectively. The t values are found to be 5.749, -1.004, 1.953, -2.076 respectively. The t values for GFA/TGA and OPI/Sale indicate the positive significant impact on LTD/TA at 1% and 5% (respectively) level of significance. This tends to suggest that as the proportion of GFA/TGA and OPI/Sale increase, the LTD/TA ratio increases. These supports trade-off theory. Average size indicates the negative significant effect on LTD/TA at 5% level of significance. This tends to suggest that as Average size increases, the LTD/TA ratio reduces. The F value is 14.975 and is significant at 1% level of significance. This implies that selection of GFA/TGA, OPI/TGA, OPI/Sale and Average size fit well in prediction of LTD/TA.

In the following 4 multiple regressions OPI/TGA and GFA/TGA are excluded and PBT/TNA and NFA/TNA are taken in their place.

When the regression is run of LTD/TA ratio on NFA/TNA and PBT/TNA, R^2 is found to be 0.6420, $\bar{R}^2$ is found to be 0.6245 and the coefficients are found to be

0.3783 and -0.0015. The t value for NFA/TNA is found to be 7.897 and is positive significant at 1% level of significance. This tends to suggest that as the proportion of NFA/TNA ratio increases the LTD/TA ratio increases. This supports trade-off theory. For PBT/TNA it is found to be -0.981 indicating the insignificant effect of PBT/TNA on LTD/TA ratio. The F value is 36.758 and is significant at 1% level of significance. This implies that this model fits well as predictor of LTD/TA.

When the regression is run of LTD/TA ratio on NFA/TNA, PBT/TNA and Average size, R^2 is found to be 0.6686, $\bar{R}^2$ is found to be 0.6437 and the coefficients are found to be 0.3950, -0.0013, and -0.0000 respectively. The t values are found to be 8.302, -0.883 and -1.793 respectively. The coefficient of NFA/TNA ratio is positive significant at 1% level of significance. This tends to suggest that as the proportion of NFA/TNA ratio increases, the LTD/TA ratio increases. This supports trade-off theory. For Average size it is negative significant at 5% level of significance. This tends to suggest that as the proportion of Average size increases, the LTD/TA ratio decreases. The F value is 26.899 and is significant at 1% level of significance. This implies that with these 3 variables the model fits well.

When the regression is run of LTD/TA ratio on NFA/TNA, OPI/Sale and Average size, R^2 is found to be 0.6707, $\bar{R}^2$ is found to be 0.6460 and the coefficients are found to be 0.3771, 0.0014 and -0.0000 respectively. The t values are found to be 6.967, 1.021 and -2.017 respectively. The coefficient of NFA/TNA is

positive significant at 1% level of significance. This supports trade-off theory. The OPI/Sale is insignificant. The Average size is negative significant at 5% level of significance. This tends to suggest that as Average size increases, LTD/TA ratio decreases. The F value is 27.159 and is significant at 1% level of significance. This implies that with these 3 variables the model fits well.

When the regression is run of LTD/TA ratio on NFA/TNA, PBT/TNA, OPI/Sale and Average size, R^2 is found to be 0.6882, $\bar{R}^2$ is found to be 0.6562 and the coefficients are found to be 0.3348, -0.0024, 0.0023 and -0.0000 respectively. The t values are found to be 5.534, -1.480, 1.567 and -2.062 respectively. The NFA/TNA and OPI/Sale ratios are positive significant at 1% and 10% (respectively) level of significance. This tends to suggest that as the proportions of NFA/TNA and OPI/Sale increase the LTD/TA ratio increases. This supports trade-off theory. The PBT/TNA and Average size are negative significant at 10% and 5% (respectively) level of significance. This tends to suggest that as PBT/TNA and Average size increase the LTD/TA ratio decreases. The PBT/TNA ratio supports pecking order theory. The F value is 21.485 and is significant at 1% level of significance. This implies that with selection of NFA/TNA, PBT/TNA, OPI/Sale and Average size model fits well.

3. TOTAL DEBT TO TOTAL ASSETS RATIO:

A. SIMPLE REGRESSIONS:

Considering the TD/TA to be a dependent variable, 6 regressions are run individually on variables mentioned above. The results of the regressions are

presented in Table VI.7. From the Table it can be observed that for the regression of TD/TA on GFA/TGA, R^2 is found to be 0.0374, and the coefficient is found to be -0.1322. The value of t is -1.292 and is insignificant. Similar observation is found while running the regression of TD/TA ratio on NFA/TNA, where R^2 is found to be 0.0128 and the coefficient is found to be -0.0784. The value of t is -0.745 and is insignificant. For the regression of TD/TA ratio on OPI/TGA, R^2 is found to be 0.0274 with the coefficient value of 0.0002. The value of t is 1.101 and is insignificant. For the regression of TD/TA ratio on OPI/Sale, R^2 is found to be 0.0673 with the coefficient value of -0.0044. The value of t is -1.762 and statistically significant at 5% level of significance. This indicates that with increase in OPI/Sale, TD/TA reduces. This supports pecking order theory. For the regression of TD/TA ratio on PBT/TNA, R^2 is found to be 0.2473 with the coefficient value of -0.0104. The value of t is -3.759. This value is statistically significant at 1% level of significance. This suggests that as the PBT/TNA increases, the TD/TA decreases. This supports pecking order theory, which shows that first priority for expansion/ capital investment is retained earnings leading to low TD/TA. The findings from the regression on Average size, R^2 is found to be 0.0113 and the coefficient is found to be -0.0000. The value of t is -0.700 and is insignificant. Thus out of 6 variables selected for the analysis, OPI/Sale and PBT/TNA are found to have negative significant impact on TD/TA ratio and this supports pecking order theory.

B. CORRELATIONS:

The Table VI.8 shows the correlation matrix of TD/TA with other ratios and among themselves. The correlation coefficient of TD/TA ratio with GFA/TGA is -0.1933, with NFA/TNA is -0.1129, with OPI/TGA is 0.1657, with OPI/Sale is -0.2595, with PBT/TNA is -0.4973 and with Average size is -0.1062. Thus five correlations except OPI/TGA are negative. This indicates that as these ratios increase, the TD/TA ratio decreases. The correlation coefficient of GFA/TGA ratio with NFA/TNA is 0.9248, with OPI/TGA is 0.0625, with OPI/Sale is 0.4455, with PBT/TNA is -0.2732 and with Average size is 0.2184. The correlation of PBT/TNA is negative indicates that as these ratios increase, GFA/TGA ratio decreases.

The correlation coefficient of NFA/TNA ratio with OPI/TGA is -0.0088, with OPI/Sale is 0.5467, with PBT/TNA is -0.2912 and with Average size is 0.1898. The correlations of OPI/TGA and PBT/TNA are negative indicate that as these ratios increase, NFA/TNA ratio decreases.

The correlation coefficient of OPI/TGA ratio with OPI/Sale is -0.1468, with PBT/TNA is -0.2139 and with Average size is 0.0072. The positive correlation of Average size indicates that as this ratio increases OPI/TGA ratio increases, while the negative correlation indicates that as these ratios increase, the OPI/TGA ratio also decreases.

The correlation coefficient of OPI/Sale ratio with PBT/TNA is 0.2110 and with Average size is 0.2370. The positive correlations indicate that as these ratios increase, the OPI/Sale ratio also increases.

The correlation coefficient of PBT/TNA with Average size is 0.0111. The positive correlation indicates that as the ratio increases, the Average size increases.

C. MULTIPLE REGRESSIONS:

The purpose of running multiple regression is to find out the combined/ Joint effect of more than one variable taken together on TD/TA. The results of these multiple regressions are presented in Table VI.9. From the Table it can be observed that when the regression is run of TD/TA on GFA/TGA and OPI/TGA, R^2 is found to be 0.0691 and $\bar{R}^2$ is found to be 0.0247 indicating thereby that out of total changes in TD/TA only 2% changes are explained by change in GFA/TGA and OPI/TGA and the coefficients are found to be -0.1398 and 0.0002 respectively. The t value for GFA/TGA, -1.370 indicates the significant negative impact on TD/TA ratio at 10% level of significance. This tends to suggest that as the GFA/TGA increases the TD/TA decreases. This supports the findings of Ferri and Jones that "with a high proportion of fixed to Total Assets are concentrated in the low leverage classes". The t value for OPI/TGA is 1.196 and is insignificant. The F value is 1.558 and is insignificant. This tends to suggest that the variations in the TD/TA ratio are due to factors other than variables included in the model.

When the regression is run of TD/TA ratio on GFA/TGA, OPI/TGA and Average size, R^2 is found to be 0.0732, $\bar{R}^2$ is found to be 0.0054 and the coefficients are found to be -0.1299, 0.0002 and -0.0000 respectively. The t value for GFA/TGA is -1.231, for OPI/TGA is 1.182 and for Average size, -0.428. All

TABLE - VI.7
REGRESSION OF TOTAL DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Intercept	0.6608	0.6262	0.5950	0.6493	0.6971	0.6068
Coefficient	-0.1322	-0.0784	0.0002	-0.0044	-0.0104	-0.0000
	(-1.292)	(-0.745)	(1.101)	(-1.762)**	(-3.759)*	(-0.700)
R-square	0.0374	0.0128	0.0274	0.0673	0.2473	0.0113

* ,**,*** indicates significance at 1%, 5% and 10% levels respectively.

TABLE - VI.8
RESULTS OF CORRELATIONS

	TD/TA	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
TD/TA	1.0000						
GFA/TGA	-0.1933	1.0000					
NFA/TNA	-0.1129	0.9248	1.0000				
OPI/TGA	0.1657	0.0625	-0.0088	1.0000			
OPI/SALE	-0.2595	0.4455	0.5467	-0.1468	1.0000		
PBT/TNA	-0.4973	-0.2732	-0.2912	-0.2139	0.2110	1.0000	
AVG Size	-0.1062	0.2184	0.1899	0.0072	0.2370	0.0111	1.0000

TABLE - VI.9
MULTIPLE REGRESSION OF TOTAL DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Intercept	0.6591	0.6590	0.6713	0.6682	0.7791	0.7797	0.6444	0.7816
GFA/TGA	-0.1398	-0.1299	-0.0628	-0.0785				
	(-1.370)***	(-1.231)	(-0.543)	(-0.671)				
OPI/TGA	0.0002	0.0002		0.0002				
	(1.196)	(1.182)		(0.958)				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.428)	(-0.233)	(-0.258)		(-0.470)	(-0.324)	(-0.498)
OPI/Sale			-0.0035	-0.0030			-0.0046	-0.0008
			(-1.236)	(-0.258)			(-1.496)***	(-0.250)
NFA/TNA					-0.1955	-0.1868	0.0316	-0.2065
					(-2.117)**	(-1.966)**	(0.252)	(-1.662)***
PBT/TNA					-0.0121	-0.0121		-0.0125
					(-4.356)*	(-4.288)*		(-3.877)*
R-square	0.0691	0.0732	0.0761	0.0968	0.3199	0.3236	0.0709	0.3246
F-value	(1.558)	(1.079)	(1.125)	(1.072)	(9.879)*	(6.538)*	(1.043)	(4.807)*
R-bar sqr	0.0247	0.0054	0.0085	0.0065	0.2876	0.2741	0.0029	0.2571

* ,**,*** indicates significance at 1%, 5% and 10% levels respectively.

these t values indicate the insignificant impact on TD/TA. The F value is 1.079 and is insignificant. This tends to suggest that the variations in the TD/TA ratio are due to factors other than variables included in the model.

When the regression is run of TD/TA ratio on GFA/TGA, OPI/Sale and Average size, R^2 is found to be 0.0761, $\bar{R}^2$ is found to be 0.0085 and the coefficients are found to be -0.0628, -0.0035 and -0.0000 respectively. The t value for GFA/TGA is -0.543, for OPI/Sale is -1.236, and for Average size it is -0.233. All the three are found to be insignificant. The F value is 1.125 and is insignificant. This tends to suggest that the variations in the TD/TA ratio are due to factors other than variables included in the model.

When the regression is run of TD/TA ratio on GFA/TGA, OPI/TGA, OPI/Sale and Average size, R^2 is found to be 0.0968, $\bar{R}^2$ is found to be 0.0065 and the coefficients are found to be -0.0785, 0.0002, -0.0030 and -0.0000 respectively. The t values are found to be -0.671, 0.958, -0.258, -0.258 respectively. All these values are found to be insignificant. The F value is 1.072 and is insignificant. This tends to suggest that the variations in the TD/TA ratio are due to factors other than variables included in the model.

In the following 4 multiple regressions OPI/TGA and GFA/TGA is excluded and PBT/TNA and NFA/TNA are taken in their place.

When the regression is run of TD/TA ratio on NFA/TNA and PBT/TNA, R^2 is found to be 0.3199, $\bar{R}^2$ is found to be 0.2876 and the coefficients are found to be -0.1955 and -0.0121. The t value for NFA/TNA is found

to be -2.117 and is negative significant at 5% level of significance. For PBT/TNA it is found to be -4.356 indicating the negative significant effect of PBT/TNA on TD/TA at 1% level of significance. This tends to suggest that as the proportion of NFA/TNA and PBT/TNA ratio increase the TD/TA ratio reduces. The findings regarding NFA/TNA supports the findings of Ferri and Jones and findings regarding PBT/TNA supports pecking order theory. The F value is 9.879 and is significant at 1% level of significance. This implies that selection of these two variables in the model fits well.

When the regression is run of TD/TA on NFA/TNA, PBT/TNA and Average size, R^2 is found to be 0.3236, $\bar{R}^2$ is found to be 0.2741 and the coefficients are found to be -0.1868, -0.0121, and -0.0000 respectively. The t values are found to be -1.966, -4.288 and -0.470 respectively. The NFA/TNA and PBT/TNA ratios are negative significant at 5% and 1% (respectively) level of significance. This tends to suggest that as the NFA/TNA and PBT/TNA ratios increase, the TD/TA ratio decreases. The findings for NFA/TNA supports the findings of Ferri and Jones and the findings for PBT/TNA supports pecking order theory. The impact of Average size on TD/TA is found to be insignificant. The F value is 6.538 and is significant at 1% level of significance. This implies that the model fits well.

When the regression is run of TD/TA ratio on NFA/TNA, OPI/Sale and Average size, R^2 is found to be 0.0709, $\bar{R}^2$ is found to be 0.0029 and the coefficients are found to be 0.0316, -0.0046 and -0.0000 respectively. The t values are found to be 0.252,

-1.496 and -0.324 respectively. The OPI/Sale ratio is negative significant at 10% level of significance. This supports pecking order theory. The impact of NFA/TNA and Average size are insignificant on TD/TA. The F value is 1.043 and is insignificant. This tends to suggest that the variations in the TD/TA are due to factors other than variables included in the model.

When the regression is run of TD/TA ratio on NFA/TNA, PBT/TNA, OPI/Sale and Average size, R^2 is found to be 0.3246, $\bar{R}^2$ is found to be 0.2571 and the coefficients are found to be -0.2065, -0.0125, -0.0008 and -0.0000 respectively. The t values are found to be -1.662, -3.877, -0.250 and -0.498 respectively. The NFA/TNA and PBT/TNA ratios are negative significant at 10% and 1% (respectively) level of significance. This tends to suggest that as the NFA/TNA and PBT/TNA increase, the TD/TA ratio decreases. The findings for NFA/TNA supports the findings of Ferri and Jones and the findings for PBT/TNA supports pecking order theory. The impact of OPI/Sale and Average size is insignificant. The F value is 4.807 and is significant at 1% level of significance. This implies that the model fits well for prediction of TD/TA.

Thus out of 8 multiple regression runs, 3 runs are found to be good predictor for TD/TA wherein NFA/TNA and PBT/TNA are found to be common.

4. TOTAL EQUITY TO TOTAL ASSETS RATIO:

A. SIMPLE REGRESSIONS:

Considering the TE/TA to be a dependent variable, 6 regressions are run individually on variables mentioned in the foregoing para. The results of the regressions are presented in Table VI.10. From the

Table it can be observed that for the regression of TE/TA on GFA/TGA, R^2 is found to be 0.0329, and the coefficient is found to be 0.1155. The value of t is 1.210 and indicates the insignificant impact on TE/TA. For the regression of TE/TA on NFA/TNA, where R^2 is found to be 0.0032 and the coefficient is found to be 0.0673. The value of t is 0.373, and is insignificant. For the regression of TE/TA ratio on OPI/TGA, R^2 is found to be 0.0133 with the coefficient value of -0.0001. The value of t is -0.763 and is insignificant. For the regression of TE/TA ratio on OPI/Sale, R^2 is found to be 0.0347 with the coefficient value of 0.0030. The value of t is 1.244. This again is insignificant. For the regression of TE/TA ratio on PBT/TNA, R^2 is found to be considerably high 0.4147 with the coefficient value of 0.0126. The value of t is 5.520. And is statistically significant at 1% level of significance. This tends to suggest that as PBT/TNA increases, the TE/TA increases. This supports pecking order theory, which shows that first priority for expansion/ capital investment is retained earnings leading to high TE/TA. The findings from the regression on Average size, R^2 is found to be 0.0083 and the coefficient is found to be 0.0000. The value of t is 0.601 and is insignificant. Thus out of 6 regression only one variable is found to have significant effect on TE/TA.

B. CORRELATIONS:

The Table VI.11 shows the correlation matrix of TE/TA with other ratios and among themselves. The correlation coefficient of TE/TA with GFA/TGA is 0.1814, with NFA/TNA is 0.0568, with OPI/TGA is

-0.1156, with OPI/Sale is 0.1863, with PBT/TNA is 0.6440 and with Average size is 0.0913. Thus five correlations are positive. This indicates that as these ratios increase, the TE/TA ratio increases. The correlation coefficient of GFA/TGA ratio with NFA/TNA is 0.9248, with OPI/TGA is 0.0625, with OPI/Sale is 0.4455, with PBT/TNA is -0.2732 and with Average size is 0.2184. The correlation of PBT/TNA is negative indicates that as these ratios increase, GFA/TGA ratio decreases. The correlation coefficient of NFA/TNA ratio with OPI/TGA is -0.0088, with OPI/Sale is 0.5467, with PBT/TNA is -0.2912 and with Average size is 0.1899. The correlations of OPI/TGA and PBT/TNA are negative indicates that as these ratios increase, NFA/TNA ratio decreases.

The correlation coefficient of OPI/TGA ratio with OPI/Sale is -0.1468, with PBT/TNA is -0.2139 and with Average size is 0.0072. The positive correlations of Average size indicates that as this ratio increases OPI/TGA ratio increases, while the negative correlations indicate that as these ratios increase, the OPI/TGA ratio also decreases.

The correlation coefficient of OPI/Sale ratio with PBT/TNA is 0.2110 and with Average size is 0.2370. The positive correlations indicate that as these ratios increase, the OPI/Sale ratio also increases.

The correlation coefficient of PBT/TNA with Average size is 0.0111. The positive correlation indicates that as the ratio increases, the Average size increases.

C. MULTIPLE REGRESSIONS:

The purpose of running multiple regression is to examine the simultaneous effect of more than one variable taken together on TE/TA. The results of these multiple regressions are presented in Table VI.12. From the Table it can be observed that when the regression is run of TE/TA ratio on GFA/TGA and OPI/TGA, R^2 is found to be 0.0491 and $\bar{R}^2$ is found to be 0.0038 indicating thereby that out of total changes in TE/TA ratio 0.3% changes are explained by change in GFA/TGA and OPI/TGA and the coefficients are found to be 0.1206 and -0.0001 respectively. The t value for GFA/TGA, is 1.256 and for OPI/TGA is -0.846. This indicates the insignificant impact on TE/TA ratio. The F value is 1.084 and is insignificant. This tends to suggest that the variations in the TE/TA ratio is due to the factors other than variables included in the model.

When the regression is run of TE/TA ratio on GFA/TGA, OPI/TGA and Average size, R^2 is found to be 0.0518, $\bar{R}^2$ is found to be -0.0176 and the coefficients are found to be 0.1132, -0.0002 and 0.0000 respectively. The t value for GFA/TGA, OPI/TGA and Average size are 1.138, -0.834 and 0.343. These indicate the insignificant impact on TE/TA ratio. The F value is 0.747 and is insignificant. This tends to suggest that the variations in the TE/TA ratio is due to the factors other than variables included in the model.

When the regression is run of TE/TA ratio on GFA/TGA, OPI/Sale and Average size, R^2 is found to be 0.0480, $\bar{R}^2$ is found to be -0.0217 and the coefficients are found to be 0.0750, 0.0020 and 0.0000 respectively.

TABLE - VI.10
REGRESSION OF TOTAL EQUITY TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Intercept	0.3135	0.3545	0.3700	0.3338	0.2495	0.3613
Coefficient	0.1155	0.0673	-0.0001	0.0030	0.0126	0.0000
	(1.210)	(0.373)	(-0.763)	(1.244)	(5.520)*	(0.601)
R-square	0.0329	0.0032	0.0133	0.0347	0.4147	0.0083

* ,**,*** indicates significance at 1%, 5% and 10% levels respectively.

TABLE - VI.11
RESULTS OF CORRELATIONS

	TE/TA	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
TE/TA	1.0000						
GFA/TGA	0.1814	1.0000					
NFA/TNA	0.0568	0.9248	1.0000				
OPI/TGA	-0.1156	0.0625	-0.0088	1.0000			
OPI/SALE	0.1863	0.4455	0.5467	-0.1468	1.0000		
PBT/TNA	0.6440	-0.2732	-0.2912	-0.2139	0.2110	1.0000	
AVG Size	0.0913	0.2184	0.1899	0.0072	0.2370	0.0111	1.0000

TABLE - VI.12
MULTIPLE REGRESSION OF TOTAL EQUITY TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Intercept	0.3146	0.3148	0.3078	0.3099	0.1771	0.1767	0.3410	0.1676
GFA/TGA	0.1206	0.1132	0.0750	0.0859				
	(1.256)	(1.138)	(0.686)	(0.772)				
OPI/TGA	-0.0001	-0.0002		-0.0001				
	(-0.846)	(-0.834)		(-0.699)				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(0.343)	(0.227)	(0.243)		(0.442)	(0.334)	(0.671)
OPI/Sale			0.0020	0.0016			0.0033	-0.0035
			(0.727)	(0.571)			(1.140)	(-1.448)***
NFA/TNA					0.1726	0.1659	-0.0445	0.2565
					(2.296)**	(2.144)**	(-0.376)	(2.598)*
PBT/TNA					0.0140	0.0140		0.0157
					(6.205)*	(6.118)*		(6.169)*
R-square	0.0491	0.0518	0.0480	0.0594	0.4800	0.4824	0.0404	0.5082
F-value	(1.084)	(0.747)	(0.689)	(0.632)	(19.382)*	(12.739)*	(0.575)	(10.334)*
R-bar sqr	0.0038	-0.0176	-0.0217	-0.0346	0.4552	0.4446	-0.0298	0.4590

* ,**,*** indicates significance at 1%, 5% and 10% levels respectively.

The t values are 0.686, 0.727 and 0.227 respectively and are insignificant. The F value is 0.689 and is insignificant. This tends to suggest that the variations in the TE/TA ratio is due to the factors other than variables included in the model.

When the regression is run of TE/TA ratio on GFA/TGA, OPI/TGA, OPI/Sale and Average size, R^2 is found to be 0.0594, $\bar{R}^2$ is found to be -0.0346 and the coefficients are found to be 0.0859, -0.0001, 0.0016 and 0.0000 respectively. The t values are found to be 0.772, -0.699, 0.571, 0.243 respectively. The t values are insignificant. The F value is 0.632 and is insignificant. This tends to suggest that the variations in the TE/TA ratio is due to the factors other than variables included in the model.

In the following 4 multiple regressions OPI/TGA and GFA/TGA are excluded and PBT/TNA and NFA/TNA are taken in their place.

When the regression is run of TE/TA ratio on NFA/TNA and PBT/TNA, R^2 is found to be 0.4800, $\bar{R}^2$ is found to be 0.4552 and the coefficients are found to be 0.1762 and 0.0140. The t value for NFA/TNA is found to be 2.296 and is positive significant at 5% level of significance. For PBT/TNA it is found to be 6.205 indicating the positive significant effect of PBT/TNA on TE/TA ratio and is significant at 1% level of significance. This tends to suggest that as the proportion of NFA/TNA and PBT/TNA ratio increases the TE/TA ratio increases. The PBT/TNA supports pecking order theory. The F value is 19.382 and is significant at 1% level of significance. This implies that the model fits well for predictor of TE/TA.

When the regression is run of TE/TA ratio on NFA/TNA, PBT/TNA and Average size, R^2 is found to be 0.4824, $\bar{R}^2$ is found to be 0.4446 and the coefficients are found to be 0.1659, 0.0140, and 0.0000 respectively. The t values are found to be 2.144, 6.118 and 0.442 respectively. The NFA/TNA and PBT/TNA ratios are significant at 5% and 1% level of significance respectively. This tends to suggest that as NFA/TNA and PBT/TNA ratios increase, the TE/TA increases. The PBT/TNA supports pecking order theory. The impact of Average size on TE/TA is insignificant. The F value is 12.739 and is significant at 1% level of significance. This implies that the model fits well in prediction of TE/TA.

When the regression is run of TE/TA ratio on NFA/TNA, OPI/Sale and Average size, R^2 is found to be 0.0404, $\bar{R}^2$ is found to be -0.0298 and the coefficients are found to be -0.0445, 0.0033 and 0.0000 respectively. The t values are found to be -0.376, 1.140 and 0.334 respectively and are insignificant. The F value is 0.575 and is insignificant. This suggests that the variations in the TE/TA ratio is due to the factors other than variables included in the model.

When the regression is run of TE/TA ratio on NFA/TNA, PBT/TNA, OPI/Sale and Average size, R^2 is found to be 0.5082, $\bar{R}^2$ is found to be 0.4590 and the coefficients are found to be 0.2565, 0.0157, -0.0035 and 0.0000 respectively. The t values are found to be 2.598, 6.169, -1.448 and 0.671 respectively. The NFA/TNA and PBT/TNA ratios are positive significant at 1% level of significance. This tends to suggest that as the proportion of NFA/TNA and PBT/TNA increase the

TE/TA ratio increases. The PBT/TNA supports pecking order theory. The OPI/Sale ratio is negative significant at 10% level of significance. This tends to suggest that as the OPI/Sale ratio increases, TE/TA ratio reduces. This supports trade-off theory. The F value is 10.334 and is significant at 1% level of significance. This implies that the model fits well.

Thus out of 8 runs three runs are found to be good predictor of TE/TA. They are runs five, six and eight.

6.3 REGRESSION ANALYSIS FOR 28 COMPANIES WITH 19 YEARS DATA:

As discussed in the preceding para the data are not available for 17 companies for 97, 98 and 99. Hence the relationship is examined for longer period of time for remaining 28 companies. The following para discusses the findings for 28 companies.

To examine the existence of Pecking order theory or Trade-off theory the attempt is made to examine the determinants of capital structure as discussed in the foregoing para, the independent variables selected are GFA/TGA, NFA/TNA, OPI/TGA, OPI/Sale, PBT/TNA and Average size. To have an overall view, an overall analysis is carried out for this purpose. The average of the ratio for a given company is taken over a period of time, both for dependent and independent variables. As discussed in the methodology, as indicator of capital structure 4 dependent variables namely (1) Debt-Equity Ratio, (2) Long-term Debt to Total Assets Ratio, (3) Total Debt to Total Assets Ratio, and (4) Total Equity to Total Assets ratio are selected.

1 DEBT-EQUITY RATIO:

A. SIMPLE REGRESSIONS:

Considering the D/E to be a dependent variable, 6 regressions are run individually on variables mentioned in the foregoing para. The results of the regressions are presented in Table VI.13. From the Table it can be observed that for regression of D/E on GFA/TGA, R^2 is found to be 0.3714, and the coefficient is found to be -3.4232. The value of t* is -3.919 and shows negative significant impact at 1% level of significance. This means that the D/E ratio reduces as the GFA/TGA ratio increases. Similar observation is found while running the regression of D/E on NFA/TNA, where R^2 is found to be 0.2659 and the coefficient is found to be -3.5565. The value of t is -3.069 and is negative significant at 1% level of significance. This necessarily tends to suggest that the D/E reduces as NFA/TNA increases. For the regression of D/E ratio on OPI/TGA, R^2 is found to be 0.0608 with the coefficient value of -0.0428. The value of t is -1.298 and is insignificant. For the regression of D/E ratio on OPI/Sale, R^2 is found to be 0.1136 with the coefficient value of -0.0433. The value of t is -1.825 and is negative significant at 5% level of significance. For the regression of D/E ratio on PBT/TNA, R^2 is found to be 0.2360, the coefficient is -0.0694. The value of t is -2.834 and is statistically significant at 1% level of significance. This tends to suggest that as OPI/Sale increases, D/E ratio decreases. Also as PBT/TNA increases, D/E ratio

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*t_{tab} for 26 d.f. at 1%=2.479, at 5%=1.706, at 10%=1.315
t_{tab} for 25 d.f. at 1%=2.485, at 5%=1.708, at 10%=1.316
t_{tab} for 24 d.f. at 1%=2.492, at 5%=1.711, at 10%=1.318
t_{tab} for 23 d.f. at 1%=2.500, at 5%=1.714, at 10%=1.319

decreases. This supports pecking order theory, which shows that first priority for expansion/ capital investment is given to retained earnings leading to low D/E ratio. The findings from the regression on Average size, R^2 is found to be 0.0542 and the coefficient is found to be -0.0000. The value of t is -1.221 and indicates the insignificant impact of Average size on D/E. Thus out of six variables selected for the analysis, GFA/TGA, NFA/TNA, OPI/Sale and PBT/TNA are found to have negative significant effect on D/E ratio. The findings are very much similar to those of 45 companies. However it is worth noting that in all cases the value of R^2 goes up when 28 companies are taken.

B. CORRELATIONS:

The Table VI.14 shows the correlation matrix of D/E with other ratios and among themselves. The correlation coefficient of D/E with GFA/TGA is -0.6094, with NFA/TNA is -0.5156, with OPI/TGA is -0.2467, with OPI/Sale is -0.3370, with PBT/TNA is -0.4858 and with Average size is -0.2329. Thus all correlations are negative, and this indicates that as these ratios increase, the D/E ratio decreases. The correlation coefficient of GFA/TGA ratio with NFA/TNA is 0.9414, with OPI/TGA is -0.2108, with OPI/Sale is 0.3976, with PBT/TNA is -0.0120 and with Average size is 0.3941. Here OPI/TGA and PBT/TNA correlations are negative and indicates that as these ratios increase, GFA/TGA ratio decreases.

The correlation coefficient of NFA/TNA with OPI/TGA is -0.2278, with OPI/Sale is 0.5265, with PBT/TNA is -0.1009 and with Average size is 0.4772. The correlations of OPI/TGA and PBT/TNA are negative indicates that as these ratios increase, NFA/TNA ratio decreases.

The correlation coefficient of OPI/TGA with OPI/Sale is 0.3870, with PBT/TNA is 0.7530 and with Average size is -0.1179. The positive correlations indicate that as these ratios increase, the OPI/TGA ratio also increases.

The correlation coefficient of OPI/Sale with PBT/TNA is 0.2107 and with Average size is 0.4936. The positive correlations indicate that as these ratios increase, the Average size also increases.

The correlation coefficient of PBT/TNA with Average size is 0.0669. The positive correlation indicates that as PBT/TNA increases, the Average size increases.

C. MULTIPLE REGRESSIONS:

On similar line as of 45 companies 8 multiple regressions are run to examine the effect of more than one variables taken together on D/E ratio. The results of these multiple regressions are presented in Table VI.15. From the Table it can be observed that when the regression is run of D/E ratio on GFA/TGA and OPI/TGA, R^2 is found to be 0.5186 and $\bar{R}^2$ is found to be 0.4801 indicating thereby that out of total changes in D/E 48% changes are explained by change in GFA/TGA and OPI/TGA and the coefficients are found to be -3.8879 and -0.0681 respectively. The t value for GFA/TGA and OPI/TGA are -4.876 and -2.765 respectively. This

TABLE - VI.13
REGRESSION OF DEBT EQUITY RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Intercept	3.4538	3.0849	2.5051	2.4622	2.6616	2.1146
Coefficient	-3.4232	-3.5565	-0.0428	-0.0433	-0.0694	-0.0000
	(-3.919)*	(-3.069)*	(-1.298)	(-1.825)**	(-2.834)*	(-1.221)
R-square	0.3714	0.2659	0.0608	0.1136	0.2360	0.0542

* ,**,*** indicates significance at 1%, 5% and 10% levels respectively.

TABLE - VI.14
RESULTS OF CORRELATIONS

	D/E	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
D/E	1.0000						
GFA/TGA	-0.6094	1.0000					
NFA/TNA	-0.5156	0.9414	1.0000				
OPI/TGA	-0.2467	-0.2108	-0.2278	1.0000			
OPI/SALE	-0.3370	0.3976	0.5265	0.3870	1.0000		
PBT/TNA	-0.4858	-0.0120	-0.1009	0.7530	0.2107	1.0000	
AVG Size	-0.2329	0.3941	0.4772	-0.1179	0.4936	0.0669	1.0000

TABLE - VI.15
MULTIPLE REGRESSION OF DEBT EQUITY RATIO ON VARIOUS EXPLANATORY VARIABLES

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Intercept	4.4525	4.4499	3.5406	4.5868	3.9383	4.0081	3.1393	4.0045
GFA/TGA	-3.8879	-3.8721	-3.2560	-4.2548				
	(-4.876)*	(-4.400)*	(-3.218)*	(-4.400)*				
OPI/TGA	-0.0681	-0.0681		-0.0858				
	(-2.765)*	(-2.709)*		(-2.752)*				
AVG Size		-0.0000	0.0000	-0.0000		0.0000	0.0000	0.0000
		(-0.047)	(0.335)	(-0.515)		(0.646)	(0.243)	(0.445)
OPI/Sale			-0.0177	0.0258			-0.0139	0.0123
			(-0.725)	(0.962)			(-0.498)	(0.539)
NFA/TNA					-3.9345	-4.2708	-3.3328	-4.5455
					(-4.269)*	(-3.998)*	(-2.257)*	(-3.793)*
PBT/TNA					-0.0776	-0.0793		-0.0825
					(-4.066)*	(-4.068)*		(-3.993)*
R-square	0.5186	0.5186	0.3849	0.5372	0.5581	0.5656	0.2736	0.5710
F-value	(13.466)*	(8.620)*	(5.006)*	(6.676)*	(15.785)*	(10.417)*	(3.013)**	(7.654)*
R-bar sqr	0.4801	0.4585	0.3080	0.4568	0.5227	0.5113	0.1823	0.4964

* ,**,*** indicates significance at 1%, 5% and 10% levels respectively.

indicates the negative significant impact on D/E ratio at 1% level of significance. The findings for OPI/TGA supports pecking order theory. The F* value is 13.925 and is significant at 1% level of significance. This implies that the model fits well.

When the regression is run of D/E ratio on GFA/TGA, OPI/TGA and Average size, R^2 is found to be 0.5186, $\bar{R}^2$ is found to be 0.4585 and the coefficients are found to be -3.8721, -0.0681 and -0.0000 respectively. The t values for GFA/TGA and OPI/TGA are -4.400 and -2.709. This indicates the negative significant impact on D/E at 1% level of significance. This tends to suggest that as the proportion of GFA/TGA and OPI/TGA increase the D/E ratio reduces. Here OPI/TGA ratio supports pecking order theory. The t value for Average size is -0.047 and shows insignificant effect on D/E ratio. The F value is 8.620 and is significant at 1% level of significance. This implies that the model fits well.

When the regression is run of D/E ratio on GFA/TGA, OPI/Sale and Average size, R^2 is found to be 0.3849, $\bar{R}^2$ is found to be 0.3080 and the coefficients are found to be -3.2560, -0.0177 and 0.0000 respectively. The t value for GFA/TGA is -3.218 and is significant at 1% level of significance. The t value for OPI/Sale is -0.725 and indicates the insignificant effect on D/E ratio. The t value for Average size is 0.335 and indicates the insignificant impact on D/E ratio. The F value is 5.006 and is significant at 1%

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*F_{tab} for (2,25) d.f. at 1%=5.57, at 5%=3.39
F_{tab} for (2,24) d.f. at 1%=4.72, at 5%=3.01
F_{tab} for (2,23) d.f. at 1%=4.26, at 5%=2.80

level of significance. This implies that model fits well with these independent variables.

When the regression is run of D/E ratio on GFA/TGA, OPI/TGA, OPI/Sale and Average size, R^2 is found to be 0.5372, $\bar{R}^2$ is found to be 0.4568 and the coefficients are found to be -4.2548, -0.0858, 0.0258 and -0.0000 respectively. The t values are found to be -4.400, -2.752, 0.962, -0.515 respectively. The GFA/TGA and OPI/TGA ratios have negative significant impact at 1% level of significance. This tends to suggest that as the proportion of GFA/TGA and OPI/TGA ratios increase the D/E ratio decreases. The OPI/TGA supports pecking order theory. The F value is 6.676 and is significant at 1% level of significance. This implies that the model fits well with these four variables.

In the following 4 multiple regressions OPI/TGA and GFA/TGA are excluded and PBT/TNA and NFA/TNA are taken in their place.

When the regression is run of D/E ratio on NFA/TNA and PBT/TNA, R^2 is found to be 0.5581, $\bar{R}^2$ is found to be 0.5227 and the coefficients are found to be -3.9345 and -0.0776. The t value for NFA/TNA is found to be -4.269 and is negative significant at 1% level of significance. For PBT/TNA it is found to be -4.066 indicating the negative significant effect of PBT/TNA on D/E ratio at 1% level of significance. This supports pecking order theory. The F value is 15.785 and is significant at 1% level of significance. This implies that the model fits well with these two variables.

When the regression is run of D/E ratio on NFA/TNA, PBT/TNA and Average size, R^2 is found to be

0.5656, $\bar{R}^2$ is found to be 0.5113 and the coefficients are found to be -4.2708, -0.0793, and 0.0000 respectively. The t values are found to be -3.998, -4.068 and 0.646 respectively. The NFA/TNA and PBT/TNA ratios have negative significant impact at 1% level of significance on D/E ratio. This tends to suggest that as NFA/TNA and PBT/TNA increase, the D/E ratio decreases. The PBT/TNA ratio supports pecking order theory. The F value is 10.417 and is significant at 1% level of significance. This implies that the model fits well with these three variables.

When the regression is run of D/E ratio on NFA/TNA, OPI/Sale and Average size, R^2 is found to be 0.2736, $\bar{R}^2$ is found to be 0.1823 and the coefficients are found to be -3.3328, -0.0139 and 0.0000 respectively. The t values are found to be -2.257, -0.498 and 0.243 respectively. The NFA/TNA ratio is negative significant at 1% level of significance and the impact of OPI/Sale ratio is insignificant. This tends to suggest that as the proportion of NFA/TNA increases, the D/E ratio decreases. The F value is 3.013 and is significant at 5% level of significance. This implies that the model fits well with these three variables.

When the regression is run of D/E ratio on NFA/TNA, PBT/TNA, OPI/Sale and Average size, R^2 is found to be 0.5710, $\bar{R}^2$ is found to be 0.4964 and the coefficients are found to be -4.5455, -0.0825, 0.0123 and 0.0000 respectively. The t values are found to be -3.793, -3.993, 0.593 and 0.445 respectively. The NFA/TNA and PBT/TNA ratios have negative significant impact at 1% level of significance. This tends to

suggest that as the NFA/TNA and PBT/TNA increase the D/E decreases. The PBT/TNA supports pecking order theory. The F value is 7.654 and is significant at 1% level of significance. This implies that the model fits well.

For all above it is important to note that as the number of companies are reduced to 28 and period of study is increased to 19 years the predictive power of variables go up and the value of R^2 goes up substantially. Moreover, when 45 companies and 16 years' Average is taken for running regression, it is observed that only Runs 5, 6 and 8 fits well, whereas when 28 companies and 19 years are taken all runs show a good fit.

2. LONG-TERM DEBT TO TOTAL ASSETS RATIO:

A. SIMPLE REGRESSIONS:

Considering the LTD/TA to be a dependent variable, 6 regressions are run individually on variables mentioned above. The results of the regressions are presented in Table VI.16. From the Table it can be observed that the regression of LTD/TA on GFA/TGA, R^2 is found to be 0.3830, and the coefficient is found to be 0.2322. The value of t is equal to 4.017 and is positive significant at 1% level of significance. This necessarily tends to suggest that the LTD/TA ratio increases as the ratio GFA/TGA increases. Similar observation is found while running the regression of LTD/TA ratio on NFA/TNA, where R^2 is found to be 0.2843 and the coefficient is found to be 0.2457. The value of t is 3.214 and this shows positive significant impact at 1% level of significance. This necessarily tends to suggest that the LTD/TA ratio increases as NFA/TNA

increases. Thus GFA/TGA and NFA/TNA supports trade-off theory. For the regression of LTD/TA ratio on OPI/TGA, R^2 is found to be 0.0923 with the coefficient value of -0.0035. The value of t is -1.626 and is negative significant at 10% level of significance. This tends to suggest that as OPI/TGA increases the LTD/TA ratio reduces. For the regression of LTD/TA ratio on OPI/Sale, R^2 is found to be 0.0500 with the coefficient value of 0.0019. The value of t shows insignificant impact. For the regression of LTD/TA ratio on PBT/TNA, R^2 is found to be 0.0771 with the coefficient of -0.0026. The value of t is -1.473. This shows negative significant impact at 5% level of significance. This supports pecking order theory. The findings from the regression on Average size, R^2 is found to be 0.0301 and the coefficient is found to be 0.0000. The value of t is 0.898 indicates the insignificant impact of size on LTD/TA.

B. CORRELATIONS:

The Table VI.17 shows the correlation matrix of LTD/TA ratio with other ratios and among themselves. The correlation coefficient of LTD/TA ratio with GFA/TGA is 0.6184, with NFA/TNA is 0.5332, with OPI/TGA is -0.3039, with OPI/Sales is 0.2235, with PBT/TNA is -0.2776 and with Average size is 0.1735. So OPI/TGA, OPI/Sale and PBT/TNA correlations are negative, indicates that as these ratios increase, the LTD/TA ratio decreases. The correlation coefficient of GFA/TGA ratio with NFA/TNA is 0.9414, with OPI/TGA is -0.2108, with OPI/Sale is 0.3976, with PBT/TNA is -0.0120 and with Average size is 0.3941. The negative correlation with OPI/TGA and PBT/TNA indicates that as these ratios

increase, GFA/TGA ratio decreases. The correlation coefficient of NFA/TNA ratio with OPI/TGA is -0.2278, with OPI/Sale is 0.5265, with PBT/TNA is -0.1009 and with Average size is 0.4772.

The correlations of OPI/TGA and PBT/TNA which are negative indicate that as these ratios increase, NFA/TNA ratio decrease. The correlation coefficient of OPI/TGA ratio with OPI/Sale is 0.3870, with PBT/TNA is 0.7730 and with Average size is -0.1179. The positive correlations indicate that as these ratios increase, the OPI/TGA ratio also increases.

The correlation coefficient of OPI/Sale ratio with PBT/TNA is 0.2107 and with Average size is 0.4936. The positive correlations indicate that both move in same direction.

The correlation coefficient of PBT/TNA with Average size is 0.0669. The positive correlation indicates that as the ratio increases, the Average size increases.

C. MULTIPLE REGRESSIONS:

On similar line as of 45 companies 8 multiple regressions are run to examine the effect of more than one variable taken together on LTD/TA. The results of these multiple regressions are presented in Table VI.18. From the table it can be observed that when the regression is run of LTD/TA on GFA/TGA and OPI/TGA, R^2 is found to be 0.4145 and $\bar{R}^2$ is found to be 0.3676 indicating thereby that out of total changes in LTD/TA ratio 36% changes are explained by change in GFA/TGA and OPI/TGA and the coefficients are found to be 0.2178 and -0.0021 respectively. The t value for GFA/TGA is 3.709 indicates the positive significant impact on

TABLE - VI.16
REGRESSION OF LONG-TERM DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Intercept	-0.0149	0.0087	0.1250	0.0632	0.1088	0.0779
Coefficient	0.2322	0.2457	-0.0035	0.0019	-0.0026	0.0000
	(4.017)*	(3.214)*	(-1.626)***	(1.169)	(-1.473)***	(0.898)
R-square	0.3830	0.2843	0.0923	0.0500	0.0771	0.0301

*,**,*** indicates significance at 1%, 5% and 10% levels respectively.

TABLE - VI.17
RESULTS OF CORRELATIONS

	LTD/TA	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
LTD/TA	1.0000						
GFA/TGA	0.6184	1.0000					
NFA/TNA	0.5332	0.9414	1.0000				
OPI/TGA	-0.3039	-0.2108	-0.2278	1.0000			
OPI/SALE	0.2235	0.3976	0.5265	0.3870	1.0000		
PBT/TNA	-0.2776	-0.0120	-0.1009	0.7530	0.2107	1.0000	
AVG Size	0.1735	0.3941	0.4772	-0.1179	0.4936	0.0669	1.0000

TABLE - VI.18
MULTIPLE REGRESSION OF LONG-TERM DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Intercept	0.0159	0.0137	-0.0178	0.0231	0.0325	0.0291	0.0065	0.0290
GFA/TGA	0.2178	0.2310	0.2438	0.2048				
	(3.709)*	(3.585)*	(3.620)*	(2.885)*				
OPI/TGA	-0.0021	-0.0021		-0.0034				
	(-1.159)	(-1.162)		(-1.464)***				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.538)	(-0.457)	(-0.908)		(-0.380)	(-0.434)	(-0.396)
OPI/Sale			0.0000	0.0018			-0.0004	0.0003
			(0.041)	(0.897)			(-0.231)	(0.136)
NFA/TNA					0.2351	0.2514	0.2772	0.2457
					(3.113)*	(2.857)*	(2.852)*	(2.473)*
PBT/TNA					-0.0022	-0.0021		-0.0021
					(-1.379)***	(-1.294)		(-1.253)
R-square	0.4145	0.4214	0.3889	0.4410	0.3349	0.3389	0.2944	0.3394
F-value	(8.848)*	(5.827)*	(5.091)*	(4.536)*	(6.295)*	(4.100)*	(3.337)**	(2.954)**
R-bar sqr	0.3676	0.3491	0.3125	0.3438	0.2817	0.2563	0.2062	0.2246

*,**,*** indicates significance at 1%, 5% and 10% levels respectively.

LTD/TA at 1% level of significance. The t value for OPI/TGA is -1.159. This indicates the insignificant impact on LTD/TA. The F value is 8.848 and is significant at 1% level of significance. This implies that with these two variables the model fits well.

When the regression is run of LTD/TA ratio on GFA/TGA, OPI/TGA and Average size, R^2 is found to be 0.4214, $\bar{R}^2$ is found to be 0.3491 and the coefficients are found to be 0.2310, -0.0021 and -0.0000 respectively. The t value for GFA/TGA is 3.585 shows significant positive impact on LTD/TA at 1% level of significance. This supports the trade-off theory. The t value for OPI/TGA is -1.162 and is insignificant. The t value for Average size is -0.538 and is insignificant. The F value is 5.827 and is significant at 1% level of significance. This implies that the model fits well.

When the regression is run of LTD/TA ratio on GFA/TGA, OPI/Sale and Average size, R^2 is found to be 0.3889, $\bar{R}^2$ is found to be 0.3125 and the coefficients are found to be 0.2438, 0.0000 and -0.0000 respectively. The t value for GFA/TGA is 3.620. This shows positive significant impact at 1% level of significance. This supports the trade-off theory. The t value for OPI/Sale is 0.041 and is insignificant. The t value for Average size is -0.457 and is insignificant. The F value is 5.091 and is significant at 1% level of significance. This implies that with these three variables the model fits well.

When the regression is run of LTD/TA ratio on GFA/TGA, OPI/TGA, OPI/Sale and Average size, R^2 is found to be 0.4410, $\bar{R}^2$ is found to be 0.3438 and the coefficients are found to be 0.2048, -0.0034, 0.0018

and -0.0000 respectively. The t values are found to be 2.885, -1.464, 0.897, -0.908 respectively. The GFA/TGA has positive significant impact at 1% level of significance. This supports the trade-off theory. The OPI/TGA shows negative significant impact at 10% level of significance. This supports pecking order theory. The F value is 4.536 and is significant at 1% level of significance. This implies that with these four variables the model fits well.

In the following 4 multiple regressions OPI/TGA and GFA/TGA is excluded and PBT/TNA and NFA/TNA are taken in their place.

When the regression is run of LTD/TA ratio on NFA/TNA and PBT/TNA, R^2 is found to be 0.3349, $\bar{R}^2$ is found to be 0.2817 and the coefficients are found to be 0.2351 and -0.0022. The t value for NFA/TNA is found to be 3.113 and shows positive significant impact at 1% level of significance. This supports trade-off theory. For PBT/TNA t value is found to be -1.379 indicating the negative significant effect of PBT/TNA on LTD/TA ratio and at 10% level of significance. This supports pecking order theory. The F value is 6.295 and is significant at 1% level of significance. This implies that the model fits well.

When the regression is run of LTD/TA ratio on NFA/TNA, PBT/TNA and Average size, R^2 is found to be 0.3389, $\bar{R}^2$ is found to be 0.2563 and the coefficients are found to be 0.2514, -0.0021, and -0.0000 respectively. The t values are found to be 2.857, -1.294 and -0.380 respectively. The NFA/TNA has positive significant impact at 1% level of significance. This supports trade-off theory. The

PBT/TNA and Average size have insignificant impact on LTD/TA. The F value is 4.100 and is significant at 1% level of significance. This implies that the model fits well.

When the regression is run of LTD/TA ratio on NFA/TNA, OPI/Sale and Average size, R^2 is found to be 0.2944, $\bar{R}^2$ is found to be 0.2062 and the coefficients are found to be 0.2772, -0.0004 and -0.0000 respectively. The t values are found to be 2.852, -0.231 and -0.434 respectively. The NFA/TNA has positive significant impact at 1% level of significance. This supports trade-off theory. The OPI/Sale and Average size have insignificant impact on LTD/TA. The F value is 3.337 and is significant at 5% level of significance. This implies that the model fits well.

When the regression is run of LTD/TA ratio on NFA/TNA, PBT/TNA, OPI/Sale and Average size, R^2 is found to be 0.3394, $\bar{R}^2$ is found to be 0.2246 and the coefficients are found to be 0.2457, -0.0021, 0.0003 and -0.0000 respectively. The t values are found to be 2.473, -1.253, 0.136 and -0.396 respectively. The NFA/TNA has positive significant impact at 1% level of significance. This supports trade-off theory. The F value is 2.954 and is significant at 5% level of significance. This implies that the model fits well.

For all above it is important to note that as the number of companies are reduced to 28 and period of study is increased to 19 years the predictive power of variables go down and the value of R^2 as well as $\bar{R}^2$ goes down substantially.

3. TOTAL DEBT TO TOTAL ASSETS RATIO:

A. SIMPLE REGRESSIONS:

Considering the TD/TA to be a dependent variable, 6 regressions are run individually on variables mentioned above. The results of the regressions are presented in Table VI.19. From the Table it can be observed that when the regression of TD/TA is run on GFA/TGA, R^2 is 0.1014, and the coefficient is -0.2114. The value of t is equal to -1.712 and is negative significant at 5% level of significance. This necessarily tends to suggest that the TD/TA ratio reduces as the ratio GFA/TGA increases. Similar observation is found while running the regression of TD/TA ratio on NFA/TNA, where R^2 is found to be 0.1117 and the coefficient is found to be -0.2725. The value of t is -1.808 which is negative significant at 1% level of significance. This necessarily tends to suggest that the TD/TA ratio reduces as the ratio NFA/TNA increases. For the regression of TD/TA ratio on OPI/TGA, R^2 is found to be 0.0469 with the coefficient value of -0.0044. The value of t is -1.131 and is insignificant. For the regression of TD/TA ratio on OPI/Sale, R^2 is found to be -0.0700 with the coefficient value of -0.0040. The value of t is -1.398 and is negative significant at 10% level of significance. For the regression of TD/TA ratio on PBT/TNA, R^2 is found to be 0.1186 with the coefficient value of -0.0058. The value of t is -1.871. Here again the coefficients are found to be negative and statistically significant at 5% level of significance. This tends to suggest that the proportion of OPI/Sale and PBT/TNA increase, the TD/TA ratio decreases. This supports pecking order theory, which shows that first

priority for expansion/ capital investment is retained earnings leading to low TD/TA ratio. The findings from the regression on Average size, R^2 is found to be 0.0241 and the coefficient is found to be -0.0000. The value of t is -0.801 and is insignificant.

B. CORRELATIONS:

The Table VI.20 shows the correlation matrix of TD/TA ratio with other ratios and among themselves. The correlation coefficient of TD/TA ratio with GFA/TGA is 0.3184, with NFA/TNA is -0.3343, with OPI/TGA is -0.2165, with OPI/Sales is -0.2645, with PBT/TNA is -0.3444 and with Average size is -0.1553. So all correlations are negative. This indicates that as these ratios increase, the TD/TA ratio decreases. The correlation coefficient of GFA/TGA ratio with NFA/TNA is 0.9414, with OPI/TGA is -0.0120, with OPI/Sale is 0.3976, with PBT/TNA is -0.0361 and with Average size is 0.3941. Here OPI/TGA and PBT/TNA correlations are negative indicates that as these ratios increase, GFA/TGA ratio decreases.

The correlation coefficient of NFA/TNA ratio with OPI/TGA is -0.2278, with OPI/Sale is 0.5265, with PBT/TNA is -0.1009 and with Average size is 0.4772. The correlations of OPI/TGA and PBT/TNA which are negative indicate that as these ratios increase, NFA/TNA ratio decreases.

The correlation coefficient of OPI/TGA ratio with OPI/Sale is 0.3870, with PBT/TNA is 0.7530 and with Average size is -0.1179. The positive correlations indicate that as these ratios increase, the OPI/TGA ratio also increases.

The correlation coefficient of OPI/Sale ratio with PBT/TNA is 0.2107 and with Average size is 0.4936. The positive correlations indicate that both move in the same direction.

The correlation coefficient of PBT/TNA with Average size is 0.0669. The positive correlation indicates that both move in the same direction.

C. MULTIPLE REGRESSIONS:

On similar line as of 45 companies 8 multiple regressions are run to examine the effect of more than one variables taken together on TD/TA ratio. The results of these multiple regressions are presented in Table VI.21. From the table it can be observed that when the regression is run of TD/TA ratio on GFA/TGA and OPI/TGA, R^2 is found to be 0.1855 and $\bar{R}^2$ is found to be 0.1204 indicating thereby that out of total changes in TD/TA ratio 12% changes are explained by change in GFA/TGA and OPI/TGA and the coefficients are found to be -0.2529 and -0.0061 respectively. The t value for GFA/TGA is -2.063 indicates the significant negative impact on TD/TA ratio at 5% level of significance. The t value for OPI/TGA is -1.607. This indicates the significant negative impact on TD/TA ratio at 10% level of significance. This tends to suggest that as the GFA/TGA and OPI/TGA increase the TD/TA ratio reduces. Thus GFA/TGA ratio supports the findings of Ferri and Jones and OPI/TGA ratio supports the pecking order theory. The F value is 2.848 and is insignificant. This tends to suggest that the variation in the TD/TA ratio is due to the factors other than variables included in the model.

TABLE - VI.19
REGRESSION OF TOTAL DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Intercept	0.6901	0.6834	0.6526	0.6431	0.6557	0.6093
Coefficient	-0.2114	-0.2725	-0.0044	-0.0040	-0.0058	-0.0000
	(-1.712)***	(-1.808)*	(-1.131)	(-1.398)***	(-1.871)**	(-0.801)
R-square	0.1014	0.1117	0.0469	0.0700	0.1186	0.0241

*,**,*** indicates significance at 1%, 5% and 10% levels respectively.

TABLE - VI.20
RESULTS OF CORRELATIONS

	TD/TA	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
TD/TA	1.0000						
GFA/TGA	-0.3184	1.0000					
NFA/TNA	-0.3343	0.9414	1.0000				
OPI/TGA	-0.2165	-0.2108	-0.2278	1.0000			
OPI/SALE	-0.2645	0.3976	0.5265	0.3870	1.0000		
PBT/TNA	-0.3444	-0.0120	-0.1009	0.7530	0.2107	1.0000	
AVG Size	-0.1553	0.3941	0.4772	-0.1179	0.4936	0.0669	1.0000

TABLE - VI.21
MULTIPLE REGRESSION OF TOTAL DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Intercept	0.7793	0.7773	0.7008	0.7805	0.7543	0.7596	0.6907	0.7596
GFA/TGA	-0.2529	-0.2408	-0.7737	-0.2499				
	(-2.063)**	(-1.782)**	(-1.218)	(-1.650)***				
OPI/TGA	-0.0061	-0.0061		-0.0065				
	(-1.607)***	(-1.585)***		(-1.339)***				
AVG Size		-0.0000	0.0000	-0.0000		-0.0000	0.0000	0.0000
		(-0.236)	(0.158)	(-0.273)		(-0.214)	(0.214)	(0.297)
OPI/Sale			-0.0027	0.0006			-0.0021	-0.0000
			(-0.785)	(0.146)			(-0.585)	(-0.008)
NFA/TNA					-0.3039	-0.3293	-0.2320	-0.3286
					(-2.150)**	(-1.997)**	(-1.221)	(-1.765)**
PBT/TNA					-0.0065	-0.0066		-0.0066
					(-2.203)**	(-2.186)**		(-2.047)**
R-square	0.1855	0.1874	0.1249	0.1882	0.2562	0.2592	0.1242	0.2592
F-value	(2.848)	(1.845)	(1.141)	(1.333)	(4.305)**	(2.780)	(1.135)	(2.012)
R-bar sqr	0.1204	0.0859	0.0155	0.0470	0.1967	0.1666	0.0148	0.1304

*,**,*** indicates significance at 1%, 5% and 10% levels respectively.

When the regression is run of TD/TA ratio on GFA/TGA, OPI/TGA and Average size, R^2 is found to be 0.1874, $\bar{R}^2$ is found to be 0.0859 and the coefficients are found to be -0.2408, -0.0061 and -0.0000 respectively. The t value for GFA/TGA is -1.782. This indicates the negative significant impact on TD/TA at 5% level of significance. This tends to suggest that as the proportion of GFA/TGA increases the TD/TA ratio reduces. Thus GFA/TGA ratio supports the findings of Ferri and Jones. The t value for OPI/TGA is -0.0061. This indicates the negative effect on TD/TA ratio at 10% level of significance. The t value for Average size is -0.236. This indicates the insignificant effect on TD/TA ratio. The F value is 1.845 and is insignificant. This tends to suggest that the variation in the TD/TA ratio is due to the factors other than variables included in the model.

When the regression is run of TD/TA ratio on GFA/TGA, OPI/Sale and Average size, R^2 is found to be 0.1249, $\bar{R}^2$ is found to be 0.0155 and the coefficients are found to be -0.7737, -0.0027 and 0.0000 respectively. The t value for GFA/TGA is -1.218, for OPI/Sale is -0.785 and for Average size is 0.158. All these three indicates the insignificant impact on TD/TA ratio. The F value is 1.141 and is also insignificant. This tends to suggest that the variation in the TD/TA ratio is due to the factors other than variables included in the model.

When the regression is run of TD/TA ratio on GFA/TGA, OPI/TGA, OPI/Sale and Average size, R^2 is found to be 0.1882, $\bar{R}^2$ is found to be 0.0470 and the coefficients are found to be -0.2499, -0.0065, 0.0006

and -0.0000 respectively. The t values are found to be -1.650, -1.339, 0.146, -0.273 respectively. The GFA/TGA ratio is negative significant at 10% level of significant. This tends to suggest that as the proportion of GFA/TGA increases, the TD/TA ratio decreases. Thus GFA/TGA ratio supports the findings of Ferri and Jones. This tends to suggest that as the proportion of GFA/TGA, OPI/Sale increase, the TD/TA ratio decreases. The F value is 1.333 and is insignificant. This tends to suggest that the variation in the TD/TA ratio is due to the factors other than variables included in the model.

In the following 4 multiple regressions OPI/TGA and GFA/TGA are excluded and PBT/TNA and NFA/TNA are taken in their place.

When the regression is run of TD/TA ratio on NFA/TNA and PBT/TNA, R^2 is found to be 0.2562, $\bar{R}^2$ is found to be 0.1967 and the coefficients are found to be -0.3039 and -0.0065. The t value for NFA/TNA is found to be -2.150 and is negative significant at 1% level of significance. This supports the findings of Ferri and Jones. For PBT/TNA it is found to be -2.203 indicating the negative significant effect of PBT/TNA on TD/TA ratio at 5% level of significance. This tends to suggest that as PBT/TNA ratio increases the TD/TA ratio reduces. This supports pecking order theory. The F value is 4.305 and is significant at 5% level of significance. This implies that with this variables the model fits well.

When the regression is run of TD/TA ratio on NFA/TNA, PBT/TNA and Average size, R^2 is found to be 0.2592, $\bar{R}^2$ is found to be 0.1666 and the coefficients

are found to be -0.3293, -0.0066, and -0.0000 respectively. The t values are found to be -1.997, -2.186 and -0.214 respectively. The NFA/TNA and PBT/TNA ratios are significant at 5% level of significance. This tends to suggest that as the proportion of NFA/TNA and PBT/TNA ratios increases, the TD/TA ratio decreases. Thus NFA/TNA supports the findings of Ferri and Jones and PBT/TNA supports pecking order theory. The F value is 2.780 and is insignificant. This tends to suggest that the variation in the TD/TA ratio is due to the factors other than variables included in the model.

When the regression is run of TD/TA ratio on NFA/TNA, OPI/Sale and Average size, R^2 is found to be 0.1242, $\bar{R}^2$ is found to be 0.0148 and the coefficients are found to be -0.2320, -0.0021 and 0.0000 respectively. The t values are found to be -1.221, -0.585 and 0.214 respectively. The NFA/TNA and OPI/Sale ratios are insignificant. The F value is 1.135 and is insignificant. This tends to suggest that the variations in the TD/TA ratio is due to the factors other than variables included in the model.

When the regression is run of TD/TA ratio on NFA/TNA, PBT/TNA, OPI/Sale and Average size, R^2 is found to be 0.2592, $\bar{R}^2$ is found to be 0.1304 and the coefficients are found to be -0.3286, -0.0066, -0.0000 and 0.0000 respectively. The t values are found to be -1.765, -2.047, -0.008 and 0.297 respectively. The NFA/TNA is negative significant at 5% level of significance. Thus NFA/TNA supports the findings of Ferri and Jones. The PBT/TNA is negative significant at 5% level of significance. It is in line with pecking

order theory. OPI/Sale and Average size are insignificant. The F value is 2.012 and is insignificant. This tends to suggest that the variation in the TD/TA ratio is explained by factors other than variables included in the model.

For all above it is important to note that as the number of companies are reduced to 28 and period of study is increased to 19 years only run 5 fits well, whereas for 45 companies with 16 years it is run 5, 6 and 8 which fits well.

4. TOTAL EQUITY TO TOTAL ASSETS RATIO:

A. SIMPLE REGRESSIONS:

Considering the TE/TA to be a dependent variable, 6 regressions are run individually on variables mentioned above. The results of the regressions are presented in Table VI.22. From the Table it can be observed that the regression of TE/TA on GFA/TGA, R^2 is found to be 0.1764, and the coefficient is found to be 0.2770. The value of t is equal to 2.350 and is positive significant at 5% level of significance. For the regression of TE/TA ratio on NFA/TNA, where R^2 is found to be 0.1309 and the coefficient is found to be 0.2929. The value of t is 1.979 which shows positive significant impact on TE/TA and NFA/TNA at 5% level of significance. This tends to suggest that as the proportion of GFA/TGA and NFA/TNA increase, TE/TA ratio increases. For the regression of TE/TA ratio on OPI/TGA, R^2 is found to be 0.1062 with the coefficient value of 0.0065. The value of t is 1.715 and is significant at 5% level of significance. This tends to suggest that as OPI/TGA increases the TE/TA ratio increases. For the regression of TE/TA ratio on

OPI/Sale, R^2 is found to be 0.1021 with the coefficient value of 0.0048. The value of t is 1.720 and is significant at 10% level of significance. This supports pecking order theory. For the regression of TE/TA ratio on PBT/TNA, R^2 is found to be 0.2173 with the coefficient value of 0.0078. The value of t is 2.686. This is statistically significant at 1% level of significance. This again tends to suggest that as PBT/TNA increases, the TE/TA ratio increases. This supports pecking order theory, which shows that first priority for expansion/ capital investment is retained earnings leading to high TE/TA ratio. The findings from the regression on Average size, R^2 is found to be 0.0074 and the coefficient is found to be 0.0000. The value of t is 0.442 indicates the insignificant impact on TE/TA.

B. CORRELATIONS:

The Table VI.23 shows the correlation matrix of TE/TA ratio with other ratios and among themselves. The correlation coefficient of TE/TA ratio with GFA/TGA is 0.4200, with NFA/TNA is 0.3618, with OPI/TGA is 0.3188, with OPI/Sales is 0.3196, with PBT/TNA is 0.4661 and with Average size is 0.0862. So all correlations are positive. This indicates that as these ratios increase, the TE/TA ratio increases. The correlation coefficient of GFA/TGA ratio with NFA/TNA is 0.9414, with OPI/TGA is 0.2108, with OPI/Sale is 0.3976, with PBT/TNA is 0.0120 and with Average size is 0.3941. Here OPI/TGA and PBT/TNA correlations are negative indicates that as these ratios increase, GFA/TGA ratio decreases.

The correlation coefficient of NFA/TNA ratio with OPI/TGA is 0.2278, with OPI/Sale is 0.5265, with

PBT/TNA is 0.1009 and with Average size is 0.4772. The correlations of OPI/TGA and PBT/TNA which are negative indicate that as these ratios increase, NFA/TNA ratio decreases.

The correlation coefficient of OPI/TGA ratio with OPI/Sale is 0.3870, with PBT/TNA is 0.7530 and with Average size is 0.1179. The positive correlations indicate that as these ratios increase, the OPI/TGA ratio also increases.

The correlation coefficient of OPI/Sale ratio with PBT/TNA is 0.2107 and with Average size is 0.4936. The positive correlations indicate that as these ratios increase, the Average size also increases. The correlation coefficient of PBT/TNA with Average size is 0.0669. The positive correlation indicates that as the ratio increases, the Average size increases.

C. MULTIPLE REGRESSIONS:

On similar line as of 45 companies 8 multiple regressions are run to examine the effect of more than one variable taken together on TE/TA ratio. The results of these multiple regressions are presented in Table VI.24. From the Table it can be observed that when the regression is run of TE/TA ratio on GFA/TGA and OPI/TGA, R^2 is found to be 0.3500 and $\bar{R}^2$ is found to be 0.2980 indicating thereby that out of total changes in TE/TA ratio 29% changes are explained by change in GFA/TGA and OPI/TGA and the coefficients are found to be 0.3362 and 0.0088 respectively. The t value for GFA/TGA is 3.091 indicates the positive significant impact on TE/TA ratio at 1% level of significance. The t value for OPI/TGA is 2.584 indicates the positive significant impact on TE/TA ratio at 1% level of

TABLE - VI.22
REGRESSION OF TOTAL EQUITY TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Intercept	0.2557	0.2840	0.2968	0.3219	0.2989	0.3683
Coefficient	0.2770	0.2929	0.0065	0.0048	0.0078	0.0000
	(2.350)**	(1.979)**	(1.715)**	(1.720)**	(2.686)*	(0.442)
R-square	0.1764	0.1309	0.1062	0.1021	0.2173	0.0074

* ,**,*** indicates significance at 1%, 5% and 10% levels respectively.

TABLE - VI.23
RESULTS OF CORRELATIONS

	TE/TA	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
TE/TA	1.0000						
GFA/TGA	0.4200	1.0000					
NFA/TNA	0.3618	0.9414	1.0000				
OPI/TGA	0.3188	-0.2108	-0.2278	1.0000			
OPI/SALE	0.3196	0.3976	0.5265	0.3870	1.0000		
PBT/TNA	0.4661	-0.0120	-0.1009	0.7530	0.2107	1.0000	
AVG Size	0.0862	0.3941	0.4772	-0.1179	0.4936	0.0669	1.0000

TABLE - VI.24
MULTIPLE REGRESSION OF TOTAL EQUITY TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Intercept	0.1284	0.1251	0.2323	0.1215	0.1903	0.1747	0.2652	0.1744
GFA/TGA	0.3362	0.3558	0.2601	0.3659				
	(3.091)*	(2.975)*	(1.960)**	(2.732)*				
OPI/TGA	0.0088	0.0086		0.0091				
	(2.584)*	(2.523)*		(2.105)**				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.430)	(-0.931)	(-0.276)		(-1.064)	(-0.843)	(-1.082)
OPI/Sale			0.0039	-0.0007			0.0036	0.0009
			(1.224)	(-0.184)			(1.050)	(0.290)
NFA/TNA					0.3344	0.4099	0.2625	0.3897
					(2.622)*	(2.814)*	(1.424)***	(2.374)**
PBT/TNA					0.0085	0.0089		0.0087
					(3.224)*	(3.344)*		(3.058)*
R-square	0.3500	0.3550	0.2318	0.3560	0.3861	0.4137	0.1783	0.4159
F-value	(6.732)*	(4.403)**	(2.415)	(3.178)**	(7.861)*	(5.646)*	(1.736)	(4.094)**
R-bar sqr	0.2980	0.2744	0.1358	0.2440	0.3370	0.3405	0.0756	0.3143

* ,**,*** indicates significance at 1%, 5% and 10% levels respectively.

significance. This tends to suggest that as the proportion of GFA/TGA and OPI/TGA increase the TE/TA ratio increases. Thus OPI/TGA is in line with pecking order theory. The F value is 6.732 and is significant at 1% level of significance. This implies that the model fits well.

When the regression is run of TE/TA ratio on GFA/TGA, OPI/TGA and Average size, R^2 is found to be 0.3550, $\bar{R}^2$ is found to be 0.2744 and the coefficients are found to be 0.3558, 0.0086 and -0.0000 respectively. The t value for GFA/TGA is 2.975 indicates the positive significant impact on TE/TA ratio at 1% level of significance. The t value for OPI/TGA is 2.523 indicating the positive significant impact on TE/TA ratio at 1% level of significance. This tends to suggest that as the proportion of GFA/TGA and OPI/TGA increase the TE/TA ratio increases. Thus OPI/TGA is in line with pecking order theory. The t value for Average size is -0.430 indicates the insignificant impact on TE/TA. F value is 4.403 and is significant at 5% level of significance. This implies that with these variables the model fits well.

When the regression is run of TE/TA ratio on GFA/TGA, OPI/Sale and Average size, R^2 is found to be 0.2318, $\bar{R}^2$ is found to be 0.1358 and the coefficients are found to be 0.2601, 0.0039 and -0.0000 respectively. The t value for GFA/TGA is 1.960 and is positive significant at 5% level of significance. The t value for OPI/Sale is 1.224, and for Average size is -0.931. Both are insignificant. The F value is 2.415 and is insignificant. This tends to suggest that the

variation in the TE/TA ratio is explained by factors other than variables included in the model.

When the regression is run of TE/TA ratio on GFA/TGA, OPI/TGA, OPI/Sale and Average size, R^2 is found to be 0.3560, $\bar{R}^2$ is found to be 0.2440 and the coefficients are found to be 0.3659, 0.0091, -0.0007 and -0.0000 respectively. The t values are found to be 2.732, 2.105, -0.184, -0.276 respectively. The GFA/TGA is positive significant at 1% level of significance. OPI/TGA is positive significant at 5% level of significance. This is in line with pecking order theory. OPI/Sale and Average size are negative insignificanct. The F value is 3.178 and is significant at 5% level of significance. This implies that the model fits well with these four variables.

In the following four multiple regressions OPI/TGA and GFA/TGA are excluded and PBT/TNA and NFA/TNA are taken in their place.

When the regression is run of TE/TA ratio on NFA/TNA and PBT/TNA, R^2 is found to be 0.3861, $\bar{R}^2$ is found to be 0.3370 and the coefficients are found to be 0.3344 and 0.0085. The t value for NFA/TNA is found to be 2.622 and is positive significant at 1% level of significance. For PBT/TNA it is found to be 3.224 indicating the positive significant effect of PBT/TNA on TE/TA ratio at 1% level of significance. This tends to suggest that as the proportion of PBT/TNA increases the TE/TA ratio increases. This is in line with pecking order theory. The F value is 7.861 and is significant at 1% level of significance. This implies that the model fits well.

When the regression is run of TE/TA ratio on NFA/TNA, PBT/TNA and Average size, R^2 is found to be 0.4137, $\bar{R}^2$ is found to be 0.3405 and the coefficients are found to be 0.4099, 0.0089, and -0.0000 respectively. The t values are found to be 2.814, 3.344 and -1.064 respectively. NFA/TNA and PBT/TNA are positive significant at 1% level of significance. Thus PBT/TNA supports pecking order theory. The Average size is insignificant. The F value is 6.898 and is significant at 5% level of significance. This implies that the model fits well.

When the regression is run of TE/TA ratio on NFA/TNA, OPI/Sale and Average size, R^2 is found to be 0.178394, $\bar{R}^2$ is found to be 0.0756 and the coefficients are found to be 0.2625, 0.0036 and -0.0000 respectively. The t values are found to be 1.424, 1.050 and -0.843 respectively. The NFA/TNA is positive significant at 10% level of significance. The OPI/Sale and Average size are insignificant. The F value is 1.736 and is insignificant. This tends to suggest that the variation in the TE/TA ratio is due to the factors other than variables included in the model.

When the regression is run of TE/TA ratio on NFA/TNA, PBT/TNA, OPI/Sale and Average size, R^2 is found to be 0.4159, $\bar{R}^2$ is found to be 0.3143 and the coefficients are found to be 0.3897, 0.0087, 0.0009 and 0.0000 respectively. The t values are found to be 2.374, 3.058, 0.290 and -1.082 respectively. The NFA/TNA and PBT/TNA are positive significant at 1% level of significance. Thus PBT/TNA supports pecking order theory. OPI/Sale and Average size are insignificant. The F value is 4.094 and is significant

at 1% level of significance. This implies that the model fits well.

For all above it is important to note that as the number of companies are reduced to 28 and period of study is increased to 19 years the predictive power of variables go up and the value of R^2 goes up substantially. Moreover, when 45 companies are analysed Runs 5, 6 and 8 shows model fitting well, whereas, when 28 companies are analysed all runs except runs 3 and 7 fits well.

SECTION -II

6.4 YEARWISE ANALYSIS:

In the preceding section an attempt is made to examine the effect of variables, either singly or jointly, on an average (i.e. average over a period of time), on average ratios, viz, D/E ratio, LTD/TA ratio, TD/TA ratio and TE/TA ratio. In the present section an yearwise analysis is carried out to examine the changes in the extent of effect of various variables on dependent variables stated above. It is worth mentioning here that for all 45 companies data are available upto 1996. Hence in the yearwise regression 45 companies are included upto 1996. For last 3 years data are available for 28 companies. Hence, 28 companies are included in running the regressions.

SIMPLE REGRESSIONS:

I. DEBT-EQUITY RATIO:

Considering D/E ratio to be dependent variable and other six variables (as taken in foregoing para)

to be independent variables, results of regression run are presented in table VI.25.

a. With GFA/TGA:

Considering the D/E ratio to be a dependent variable, and GFA/TGA as independent variable linear regressions are run yearwise from 1981 to 1999. From the Table it can be observed that on running regression of D/E ratio on GFA/TGA, R^2 are found to be 0.0150, 0.1694, 0.0407, 0.0002, 0.1328, 0.2123, 0.2375, 0.0779, 0.0399, 0.0617, 0.0227, 0.0137, 0.0129, 0.0064, 0.0059, 0.0016, 0.0140, 0.0515 and 0.0034, respectively. The highest R^2 is found to be 0.2375 for the year 1987 and the lowest R^2 is found to be 0.0034 for the year 1999.

Similarly the coefficients of GFA/TGA are found to be -1.9822, -3.7317, -1.7325, 0.0028, -2.6202, -3.3662, -3.3402, -1.8298, -1.1373, -1.5553, -0.9691, -0.9001, -0.6616, -0.4399, -0.4382, -0.2190, 0.6557, 1.1296 and 0.3068 respectively. It is important to note that out of 19 years under study for 15 years coefficients are found to be negative. This implies that for these years as GFA/TGA increases, the D/E ratio decreases. The highest coefficient is found to be 1.1296 for the year 1998 and the lowest coefficient is found to be -3.7317 for the year 1982. In the year 1984 the coefficient is observed to be positive because both of the ratios are increasing in the same direction. Similarly for the year 1997, 1998 and 1999, the rise in GFA/TGA tends to increase D/E ratio.

The value of t are found to be -0.809, -2.926, -1.335, 0.086, -2.567, -3.404, -3.660, -1.906, -1.337, -1.682, -0.999, -0.774, -0.751, -0.525, -0.504,

-0.262, 0.606, 1.188 and 0.298 respectively. It is worth mentioning here that out of 19 years, negative significant t values are for 8 years. For other years the impact of GFA/TGA on D/E ratio is found to be insignificant. The negative significant impact of GFA/TGA tends to suggest that with rise in GFA/TGA, D/E reduces. This does not support trade-off theory.

b. With NFA/TNA:

Considering the D/E ratio to be a dependent variable and NFA/TNA as independent variable linear regressions are run yearwise from 1981-1999. From the Table it can be observed that on running the regression of debt D/E ratio on NFA/TNA, R^2 are found to be 0.0006, 0.0683, 0.0030, 0.0018, 0.0405, 0.0834, 0.0448, 0.0062, 0.0005, 0.0044, 0.0013, 0.0058, 0.0167, 0.0223, 0.0071, 0.0004, 0.0099, 0.0415 and 0.0046 respectively. The highest R^2 is found to be 0.0834 for the year 1986 and the lowest R^2 is found to be 0.0004 for the year 1996.

Similarly, the coefficients are -0.3883, -2.4052, -0.4591, 0.4356, -1.4941, -2.1489, -1.5229, -0.5030, -0.1282, -0.4425, -0.2335, -0.5493, -0.6943, -0.7511, -0.4375, -0.1130, 0.5442, 1.0031 and 0.3600 respectively. It is important to note here that out of 19 years under study, for 15 years coefficients are found to be negative. This implies that for these years as NFA/TNA increases, the D/E ratio decreases. The highest coefficient is found to be 1.0031 for the year 1998 and the lowest coefficient is found to be -2.4052 for the year 1989.

The t values are -0.159, -1.755, -0.354, 0.279, -1.348, -1.976, -1.421, -0.518, -0.150, -0.436, -0.238, -0.500, -0.855, -0.991, -0.556, -0.133, 0.509, 1.061 and 0.347 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 4 years. For all other years the impact of NFA/TNA on D/E ratio is found to be insignificant. This tends to suggest that in general NFA/TNA had no significant effect and only for 4 years when NFA/TNA rises, D/E goes down. This does not support trade-off theory.

c. With OPI/TGA:

Considering the D/E ratio to be a dependent variable and OPI/TGA as independent variable linear regressions are run yearwise from 1981-1999. From the Table it can be observed that the regression of D/E ratio on OPI/TGA, R^2 are found to be, 0.1170, 0.0720, 0.0481, 0.0828, 0.0275, 0.0157, 0.0142, 0.0479, 0.0871, 0.1020, 0.1416, 0.0150, 0.0536, 0.0649, 0.0273, 0.0045, 0.0379, 0.0799 and 0.0484 respectively. The highest R^2 is found to be 0.1416 for the year 1991 and the lowest R^2 is found to be 0.0045 for the year 1996.

The coefficients are -0.1617, -0.0118, -0.0504, -0.0717, -0.0264, -0.0194, -0.0201, -0.0345, -0.0424, -0.0490, -0.0802, -0.0226, -0.0293, -0.0318, -0.0273, -0.0113, -0.0247, -0.0414 and -0.0311 respectively. It is important to note that out of 19 years under study, for all years as OPI/TGA increases, the D/E ratio decreases. The highest coefficient is found to be

-0.0113 for the year 1996 and the same is found to be lowest to the tune of -0.0617 for the year 1981.

The t values are -2.387, -0.268, -1.456, -1.970, -1.102, -0.829, -0.786, -1.471, -2.026, -2.210, -2.663, -0.810, -1.560, -1.728, -1.098, -0.442, -1.012, -1.503 and -1.150 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 10 years. This is in line with pecking order theory. For all other years the impact of OPI/TGA on D/E ratio is found to be insignificant.

d. With OPI/Sale:

Considering the D/E ratio to be a dependent variable and OPI/Sale as independent variable, linear regressions are run yearwise from 1981-1999. From the Table it can be observed that regression of D/E ratio on OPI/Sale, R^2 are found to be 0.0703, 0.0051, 0.0578, 0.0034, 0.0003, 0.0047, 0.0076, 0.0175, 0.0567, 0.0852, 0.0541, 0.0142, 0.0087, 0.0449, 0.0564, 0.0213, 0.0827, 0.1518 and 0.2132 respectively. The highest R^2 is found to be 0.1518 for the year 1998 and the lowest R^2 is found to be 0.0003 for the year 1985.

The coefficients are -0.0805, -0.0147, -0.0455, -0.0155, 0.0034, -0.0125, -0.0134, -0.0190, -0.0349, -0.0361, -0.0398, -0.0192, -0.0108, -0.0107, -0.0333, -0.0159, -0.0290, -0.0407 and -0.0599 respectively. It is important to note here that out of 19 years under study, for 18 years coefficient are found to be negative. This implies that for these years as OPI/Sale increases, the D/E ratio decreases. The

highest coefficient is found to be 0.0192 for the year 1992 and the same is found to be lowest to the tune of -0.0805 for the year 1981.

The values of t are -1.803, -0.463, -1.606, -0.385, 0.120, -0.448, -0.573, -0.875, -1.607, -2.001, -1.568, -0.786, -0.613, -1.421, -1.603, -0.967, -1.531, -2.157 and -2.654 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 9 years. This is in line with pecking order theory. For all other years the impact of OPI/Sale on D/E ratio is found to be insignificant.

e. With PBT/TNA:

Considering the D/E ratio to be a dependent variable and PBT/TNA as independent variable linear regressions are run yearwise from 1981-1999. From the Table it can be observed that R^2 are found to be 0.0064, 0.0198, 0.1922, 0.1962, 0.1596, 0.1120, 0.0756, 0.2188, 0.3081, 0.3818, 0.3880, 0.2068, 0.2101, 0.2207, 0.2198, 0.2052, 0.2293, 0.2817 and 0.2662 respectively. The highest R^2 is found to be 0.3880 for the year 1991 and the same is found to be lowest at 0.0064 for the year 1981.

The coefficients are -0.0371, -0.0382, -0.0956, -0.1096, -0.0548, -0.0426, -0.0461, -0.0694, -0.0701, -0.0906, -0.1163, -0.0852, -0.0660, -0.0584, -0.0354, -0.0316, -0.0596, -0.0449 and -0.0562 respectively. It is important to note here that for all the years under study coefficient is found to be negative. This means that for all years as PBT/TNA increases, the D/E ratio decreases. The highest coefficient is found to be

-0.0145 for the year 1996 and the lowest is -0.[illegible] for the year 1991.

The t values are -0.524, -0.920, -3.161, -3.240, -2.857, -2.329, -1.876, -3.470, -4.376, -5.153, -5.221, -3.348, -3.382, -3.490, -3.481, -3.332, -2.782, -3.194 and -3.071 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 17 years. This is in line with pecking order theory. For all other years the impact of PBT/TNA on D/E ratio was found to be insignificant.

f. With Average Size:

Considering the D/E ratio to be a dependent variable and Average size as independent variable linear regressions are run yearwise from 1981-1999. From the Table it can be observed that on running the regression of D/E on Average size, R^2 are found to be 0.0304, 0.0397, 0.0194, 0.0355, 0.0003, 0.0558, 0.0161, 0.0132, 0.0236, 0.0450, 0.0257, 0.0020, 0.0017, 0.0032, 0.0001, 0.0001, 0.0041, 0.0035 and 0.0019 respectively. The highest R^2 is found to be 0.00558 for the year 1986 and the same is found to be lowest to the tune of 0.0001 for the year 1995 and 1996.

The coefficients are -0.0001, -0.0000, -0.0000, -0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000 and -0.0000 respectively. The highest and lowest coefficients are 0.0000 and -0.0001 respectively.

TABLE - VI.25
YEARWISE SIMPLE REGRESSIONS OF DEBT-EQUITY RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Year 1981						
Intercept	3.4210	2.6325	4.4551	3.5200	2.8620	2.8888
Coefficient	-1.9822	-0.3883	-0.1617	-0.0805	-0.0371	-0.0001
	(-0.809)	(-0.159)	(-2.387)**	(-1.803)**	(-0.524)	(-1.162)
R-square	0.0150	0.0006	0.1170	0.0703	0.0064	0.0304
Year 1982						
Intercept	3.9146	2.9993	2.3374	2.3699	2.5332	2.4205
Coefficient	-3.7317	-2.4052	-0.0118	-0.0147	-0.0382	-0.0000
	(-2.926)*	(-1.755)**	(-0.268)	(-0.463)	(-0.920)	(-1.318)***
R-square	0.1694	0.0683	0.0720	0.0051	0.0198	0.0397
Year 1983						
Intercept	2.8938	2.2233	2.7004	2.5932	3.0225	2.2038
Coefficient	-1.7325	-0.4591	-0.0504	-0.0455	-0.0956	-0.0000
	(-1.335)***	(-0.354)	(-1.456)***	(-1.606)***	(-3.161)*	(-0.911)
R-square	0.0407	0.0030	0.0481	0.0578	0.1922	0.0194
Year 1984						
Intercept	2.1873	2.0394	3.0589	2.3655	3.2096	2.4075
Coefficient	0.0028	0.4356	-0.0717	-0.0155	-0.1096	-0.0000
	(0.086)	(0.279)	(-1.970)**	(-0.385)	(-3.240)*	(-1.258)
R-square	0.0002	0.0018	0.0828	0.0034	0.1962	0.0355
Year 1985						
Intercept	3.2649	2.5118	2.3355	1.9635	2.5420	1.9924
Coefficient	-2.6202	-1.4941	-0.0264	0.0034	-0.0548	0.0000
	(-2.567)*	(-1.348)***	(-1.102)	(0.120)	(-2.857)*	(0.106)
R-square	0.1328	0.0405	0.0275	0.0003	0.1596	0.0003
Year 1986						
Intercept	3.5423	2.6621	2.1617	2.0636	2.3120	2.1173
Coefficient	-3.3662	-2.1489	-0.0194	-0.0125	-0.0426	-0.0000
	(-3.404)*	(-1.976)**	(-0.829)	(-0.448)	(-2.329)**	(-1.593)***
R-square	0.2123	0.0834	0.0157	0.0047	0.1120	0.0558

cont.

TABLE VI.25 cont.

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Year 1987						
Intercept	3.5163	2.4078	2.1248	2.0403	2.2753	1.9931
Coefficient	-3.3402	-1.5229	-0.0201	-0.0134	-0.0461	-0.0000
	(-3.660)*	(-1.421)***	(-0.786)	(-0.573)	(-1.876)**	(-0.839)
R-square	0.2375	0.0448	0.0142	0.0076	0.0756	0.0161
Year 1988						
Intercept	2.7987	2.1068	2.3433	2.1474	2.5064	2.0117
Coefficient	-1.8298	-0.5030	-0.0345	-0.0190	-0.0694	-0.0000
	(-1.906)**	(-0.518)	(-1.471)***	(-0.875)	(-3.470)*	(-0.757)
R-square	0.0779	0.0062	0.0479	0.0175	0.2188	0.0132
Year 1989						
Intercept	2.4871	2.0161	2.4810	2.3490	2.6055	2.0644
Coefficient	-1.1373	-0.1282	-0.0424	-0.0349	-0.0701	-0.0000
	(-1.337)***	(-0.150)	(-2.026)**	(-1.607)***	(-4.376)*	(-1.019)
R-square	0.0399	0.0005	0.0871	0.0567	0.3081	0.0236
Year 1990						
Intercept	2.8567	2.3070	2.6842	2.5430	2.9130	2.3158
Coefficient	-1.5553	-0.4425	-0.0490	-0.0361	-0.0906	-0.0000
	(-1.682)***	(-0.436)	(-2.210)**	(-2.001)**	(-5.153)*	(-1.424)***
R-square	0.0617	0.0044	0.1020	0.0852	0.3818	0.0450
Year 1991						
Intercept	2.7025	2.3422	3.1597	2.7196	3.2140	2.3728
Coefficient	-0.9691	-0.2335	-0.0802	-0.0398	-0.1163	-0.0000
	(-0.999)	(-0.238)	(-2.663)*	(-1.568)***	(-5.221)*	(-1.065)
R-square	0.0227	0.0013	0.1416	0.0541	0.3880	0.0257
Year 1992						
Intercept	2.7393	2.5153	2.5935	2.5502	3.0817	2.3687
Coefficient	-0.9001	-0.5493	-0.0226	-0.0192	-0.0852	-0.0000
	(-0.774)	(-0.500)	(-0.810)	(-0.786)	(-3.348)*	(-0.294)
R-square	0.0137	0.0058	0.0150	0.0142	0.2068	0.0020
Year 1993						
Intercept	2.4394	2.3730	2.4694	2.2586	2.7008	2.1174
Coefficient	-0.6616	-0.6943	-0.0293	-0.0108	-0.0660	0.0000
	(-0.751)	(-0.855)	(-1.560)***	(-0.613)	(-3.382)*	(0.272)
R-square	0.0129	0.0167	0.0536	0.0087	0.2101	0.0017

cont.

TABLE VI.25 cont.

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Year 1994						
Intercept	1.9823	2.0370	2.1551	1.9290	2.3838	1.7543
Coefficient	-0.4399	-0.7511	-0.0318	-0.0107	-0.0584	0.0000
	(-0.525)	(-0.991)	(-1.728)**	(-1.421)***	(-3.490)*	(0.371)
R-square	0.0064	0.0223	0.0649	0.0449	0.2207	0.0032
Year 1995						
Intercept	1.8665	1.8207	1.9642	2.0458	2.0938	1.6771
Coefficient	-0.4382	-0.4375	-0.0273	-0.0333	-0.0354	-0.0000
	(-0.504)	(-0.556)	(-1.098)	(-1.603)***	(-3.481)*	(-0.060)
R-square	0.0059	0.0071	0.0273	0.0564	0.2199	0.0001
Year 1996						
Intercept	1.7106	1.6546	1.7245	1.7905	1.9756	1.6216
Coefficient	-0.2190	-0.1130	-0.0113	-0.0159	-0.0316	-0.0000
	(-0.262)	(-0.133)	(-0.442)	(-0.967)	(-3.332)*	(-0.064)
R-square	0.0016	0.0004	0.0045	0.0213	0.2052	0.0001
Year 1997						
Intercept	1.2429	1.3357	1.8023	1.8639	2.1422	1.5576
Coefficient	0.6557	0.5442	-0.0247	-0.0290	-0.0596	-0.0000
	(0.606)	(0.509)	(-1.012)	(-1.531)***	(-2.782)*	(-0.327)
R-square	0.0140	0.0099	0.0379	0.0827	0.2293	0.0041
Year 1998						
Intercept	0.9469	1.0864	1.9147	1.9171	1.9393	1.4708
Coefficient	1.1296	1.0031	-0.0414	-0.0407	-0.0449	-0.0000
	(1.188)	(1.061)	(-1.503)***	(-2.157)**	(-3.194)*	(-0.302)
R-square	0.0515	0.0415	0.0799	0.1518	0.2818	0.0035
Year 1999						
Intercept	1.2530	1.2624	1.7545	2.0946	1.9219	1.4136
Coefficient	0.3068	0.3600	-0.0311	-0.0599	-0.0562	-0.0000
	(0.298)	(0.347)	(-1.150)	(-2.654)*	(-3.071)*	(-0.225)
R-square	0.0034	0.0046	0.0484	0.2132	0.2662	0.0019

*,**,*** indicates significance at 1%, 5% and 10% levels respectively.

The t values are -1.162, -1.318, -0.911, -1.258, 0.106, -1.593, -0.839, -0.757, -1.019, -1.424, -1.065, -0.294, 0.272, 0.371, -0.060, -0.064, -0.327, -0.302 and -0.225 respectively. It is worth mentioning here that out of 19 years, negative significant impact is found for only 3 years. For all other years the impact of Average size on D/E ratio is found to be insignificant.

II. LONG-TERM DEBT TO TOTAL ASSETS RATIO:

Considering LTD/TA ratio as dependent variable, and other six variables as independent variables, regressions are run for 19 years and results of regression are presented on Table VI.26.

a. With GFA/TGA:

Considering GFA/TGA as independent variable linear regressions are run yearwise from 1981 to 1999. As mentioned in preceding section, Searle is omitted for 1982 and 1993, because these are the two years for which observations are abnormal. For all other years Searle is included. Thus for the years 1982 and 1983, the LTD/TA ratio is computed for 44 companies and for remaining years it is computed for 45 companies. From the table it can be observed, R^2 are found to be 0.3541, 0.2586, 0.2379, 0.0003, 0.1627, 0.2310, 0.2283, 0.3437, 0.3502, 0.4802, 0.4968, 0.3901, 0.4979, 0.4557, 0.2424, 0.1941, 0.3252, 0.2934 and 0.2034 respectively. The highest R^2 is found to be 0.4979 for the year 1993 and the lowest R^2 is found to be 0.0003 in the year 1984.

The coefficients are 0.4684, 0.3626, 0.3231, -0.0002, 0.2202, 0.2688, 0.2085, 0.3566, 0.2967, 0.3725, 0.4304, 0.3230, 0.3408, 0.3647, 0.3202, 0.3520, 0.4248, 0.4193 and 0.2562 respectively. It is important to note here that for 18 years under study, coefficient is found to be positive. This means that for all years as GFA/TGA increases, the LTD/TA ratio increases.

The t values are 4.855, 3.827, 3.621, -0.114, 2.891, 3.594, 3.566, 4.746, 4.814, 6.302, 6.515, 5.244, 6.530, 5.100, 3.709, 3.218, 3.540, 3.286 and 2.577 respectively. It is worth mentioning here that out of 19 years under study for 18 years, the impact of GFA/TGA is significant. It is in line with trade off theory for these years.

b. With NFA/TNA:

Considering the LTD/TA ratio to be a dependent variable and NFA/TNA as independent variable linear regressions are run yearwise from 1981-1999. From the Table it can be observed that the values of R^2 are 0.5457, 0.3744, 0.3505, 0.4061, 0.3285, 0.2870, 0.2979, 0.2985, 0.4933, 0.6098, 0.6190, 0.4502, 0.4628, 0.4582, 0.2410, 0.2603, 0.3675, 0.3072 and 0.2481 respectively. The highest R^2 is found to be 0.6190 for the year 1991 and the lowest R^2 is found to be 0.2410 for the year 1995.

The coefficients are 0.5767, 0.4389, 0.3800, 0.3854, 0.3230, 0.3052, 0.2500, 0.3240, 0.3463, 0.4468, 0.4812, 0.3267, 0.3033, 0.3331, 0.2895, 0.4141, 0.4460, 0.4246 and 0.2857 respectively. It is important to note here that for all years the

coefficients are found to be positive. This means that for all years as NFA/TNA increases, the LTD/TA ratio increases. The highest coefficient is found to be 0.5767 for the year 1981 and the lowest coefficient is found to be 0.2500 for the year 1987.

The value of t are found to be 7.187, 5.014, 4.761, 5.423, 4.587, 4.160, 4.271, 4.278, 6.469, 8.197, 8.359, 5.934, 6.086, 6.030, 3.695, 3.890, 3.887, 3.395 and 2.929 respectively. It is worth mentioning here that for all years, NFA/TNA has positive significant impact on LTD/TA. This is again in line with trade off theory.

c. With OPI/TGA:

Considering the LTD/TA ratio to be a dependent variable and OPI/TGA as independent variable linear regressions are run yearwise from 1981-1999. From the Table it can be observed that values of R^2 are 0.0107, 0.0070, 0.0292, 0.0307, 0.0010, 0.0221, 0.0120, 0.0007, 0.0102, 0.0157, 0.0173, 0.0244, 0.0359, 0.0689, 0.0001, 0.0066, 0.1634, 0.1866 and 0.2559 respectively. The highest R^2 is found to be 0.2559 for the year 1999 and the lowest R^2 is found to be 0.0001 for the year 1995.

The coefficients are -0.0024, -0.0019, -0.0030, -0.0026, -0.0004, 0.0018, 0.0012, -0.0004, -0.0013, -0.0016, -0.0027, -0.0019, -0.0020, -0.0032, -0.0002, 0.0020, -0.0069, -0.0098 and -0.0077 respectively. For years 1981 to 1999, it is important to note here that for 16 years the coefficient is found to be negative.

The t values are -0.680, -0.542, -0.124, -1.167, -0.209, 0.987, 0.721, -0.170, -0.665, -0.827, -0.869, -1.037, -1.265, -1.784, -0.058, 0.536, -2.253, -2.442 and -2.990 respectively. It is worth mentioning that only for 4 years the impact of OPI/TGA is found to be negative and significant on LTD/TA. It is in line with pecking order theory.

d. With OPI/Sale:

Considering the LTD/TA ratio to be a dependent variable and OPI/Sale as independent variable linear regressions are run yearwise from 1981-1999. From the Table it can be observed that the values of R^2 are found to be 0.2797, 0.1322, 0.0799, 0.0935, 0.1793, 0.3165, 0.1228, 0.0606, 0.0274, 0.0062, 0.0825, 0.0990, 0.0851, 0.0001, 0.0754, 0.1036, 0.0003, 0.0083 and 0.0782 respectively. The highest R^2 is found to be 0.3165 (1986) and the lowest R^2 is found to be 0.0001 (1994).

The coefficients are 0.0078, 0.0059, 0.0042, 0.0048, 0.0060, 0.0079, 0.0034, 0.0033, 0.0021, 0.0008, 0.0047, 0.0034, 0.0028, -0.0000, 0.0044, 0.0051, 0.0002, -0.0015 and -0.0039 respectively. It is important to note that for 16 years the coefficients are found to be positive.

The t values are 4.087, 2.530, 1.910, 2.106, 3.065, 4.462, 2.453, 1.666, 1.100, 0.519, 1.967, 2.173, 1.100, -0.056, 1.872, 2.229, 0.088, -0.467 and -1.485 respectively. It is worth mentioning here that out of 19 years, for 12 years OPI/Sale has positive significant effect on LTD/TA. This is in line with trade-off theory. For 1 year 1999 the impact is

negative and significant. This is in line with pecking order theory. For remaining years the impact of OPI/Sale on LTD/TA ratio is found to be insignificant.

e. With PBT/TNA:

Considering the LTD/TA ratio to be a dependent variable and PBT/TNA as independent variable linear regressions are run yearwise from 1981-1999. From the Table it can be observed that the values of R^2 are found to be 0.0314, 0.0368, 0.0129, 0.1256, 0.0510, 0.0006, 0.0044, 0.0214, 0.0310, 0.0877, 0.0646, 0.0322, 0.1019, 0.1773, 0.1353, 0.1078, 0.3993, 0.3985 and 0.5142 respectively. The highest R^2 is found to be 0.5142 for the year 1999 and the lowest R^2 is found to be 0.0001 for the year 1986.

The coefficients are -0.0040, -0.0043, -0.0019, -0.0052, -0.0024, -0.0002, -0.0007, 0.0006, -0.0020, -0.0037, -0.0045, -0.0023, -0.0038, -0.0051, -0.0032, -0.0033, -0.0106, -0.0083 and -0.0084 respectively. It is important to note here that for 18 years the coefficients are found to be negative.

The t value are -1.180, -1.267, -0.740, -2.485, -1.520, -0.159, -0.437, 0.283, -1.173, -2.033, -1.724, -1.197, -2.209, -3.044, -2.593, -2.279, -4.157, -4.150 and -5.246 respectively. Out of 19 years, negative significant impact is found for 11 years. This it is in line with pecking order theory. For other years the impact of PBT/TNA on LTD/TA ratio is found to be insignificant.

TABLE - VI.26
YEARWISE SIMPLE REGRESSIONS OF LONG-TERM DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Year 1981						
Intercept	-0.1105	-0.0929	0.1365	0.0086	0.1472	0.1266
Coefficient	0.4684	0.5767	-0.0024	0.0078	-0.0040	-0.0000
	(4.855)*	(7.187)*	(-0.680)	(4.087)*	(-1.180)	(-1.150)
R-square	0.3541	0.5457	0.0107	0.2797	0.0314	0.0298
Year 1982						
Intercept	-0.0637	-0.0440	0.1272	0.0368	0.1423	0.1205
Coefficient	0.3626	0.4389	-0.0019	0.0059	-0.0043	-0.0000
	(3.827)*	(5.014)*	(-0.542)	(2.530)**	(-1.267)	(-1.101)
R-square	0.2586	0.3744	0.0070	0.1322	0.0368	0.0281
Year 1983						
Intercept	-0.0462	-0.0227	0.1463	0.0620	0.1286	0.1300
Coefficient	0.3231	0.3800	-0.0030	0.0042	-0.0019	-0.0000
	(3.621)*	(4.761)*	(-0.124)	(1.910)**	(-0.740)	(-1.782)**
R-square	0.2379	0.3505	0.0292	0.0799	0.0129	0.0703
Year 1984						
Intercept	0.1061	-0.0289	0.1369	0.0523	0.1538	0.1207
Coefficient	-0.0002	0.3854	-0.0026	0.0048	-0.0052	-0.0000
	(-0.114)	(5.423)*	(-1.167)	(2.106)**	(-2.485)*	(-1.485)***
R-square	0.0003	0.4061	0.0307	0.0935	0.1256	0.0488
Year 1985						
Intercept	-0.0145	-0.0184	0.0964	0.0217	0.1147	0.1022
Coefficient	0.2202	0.3230	-0.0004	0.0060	-0.0024	-0.0000
	(2.891)*	(4.587)*	(-0.209)	(3.065)*	(-1.520)***	(-1.415)***
R-square	0.1627	0.3285	0.0010	0.1793	0.0510	0.0445
Year 1986						
Intercept	-0.0437	-0.0192	0.0639	-0.0017	0.0875	0.0991
Coefficient	0.2688	0.3052	0.0018	0.0079	-0.0002	-0.0000
	(3.594)*	(4.160)*	(0.987)	(4.462)*	(-0.159)	(-1.494)***
R-square	0.2310	0.2870	0.0221	0.3165	0.0006	0.0493

.cont.

TABLE VI.26 cont.

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Year 1987						
Intercept	-0.0223	-0.0053	0.0655	0.0417	0.0848	0.0846
Coefficient	0.2085	0.2500	0.0012	0.0034	-0.0007	-0.0000
	(3.566)*	(4.271)*	(0.721)	(2.453)*	(-0.437)	(-0.761)
R-square	0.2283	0.2979	0.0120	0.1228	0.0044	0.0133
Year 1988						
Intercept	-0.0783	-0.0190	0.0938	0.0533	0.0845	0.0975
Coefficient	0.3566	0.3240	-0.0004	0.0033	0.0006	-0.0000
	(4.746)*	(4.278)*	(-0.170)	(1.666)***	(0.283)	(-0.913)
R-square	0.3437	0.2985	0.0007	0.0606	0.0214	0.0190
Year 1989						
Intercept	-0.0665	-0.0421	0.0821	0.0440	0.0845	0.0690
Coefficient	0.2967	0.3463	-0.0013	0.0021	-0.0020	-0.0000
	(4.814)*	(6.469)*	(-0.665)	(1.100)	(-1.173)	(-0.273)
R-square	0.3502	0.4933	0.0102	0.0274	0.0310	0.0085
Year 1990						
Intercept	-0.0877	-0.0610	0.0939	0.0680	0.1072	0.0801
Coefficient	0.3725	0.4468	-0.0016	0.0008	-0.0037	-0.0000
	(6.302)*	(8.197)*	(-0.827)	(0.519)	(-2.033)**	(-0.386)
R-square	0.4802	0.6098	0.0157	0.0062	0.0877	0.0035
Year 1991						
Intercept	-0.0963	-0.0594	0.1272	0.0444	0.1343	0.0972
Coefficient	0.4304	0.4812	-0.0027	0.0047	-0.0045	0.0000
	(6.515)*	(8.359)*	(-0.869)	(1.967)**	(-1.724)**	(0.038)
R-square	0.4968	0.6190	0.0173	0.0825	0.0646	0.00003
Year 1992						
Intercept	-0.0539	-0.0161	0.1135	0.0530	0.1112	0.0793
Coefficient	0.3230	0.3267	-0.0019	0.0034	-0.0023	0.0000
	(5.244)*	(5.934)*	(-1.037)	(2.173)**	(-1.197)	(1.590)***
R-square	0.3901	0.4502	0.0244	0.0990	0.0322	0.0556
Year 1993						
Intercept	-0.0435	0.0089	0.1323	0.0796	0.1423	0.0900
Coefficient	0.3408	0.3033	-0.0020	0.0028	-0.0038	0.0000
	(6.530)*	(6.086)*	(-1.265)	(1.100)	(-2.209)**	(2.965)*
R-square	0.4979	0.4628	0.0359	0.0851	0.1019	0.1697

cont.

TABLE VI.26 cont.

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Year 1994						
Intercept	-0.0670	-0.0149	0.1348	0.0979	0.1500	0.0756
Coefficient	0.3647	0.3331	-0.0032	-0.0000	-0.0051	0.0000
	(5.100)*	(6.030)*	(-1.784)***	(-0.056)	(-3.044)*	(3.057)*
R-square	0.4557	0.4582	0.0689	0.0001	0.1773	0.1785
Year 1995						
Intercept	-0.0372	0.0065	0.1067	0.0557	0.1425	0.0883
Coefficient	0.3202	0.2895	-0.0002	0.0044	-0.0032	0.0000
	(3.709)*	(3.695)*	(-0.058)	(1.872)**	(-2.593)*	(1.781)**
R-square	0.2424	0.2410	0.0001	0.0754	0.1353	0.0687
Year 1996						
Intercept	-0.0284	-0.0193	0.1054	0.0683	0.1628	0.1148
Coefficient	0.3520	0.4141	0.0020	0.0051	-0.0033	0.0000
	(3.218)*	(3.890)*	(0.536)	(2.229)**	(-2.279)**	(0.703)
R-square	0.1941	0.2603	0.0066	0.1036	0.1078	0.0114
Year 1997						
Intercept	-0.0585	-0.0302	0.2001	0.1190	0.2318	0.1064
Coefficient	0.4248	0.4460	-0.0069	0.0002	-0.0106	0.0000
	(3.540)*	(3.887)*	(-2.253)**	(0.088)	(-4.157)*	(1.043)
R-square	0.3252	0.3675	0.1634	0.0003	0.3993	0.0402
Year 1998						
Intercept	-0.0476	-0.0141	0.2480	0.1521	0.2274	0.1256
Coefficient	0.4193	0.4246	-0.0098	-0.0015	-0.0083	0.0000
	(3.286)*	(3.395)*	(-2.442)**	(-0.467)	(-4.150)*	(0.534)
R-square	0.2934	0.3072	0.1866	0.0083	0.3985	0.0109
Year 1999						
Intercept	0.0021	0.0151	0.2051	0.1600	0.1941	0.1075
Coefficient	0.2562	0.2857	-0.0077	-0.0039	-0.0084	0.0000
	(2.577)*	(2.929)*	(-2.990)*	(-1.485)***	(-5.246)*	(0.464)
R-square	0.2034	0.2481	0.2559	0.0782	0.5142	0.0082

*,**,*** indicates significance at 1%, 5% and 10% levels respectively.

f. With Average Size:

Considering the LTD/TA ratio to be a dependent variable and Average size as independent variable linear regressions are run yearwise from 1981-1999. From the Table it can be observed that the values of R^2 are found to be 0.0298, 0.0281, 0.0703, 0.0488, 0.0445 0.0493, 0.0133 0.0190, 0.0085, 0.0035, 0.00003, 0.0556, 0.1697, 0.1785, 0.0687, 0.0114, 0.0402, 0.0109 and 0.0082 respectively. The highest R^2 is found to be 0.1785 (1994) and the lowest R^2 is found to be 0.0000 (1991).

The coefficients are -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000 and 0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years.

The t values are found to be -1.150, -1.101, -1.782, -1.485, -1.415, -1.494, -0.761, -0.913, -0.273, -0.386, 0.038, 1.590, 2.965, 3.057, 1.781, 0.703, 1.043, 0.534 and 0.464 respectively. Out of 19 years, only for 4 years negative significant impact is also found and the positive significant impact is also found for only 4 years. Thus the contradictory behaviour is observed. For other years the impact of Average size on LTD/TA ratio is found to be insignificant.

III. TOTAL DEBT TO TOTAL ASSETS RATIO:

Considering TD/TA ratio as dependent variable and other six variables as independent variables,

regressions are run for 19 years and results are presented in Table VI.27.

a. With GFA/TGA:

On running regression of TD/TA and GFA/TGA it is observed that the values of R^2 are 0.0707, 0.0573, 0.0205, 0.0073, 0.0498, 0.0748, 0.0993, 0.0041, 0.0113, 0.0227, 0.0134, 0.0728, 0.0246, 0.0038, 0.0016, 0.0243, 0.0553, 0.1108 and 0.0695 respectively. The highest R^2 is found to be 0.1108 for the year 1998 and the lowest R^2 is found to be 0.0016 in the year 1995

The coefficients are -0.2160, -0.2027, -0.1308, 0.0017, -0.2064, -0.2609, -0.2679, -0.0600, -0.0775, -0.1019, -0.0741, -0.2036, -0.1084, -0.0525, -0.0906, 0.1341, 0.2318, 0.3170 and 0.2194 respectively. It is important to note here that for 14 years under study, coefficient is found to be negative.

The t values are -1.808, -1.616, -0.948, 0.564, -1.502, -1.864, -2.177, -0.423, -0.701, -1.000, -0.765, -1.837, -1.042, -0.404, -0.710, 1.035, 1.233, 1.800 and 1.393. It is worth mentioning here that for 6 years, GFA/TGA is found to have negative significant impact on TD/TA. This is in line with the findings of Ferri and Jones. Also positive significant impact is found for 2 years.

b. With NFA/TNA:

On running the regression of NFA/TNA on TD/TA it is observed that values of R^2 are found to be 0.0146, 0.0077, 0.0000, 0.0055, 0.0113, 0.0455, 0.0299,

0.0001, 0.0017, 0.0005, 0.0041, 0.0851, 0.0328, 0.0137, 0.0109, 0.0367, 0.0479, 0.1072 and 0.0846 respectively. The highest R^2 0.1072 (1998) and the lowest R^2 is 0.0000 for the year (1983).

The coefficients are -0.0974, -0.0747, 0.0007, -0.0705, -0.1015, -0.2073, -0.1543, 0.0102, -0.0291, -0.0157, -0.0409, -0.2073, -0.1154, -0.0912, -0.0797, 0.1674, 0.2132, 0.3086 and 0.2444 respectively. It is important to note here that out of 19 years under study, for 13 years the coefficients are found to be negative.

The t values are -0.799, -0.577, 0.005, -0.488, -0.701, -1.432, -1.151, 0.073, -0.266, -0.143, -0.420, -1.100, -1.207, -0.773, -0.689, 1.280, 1.144, 1.767 and 1.550 respectively. It is worth mentioning here that only for 2 years, impact is positive and significant. This is in line with trade off theory. The negative significant impact is also found for 1 year. This is in line with the findings of Ferri and Jones. For other years the impact of NFA/TNA on TD/TA ratio was found to be insignificant.

c. With OPI/TGA:

On running regression of OPI/TGA on TD/TA, R^2 are found to be 0.0807, 0.0094, 0.0419, 0.0667, 0.0418, 0.0008, 0.0100, 0.0725, 0.1405, 0.1415, 0.1304, 0.0067, 0.0170, 0.0423, 0.0203, 0.0028, 0.0102, 0.0340 and 0.0350 respectively. The highest R^2 is found to be 0.1415 for the year 1990 and the lowest R^2 is found to be 0.0008 for the year 1986.

The coefficients are -0.0067, -0.0025, -0.0049, -0.0060, -0.0042, -0.0006, -0.0021, -0.0060, -0.0069, -0.0062, -0.0076, -0.0015, -0.0020, -0.0040, -0.0035, 0.0014, -0.0023, -0.0052 and -0.0042 respectively. It is important to note here that for 18 years the coefficients are found to be negative.

The t values are -1.942, -0.640, -1.372, -1.754, -1.369, -0.187, -0.660, -1.833, -2.651, -2.662, -2.539, -0.537, -0.863, -1.379, -0.943, 0.347, -0.519, -0.957 and -0.971 respectively. It is worth mentioning here that out of 19 years, the impact of OPI/TGA on TD/TA is found to be negative for 9 years. This is in line with pecking order theory. For all other years the impact of OPI/TGA on TD/TA ratio is found to be insignificant.

d. With OPI/Sale:

On running the regression of TD/TA on OPI/Sale, R^2 are 0.0496, 0.0105, 0.0506, 0.0249, 0.0256, 0.0072, 0.0023, 0.0105, 0.0858, 0.1040, 0.0429, 0.0464, 0.0141, 0.0263, 0.0093, 0.0006, 0.0350, 0.0793 and 0.1535 respectively. The highest R^2 is found to be 0.1535 for the year 1999 and the lowest R^2 is found to be 0.0006 for the year 1996.

The coefficients are -0.0034, -0.0020, -0.0046, -0.0039, -0.0039, -0.0020, -0.0009, -0.0021, -0.0055, -0.0043, -0.0035, -0.0034, -0.0016, -0.0013, -0.0020, 0.0004, -0.0033, -0.0056 and -0.0081 respectively. It is important to note here that for 18 years the coefficients are found to be negative. This means that for all years except one as OPI/Sale increases, the TD/TA ratio decreases.

The t values are -1.498, -0.678, -1.513, -1.048, -1.062, -0.558, -0.312, 0.675, -2.009, -2.234, -1.388, -1.446, -0.785, -1.078, -0.637, 1.555, -0.970, -1.496 and -2.171 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 8 years. This is in line with pecking order theory. Also positive significant effect is found for 1 year. This is not in line with trade-off theory. For all other years the impact of OPI/Sale on TD/TA ratio is found to be insignificant.

e. With PBT/TNA:

On running the regression of TD/TA on PBT/TNA, R^2 are found to be 0.1114, 0.0222, 0.1391, 0.2081, 0.1296, 0.0246, 0.0281, 0.1180, 0.2747, 0.2468, 0.2152, 0.0294, 0.0281, 0.0660, 0.1394, 0.3376, 0.1293, 0.2077 and 0.3045 respectively. The highest R^2 is 0.3376 (1996) and the lowest R^2 is 0.0222 (1982).

The coefficients are -0.0078, -0.0038, -0.0088, -0.0105, -0.0064, -0.0026, -0.0035, -0.0072, -0.0085, -0.0079, -0.0086, -0.0032, -0.0029, -0.0049, -0.0042, -0.0064, -0.0080, -0.0074 and -0.0095 respectively. It is important to note here that for all years the coefficients are found to be negative. This implies that for all years as PBT/TNA increases, the TD/TA ratio decreases.

The t values are -2.321, -0.988, -2.636, -3.362, -2.530, -1.041, -1.115, -2.399, -4.035, -3.753, -3.434, -1.140, -1.115, -1.744, -2.639, -4.682, -1.965, -2.611 and -2.374 respectively. It is worth mentioning here that out of 19 years, for 14 years the impact of PBT/TNA is found to be negative and

TABLE - VI.27
YEARWISE SIMPLE REGRESSIONS OF TOTAL DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Year 1981						
Intercept	0.7307	0.6639	0.7116	0.6731	0.7067	0.6519
Coefficient	-0.2160	-0.0974	-0.0067	-0.0034	-0.0018	-0.0000
	(-1.808)**	(-0.799)	(-1.942)**	(-1.498)***	(-2.321)**	(-1.302)
R-square	0.0707	0.0146	0.0807	0.0496	0.1114	0.0379
Year 1982						
Intercept	0.1384	0.6694	0.6738	0.6671	0.6780	0.6682
Coefficient	-0.2027	-0.0747	-0.0025	-0.0020	-0.0038	-0.0000
	(-1.616)***	(-0.577)	(-0.640)	(-0.678)	(-0.988)	(-1.539)***
R-square	0.0573	0.0077	0.0094	0.0105	0.0222	0.0522
Year 1983						
Intercept	0.6964	0.6331	0.6942	0.6854	0.7212	0.6551
Coefficient	-0.1308	0.0007	-0.0049	-0.0046	-0.0088	-0.0000
	(-0.948)	(0.005)	(-1.372)***	(-1.513)***	(-2.636)*	(-1.386)***
R-square	0.0205	0.0000	0.0419	0.0506	0.1391	0.0428
Year 1984						
Intercept	0.6143	0.6415	0.6890	0.6602	0.7140	0.6359
Coefficient	0.0017	-0.0705	-0.0060	-0.0039	-0.0105	-0.0000
	(0.564)	(-0.488)	(-1.754)**	(-1.048)	(-3.362)*	(-1.193)
R-square	0.0073	0.0055	0.0667	0.0249	0.2081	0.0320
Year 1985						
Intercept	0.7029	0.6381	0.6563	0.6482	0.6660	0.6087
Coefficient	-0.2064	-0.1075	-0.0042	-0.0039	-0.0064	-0.0000
	(-1.502)***	(-0.701)	(-1.369)***	(-1.062)	(-2.530)*	(-0.394)
R-square	0.0498	0.0113	0.0478	0.0256	0.1296	0.0036
Year 1986						
Intercept	0.7175	0.6633	0.5992	0.6146	0.6158	0.6049
Coefficient	-0.2609	-0.2073	-0.0006	-0.0020	-0.0026	-0.0000
	(-1.864)**	(-1.432)***	(-0.187)	(-0.558)	(-1.041)	(-0.790)
R-square	0.0748	0.0455	0.0008	0.0072	0.0246	0.0143

cont.

TABLE VI.27 cont.

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Year 1987						
Intercept	0.7083	0.6302	0.6022	0.5881	0.6070	0.5685
Coefficient	-0.2679	-0.1543	-0.0021	-0.0009	-0.0035	0.0000
	(-2.177)**	(-1.151)	(-0.660)	(-0.312)	(-1.115)	(0.667)
R-square	0.0993	0.0299	0.0100	0.0023	0.0281	0.0102
Year 1988						
Intercept	0.6220	0.5904	0.6645	0.6168	0.6531	0.5965
Coefficient	-0.0600	0.0102	-0.0060	-0.0021	-0.0072	-0.0000
	(-0.423)	(0.073)	(-1.833)**	(-0.675)	(-2.399)**	(-0.198)
R-square	0.0041	0.0001	0.0725	0.0105	0.1180	0.0009
Year 1989						
Intercept	0.6346	0.6089	0.6819	0.6586	0.6759	0.6116
Coefficient	-0.0775	-0.0291	-0.0069	-0.0055	-0.0085	-0.0000
	(-0.701)	(-0.266)	(-2.651)*	(-2.009)**	(-4.035)*	(-1.066)
R-square	0.0113	0.0017	0.1405	0.0858	0.2747	0.0258
Year 1990						
Intercept	0.6565	0.6641	0.6768	0.6560	0.6760	0.6217
Coefficient	-0.1099	-0.0157	-0.0062	-0.0043	-0.0079	-0.0000
	(-1.000)	(-0.143)	(-2.662)*	(-2.234)**	(-3.573)*	(-0.909)
R-square	0.0227	0.0005	0.1415	0.1040	0.2468	0.0189
Year 1991						
Intercept	0.6556	0.6356	0.7075	0.6624	0.6924	0.6268
Coefficient	-0.0741	-0.0409	-0.0076	-0.0035	-0.0086	-0.0000
	(-0.765)	(-0.420)	(-2.539)***	(-1.388)***	(-3.434)*	(-0.456)
R-square	0.0134	0.0041	0.1304	0.0429	0.2152	0.0048
Year 1992						
Intercept	0.7006	0.6773	0.6261	0.6474	0.6368	0.6054
Coefficient	-0.2036	-0.2073	-0.0015	-0.0034	-0.0032	0.0000
	(-1.837)**	(-1.100)	(-0.537)	(-1.446)***	(-1.140)	(0.331)
R-square	0.0728	0.0851	0.0067	0.0464	0.0294	0.0026
Year 1993						
Intercept	0.6466	0.6362	0.6197	0.6155	0.6221	0.5931
Coefficient	-0.1084	-0.1154	-0.0020	-0.0016	-0.0029	0.0000
	(-1.042)	(-1.207)	(-0.863)	(-0.785)	(-1.115)	(0.442)
R-square	0.0246	0.0328	0.0170	0.0141	0.0281	0.0045

cont.

TABLE VI.27 cont.

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Year 1994						
Intercept	0.5908	0.5978	0.6135	0.5843	0.6180	0.5615
Coefficient	-0.0525	-0.0912	-0.0040	-0.0013	-0.0049	0.0000
	(-0.404)	(-0.773)	(-1.379)***	(-1.078)	(-1.744)**	(0.453)
R-square	0.0038	0.0137	0.0423	0.0263	0.0660	0.0048
Year 1995						
Intercept	0.5913	0.5752	0.5882	0.5735	0.6006	0.5493
Coefficient	-0.0906	-0.0197	-0.0035	-0.0020	-0.0042	0.0000
	(-0.710)	(-0.689)	(-0.943)	(-0.637)	(-2.639)*	(0.145)
R-square	0.0116	0.0709	0.0203	0.0093	0.1394	0.0005
Year 1996						
Intercept	0.4983	0.4985	0.5432	0.5522	0.6292	0.5556
Coefficient	0.1341	0.1674	0.0014	0.0004	-0.0064	0.0000
	(1.035)	(1.280)	(0.347)	(0.155)	(-4.682)*	(0.072)
R-square	0.0243	0.0367	0.0028	0.0006	0.3376	0.0001
Year 1997						
Intercept	0.4459	0.4717	0.5703	0.5839	0.6271	0.5444
Coefficient	0.2318	0.2132	-0.0023	-0.0033	-0.0080	-0.0000
	(1.233)	(1.144)	(-0.519)	(-0.970)	(-1.965)**	(-0.008)
R-square	0.0553	0.0479	0.0102	0.0350	0.1293	0.0000
Year 1998						
Intercept	0.3947	0.4244	0.5920	0.5988	0.6149	0.5295
Coefficient	0.3170	0.3086	-0.0052	-0.0056	-0.0074	0.0000
	(1.800)**	(1.767)**	(-0.957)	(-1.496)*	(-2.611)*	(0.142)
R-square	0.1108	0.1072	0.0340	0.0793	0.2077	0.0008
Year 1999						
Intercept	0.4178	0.4290	0.5628	0.6084	0.6040	0.5040
Coefficient	0.2194	0.2444	-0.0042	-0.0081	-0.0095	0.0000
	(1.393)***	(1.550)	(-0.971)	(-2.171)*	(-3.374)*	(0.483)
R-square	0.0695	0.0846	0.0350	0.1535	0.3045	0.0089

*,**,*** indicates significance at 1%, 5% and 10% levels respectively.

significant. This is in line with pecking order theory. For all other years the impact of PBT/TNA on TD/TA ratio is insignificant.

f. With Average Size:

On running the TD/TA on Average size, R^2 are found to be 0.0379, 0.0522, 0.0428, 0.0320, 0.0036, 0.0143, 0.0102, 0.0009, 0.0258, 0.0189, 0.0048, 0.0026, 0.0045, 0.0048, 0.0005, 0.0001, 0.0000, 0.0008 and 0.0089 respectively. The highest R^2 is 0.0428 (1983) and the lowest R^2 is 0.0000 (1997).

The coefficients are -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, 0.0000 and 0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years.

The t values are -1.302, -1.539, -1.386, -1.193, -0.394, -0.790, 0.667, -0.198, -1.066, -0.909, -0.456, 0.331, 0.442, 0.453, 0.145, 0.072, -0.008, 0.142 and 0.483 respectively. It is worth mentioning here that out of 19 years, only for 3 years impact of Average size on TD/TA is found to be negative and significant. This is in line with the findings of Gupta[11]. For all other 16 years the impact of Average size on TD/TA ratio is found to be insignificant.

IV. TOTAL EQUITY TO TOTAL ASSETS RATIO:

Considering TE/TA ratio as dependent variable and other six variables as independent variables,

regressions are run for 19 years and results are presented in Table VI.28.

a. With GFA/TGA:

On running the regression of TE/TA on GFA/TGA, R^2 are found to be 0.0703, 0.0564, 0.0170, 0.0052, 0.0467, 0.0910, 0.1603, 0.0522, 0.0315, 0.0169, 0.0050, 0.0313, 0.0213, 0.0028, 0.0038, 0.0285, 0.0757, 0.1310 and 0.0542 respectively. The highest R^2 is found to be 0.1603 for the year 1987 and the lowest R^2 is found to be 0.0028 in the year 1994

The coefficients are 0.2145, 0.2009, 0.1184, -0.0014, 0.1822, 0.2835, 0.3354, 0.1926, 0.1210, 0.0812, 0.0425, 0.1139, 0.0900, 0.0383, 0.0483, -0.1357, -0.2750, -0.3478 and -0.2309 respectively. It is important to note here that out of 19 years under study for 14 years, the coefficients are found to be positive. This implies that for all years as GFA/TGA increases, the TE/TA ratio increases.

The t values are 1.803, 1.603, 0.863, -0.473, 1.452, 2.075, 2.865, 1.538, 1.183, 0.860, 0.466, 1.178, 0.966, 0.348, 0.403, -1.123, -1.459, -1.979 and -1.220. It is worth mentioning here that for 6 years, impact is positive and significant. This is not in line with trade-off theory. For 2 years the impact is found to be negative and significant. This is in line with trade-off theory. For all other years the impact of GFA/TGA on TE/TA is found to be insignificant.

b. With NFA/TNA:

On running the regression of NFA/TNA on TE/TA, R^2 are found to be 0.0148, 0.0072, 0.0003, 0.0001,

0.0012, 0.0204, 0.0123, 0.0017, 0.0002, 0.0028, 0.0022, 0.0287, 0.0215, 0.0140, 0.0037, 0.0334, 0.0731, 0.1275 and 0.0634 respectively. The highest R^2 is 0.1275 (1998) and the lowest R^2 is 0.0001 (1984).

The coefficients are 0.0977, 0.0721, -0.0159, -0.0058, 0.0305, 0.1366, 0.0977, 0.0034, -0.0083, -0.0353, -0.0283, 0.1028, 0.0835, 0.0780, 0.0432, -0.1493, -0.2668, -0.3396 and -0.2522 respectively. It is important to note here that out of 19 years under study, for 10 years the coefficients are positive. This means that for these years as NFA/TNA increases, the TE/TA ratio decreases.

The t values are 0.804, 0.558, -0.119, -0.039, 0.230, 0.946, 0.733, 0.269, -0.081, -0.349, -0.310, 1.128, 0.971, 0.782, 0.398, -1.219, -1.432, -1.949 and -1.327 respectively. It is worth mentioning here that only for 3 years, the impact is found to be negative and significant. This is in line with trade-off theory. For all other years the impact of NFA/TNA on TE/TA ratio is found to be insignificant.

c. With OPI/TGA:

On running the regression of TE/TA on OPI/TGA, R^2 are found to be 0.0788, 0.0089, 0.0554, 0.1270, 0.0838, 0.0803, 0.0047, 0.0385, 0.1053, 0.1447, 0.1431, 0.0129, 0.0301, 0.0706, 0.0396, 0.0001, 0.0091, 0.0444 and 0.0859 respectively. The highest R^2 is 0.1447 (1990) and the lowest R^2 is 0.0001 (1996).

The coefficients are 0.0066, 0.0024, 0.0056, 0.0084, 0.0054, 0.0056, 0.0013, 0.0040, 0.0056, 0.0058, 0.0075, 0.0018, 0.0023, 0.0043, 0.0045,

0.0003, 0.0022, 0.0060 and 0.0078 respectively. It is important to note here that for all years the coefficients are found to be positive. This implies that for all years as OPI/TGA increases, the TE/TA ratio increases.

The t values are 1.918, 0.622, 1.587, 2.501, 1.983, 1.937, 0.452, 1.311, 2.250, 2.697, 2.680, 0.750, 1.156, 1.808, 1.332, 0.075, 0.489, 1.099 and 1.563 respectively. It is worth mentioning here that out of 19 years, for 12 years OPI/TGA is found to be positive and significant. This is in line with pecking order theory. For all other years the impact of OPI/TGA on TE/TA ratio is found to be insignificant.

d. With OPI/Sale:

On running the regression of TD/TA on OPI/Sale, R^2 are found to be 0.0484, 0.0104, 0.0597, 0.0314, 0.0005, 0.0028, 0.0047, 0.0032, 0.0456, 0.0862, 0.0288, 0.0086, 0.0002, 0.0476, 0.0432, 0.0020, 0.0297, 0.0917 and 0.1877 respectively. The highest R^2 is 0.1877 (1999) and the lowest R^2 is 0.0002 (1993).

The coefficients are 0.0033, 0.0019, 0.0049, 0.0044, -0.0005, 0.0012, 0.0013, 0.0010, 0.0037, 0.0036, 0.0027, 0.0013, 0.0002, 0.0014, 0.0040, 0.0007, 0.0031, 0.0061 and 0.0106 respectively.

The t values are 1.479, 0.673, 1.653, 1.181, -0.146, 0.345, 0.452, 0.371, 1.433, 2.014, 1.129, 0.612, 0.096, 1.466, 1.394, 0.296, 0.892, 1.620 and 2.451 respectively. It is worth mentioning here that out of 19 years, for 8 years positive significant effect is found on TE/TA. This is in line with pecking

order theory for these years. For all other years the impact of OPI/Sale on TE/TA ratio is found to be insignificant.

e. With PBT/TNA:

On running the regression of TE/TA on PBT/TNA, R^2 are found to be 0.1071, 0.0191, 0.1562, 0.3128, 0.2849, 0.2799, 0.0897, 0.2136, 0.3399, 0.4706, 0.4133, 0.1713, 0.1654, 0.1822, 0.2603, 0.5048, 0.1889, 0.2494 and 0.3809 respectively. The highest R^2 is 0.4706 (1990) and the lowest R^2 is 0.0191 (1982).

The coefficients are 0.0076, 0.0036, 0.0093, 0.0130, 0.0086, 0.0087, 0.0061, 0.0088, 0.0088, 0.0100, 0.0112, 0.0065, 0.0062, 0.0069, 0.0053, 0.0073, 0.0097, 0.0082 and 0.0127 respectively. It is important to note here that for all years the coefficient is found to be positive. This means that for all years as PBT/TNA increases, the TE/TA ratio increases.

The t values are 2.271, 0.916, 2.821, 4.424, 4.139, 4.088, 2.058, 3.417, 4.705, 6.183, 5.504, 2.981, 2.919, 3.095, 3.890, 6.621, 2.460, 2.939 and 4.000 respectively. It is worth mentioning here that out of 19 years, for as many as 18 years the impact of PBT/TNA is found to be positive and significant. This implies that as PBT/TNA goes up TE/TA also goes up. This explains why the profitable companies need to borrow less. Thus the findings is in line with pecking order theory.

TABLE - VI.28
YEARWISE SIMPLE REGRESSIONS OF TOTAL EQUITY TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Year 1981						
Intercept	0.2709	0.3369	0.2905	0.3285	0.2960	0.3496
Coefficient	0.2145	0.0977	0.0066	0.0033	0.0076	0.0000
	(1.803)**	(0.804)	(1.918)**	(1.479)***	(2.271)**	(1.266)
R-square	0.0703	0.0148	0.0788	0.0484	0.1071	0.0360
Year 1982						
Intercept	0.2611	0.3301	0.3257	0.3318	0.3232	0.3320
Coefficient	0.2009	0.0721	0.0024	0.0019	0.0036	0.0000
	(1.603)***	(1.558)	(0.622)	(0.673)	(0.916)	(1.434)***
R-square	0.0564	0.0072	0.0089	0.0104	0.0191	0.0457
Year 1983						
Intercept	0.3063	0.3689	0.2940	0.3072	0.2710	0.3468
Coefficient	0.1184	-0.0159	0.0056	0.0049	0.0093	0.0000
	(0.863)	(-0.119)	(1.587)	(1.653)	(2.821)*	(1.047)
R-square	0.0170	0.0003	0.0554	0.0597	0.1562	0.0249
Year 1984						
Intercept	0.3727	0.2725	0.2694	0.3210	0.2495	0.3568
Coefficient	-0.0014	-0.0058	0.0084	0.0044	0.0130	0.0000
	(0.473)	(-0.039)	(2.501)*	(1.181)	(4.424)*	(0.837)
R-square	0.0052	0.0001	0.1270	0.0314	0.3128	0.0160
Year 1985						
Intercept	0.2811	0.3585	0.3088	0.3746	0.2844	0.3705
Coefficient	0.1822	0.0305	0.0054	-0.0005	0.0086	-0.0000
	(1.452)***	(0.230)	(1.983)**	(-0.146)	(4.139)*	(-0.131)
R-square	0.0467	0.0012	0.0838	0.0005	0.2849	0.0004
Year 1986						
Intercept	0.2445	0.3338	0.3121	0.3670	0.3021	0.3633
Coefficient	0.2835	0.1366	0.0056	0.0012	0.0087	0.0000
	(2.075)**	(0.946)	(1.937)**	(0.345)	(4.088)*	(1.105)
R-square	0.0910	0.0204	0.0803	0.0028	0.2799	0.0276

cont.

TABLE VI.28 cont.

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Year 1987						
Intercept	0.2216	0.3515	0.3704	0.3704	0.3338	0.3798
Coefficient	0.3354	0.0977	0.0013	0.0013	0.0061	0.0000
	(2.865)	(0.733)	(0.452)*	(0.452)**	(2.058)**	(0.324)
R-square	0.1603	0.0123	0.0047	0.0047	0.0897	0.0024
Year 1988						
Intercept	0.2843	0.3636	0.3283	0.3634	0.3027	0.3744
Coefficient	0.1926	0.0034	0.0040	0.0010	0.0088	0.0000
	(1.538)***	(0.269)	(1.311)***	(0.371)	(3.417)*	(0.037)
R-square	0.0522	0.0017	0.0385	0.0032	0.2136	0.00003
Year 1989						
Intercept	0.3009	0.3579	0.2888	0.3152	0.2761	0.3483
Coefficient	0.1210	-0.0083	0.0056	0.0037	0.0088	0.0000
	(1.183)	(-0.081)	(2.250)**	(1.433)***	(4.705)*	(0.667)
R-square	0.0315	0.0002	0.1053	0.0456	0.3399	0.0102
Year 1990						
Intercept	0.3049	0.3515	0.2797	0.3033	0.2585	0.3286
Coefficient	0.0812	-0.0353	0.0056	0.0036	0.0100	0.0000
	(0.860)	(-0.039)	(2.697)*	(2.014)**	(6.183)*	(1.175)
R-square	0.0169	0.0028	0.1947	0.0862	0.4706	0.0311
Year 1991						
Intercept	0.3106	0.3390	0.2462	0.2990	0.2387	0.3239
Coefficient	0.0425	-0.0283	0.0075	0.0027	0.0112	0.0000
	(0.466)***	(-1.310)***	(2.680)*	(1.129)	(5.504)*	(0.622)
R-square	0.0050	0.0022	0.1431	0.0288	0.4133	0.0089
Year 1992						
Intercept	0.2772	0.2946	0.3083	0.3143	0.2714	0.2304
Coefficient	0.1139	0.1028	0.0018	0.0013	0.0065	-0.0000
	(1.178)	(1.128)	(0.750)	(0.612)	(2.981)*	(-0.210)
R-square	0.0313	0.0287	0.0129	0.0086	0.1713	0.0010
Year 1993						
Intercept	0.3001	0.3128	0.3146	0.3387	0.2880	0.3472
Coefficient	0.0900	0.0835	0.0023	0.0002	0.0062	-0.0000
	(0.966)	(0.971)	(1.156)	(0.096)	(2.919)*	(-0.702)
R-square	0.0213	0.0215	0.0301	0.0002	0.1654	0.0113

cont.

TABLE VI.28 cont.

Particulars	GFA/TGA	NFA/TNA	OPI/TGA	OPI/Sale	PBT/TNA	AVG Size
Year 1994						
Intercept	0.3725	0.3635	0.3391	0.3702	0.3184	0.3985
Coefficient	0.0383	0.0780	0.0043	0.0014	0.0069	-0.0000
	(0.348)	(0.782)	(1.808)**	(1.466)***	(3.095)*	(-0.839)
R-square	0.0028	0.0140	0.0706	0.0476	0.1822	0.0161
Year 1995						
Intercept	0.3857	0.3924	0.3587	0.3620	0.3439	0.4117
Coefficient	0.0483	0.0432	0.0045	0.0040	0.0053	-0.0000
	(0.403)	(0.398)	(1.332)***	(1.394)***	(3.890)*	(-0.392)**
R-square	0.0038	0.0037	0.0396	0.0432	0.2603	0.0036
Year 1996						
Intercept	0.4828	0.4757	0.4211	0.4158	0.3409	0.4312
Coefficient	-0.1357	-0.1493	0.0003	0.0007	0.0073	-0.0000
	(-1.123)	(-1.219)	(0.075)	(0.296)	(6.621)*	(-0.526)
R-square	0.0285	0.0344	0.0001	0.0020	0.5048	0.0064
Year 1997						
Intercept	0.5502	0.5245	0.4087	0.3966	0.3321	0.4379
Coefficient	-0.2750	-0.2668	0.0022	0.0031	0.0097	-0.0000
	(-1.459)***	(-1.432)***	(0.489)	(0.892)	(2.460)	(-0.215)
R-square	0.0757	0.0731	0.0091	0.0297	0.1889	0.0018
Year 1998						
Intercept	0.5990	0.5669	0.3792	0.3759	0.3567	0.4530
Coefficient	-0.3478	-0.3396	0.0060	0.0061	0.0082	-0.0000
	(-1.979)**	(-1.949)	(1.099)	(1.620)***	(2.939)**	(-0.245)
R-square	0.1310	0.1275	0.0444	0.0917	0.2494	0.0023
Year 1999						
Intercept	0.5690	0.5555	0.3760	0.3431	0.3476	0.4769
Coefficient	-0.2309	-0.2522	0.0078	0.0106	0.0127	-0.0000
	(-1.220)	(-1.327)***	(1.563)***	(2.451)**	(4.000)*	(-0.366)
R-square	0.0542	0.0634	0.0859	0.1877	0.3809	0.0051

*,**,*** indicates significance at 1%, 5% and 10% levels respectively.

f. With Average Size:

On running the regression of TE/TA on Average size, R^2 is 0.0360, 0.0457, 0.0249, 0.0160, 0.0004 0.0276, 0.0024, 0.00003, 0.0102, 0.0311, 0.0089, 0.0010, 0.0113, 0.0161, 0.0036, 0.0064, 0.0018, 0.0023 and 0.0051 respectively. The highest R^2 is 0.0457 (1982) and the lowest R^2 is 0.0003 (1988).

The coefficients are 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000 and -0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years.

The t values are 1.266, 1.434, 1.047, 0.837, -0.131, 1.105, 0.324, 0.037, 0.667, 1.175, 0.662, -0.210, -0.702, -0.839, -0.392, -0.526, -0.215, -0.245 and -0.366 respectively. It is worth mentioning here that out of 19 years, only for 1 year the impact of TE/TA is found to be positive and significant. For all other years the impact of Average size on TE/TA ratio is found to be insignificant.

6.5 YEARWISE ANALYSIS:

MULTIPLE REGRESSIONS:

In the present section an yearwise multiple regression analysis is carried out between dependent and independent variables stated in preceding section. The purpose of running multiple regressions is to find out the combined / joint effect of more than one variables taken together on dependent variable.

I. DEBT-EQUITY RATIO:

a. With RUN 1:

Considering the D/E ratio to be a dependent variable, and GFA/TGA and OPI/TGA as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.29. From the Table it can be observed that on running the regression of D/E on GFA/TGA and OPI/TGA, R^2 are 0.1417, 0.1800, 0.1129, 0.0835, 0.1961, 0.2564, 0.2888, 0.1552, 0.1548, 0.1898, 0.1830, 0.0396, 0.0844, 0.0977, 0.0361, 0.0054, 0.0578, 0.1181 and 0.0493 respectively. $\bar{R}^2$ are found to be 0.1008, 0.1400, 0.0696, 0.0398, 0.1578, 0.2210, 0.2550, 0.1150, 0.1146, 0.1513, 0.1441, -0.0061, 0.0408, 0.0547, -0.0099, -0.0420, -0.0177, 0.0475, and -0.0267 respectively. The highest $\bar{R}^2$ is found to be 0.2550 for the year 1987 and the lowest $\bar{R}^2$ is -0.0420 (1996).

The coefficients of GFA/TGA are -2.5576, -3.8702, -2.2370, 0.0056, -3.0252, -3.6420, -3.6737, -2.1895, -1.5090, -1.8742, -1.3212, -1.2536, -1.0529, -1.0667, -0.5380, -0.1604, 0.7850, 0.9792 and 0.1598 respectively. The t values are found to be -1.100, -2.985, -1.730, 0.180, -2.968, -3.687, -4.027, -2.310, -1.834, -2.134, -1.459, -1.038, -1.188, -1.235, -0.618, -0.187, 0.724, 1.040 and 0.155 respectively. It is worth mentioning here that out of 19 years for 9 years the impact of GFA/TGA on D/E is found to be negative and significant. This is not in line with trade-off theory.

The coefficients of OPI/TGA are -0.1691, -0.0297, -0.0632, -0.0720, -0.0411, -0.0331, -0.0391, -0.0447, -0.0496, -0.0555, -0.0861, -0.0309, -0.0348, -0.0403, -0.0288, -0.0104, -0.0267, -0.0381, and -0.0306. The t values are -2.490, -0.728, -1.826, -1.954, -1.818, -1.580, -1.740, -1.961, -2.390, -2.577, -2.871, -1.065, -1.810, -2.062, -1.147, -0.398, -1.077, -1.374 and -1.099 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 12 years. This is in line with pecking order theory.

The F value are 3.467, 4.499, 2.608, 1.913, 5.123, 1.913, 5.123, 7.242, 8.528, 3.859, 3.847, 4.921, 4.703, 0.867, 1.935, 2.274, 0.785, 0.113, 0.765, 1.674 and 0.649. Out of 19 years under study, significant F value is found for 10 years. This tends to suggest that for 10 years the model fits well with these two variables.

b. With RUN 2:

On running the multiple regression of D/E on GFA/TGA, OPI/TGA and Average size it is observed that, R^2 are 0.1740, 0.1893, 0.1277, 0.1378, 0.1962, 0.2875, 0.2970, 0.1697, 0.1787, 0.2493, 0.2079, 0.0412, 0.0862, 0.0996, 0.0392, 0.0056, 0.0645, 0.1265 and 0.0529 respectively. $\bar{R}^2$ are found to be 0.1136, 0.1285, 0.0623, 0.0747, 0.1374, 0.2353, 0.2455, 0.1090, 0.1186, 0.1943, 0.1499, -0.0290, 0.0193, 0.0338, -0.0311, -0.0671, -0.0524, 0.0173 and -0.0655 respectively. The highest $\bar{R}^2$ is 0.2550 (1987) and the lowest $\bar{R}^2$ is -0.0420 (1996).

The coefficients of GFA/TGA are -1.8639, -3.6224, -1.9806, 0.0015, -3.0248, -3.4008, -3.6105, -2.1350, -1.4351, -1.7706, -1.1541, -1.1878, -1.1175, -1.1349, -0.6268, -0.1765, 0.9237, 1.1132 and 0.2234 respectively. It is important to note here that out of 19 years under study, for 15 years the coefficients are found to be negative. The t values are -0.786, -2.673, -1.484, 0.048, -2.932, -3.417, -3.914, -2.240, -1.742, -2.065, -1.262, -0.952, -1.210, -1.257, -0.688, -0.201, 0.802, 1.118 and 0.208 respectively. It is worth mentioning here that negative significant impact is found for only 8 years. Again this is not in line with trade-off theory.

The coefficients of OPI/TGA are -0.1763, -0.0324, -0.0665, -0.0806, -0.0413, -0.0371, -0.0406, -0.0468, -0.0509, -0.0608, -0.0879, -0.0319, -0.0341, -0.0394, -0.0314, -0.0113, -0.0257, -0.0363 and -0.0307. It is important to note here that out of 19 years under study, for all years the coefficients are negative. The t values are -2.604, -0.786, -1.902, -2.205, -1.783, -1.770, -1.788, -2.034, -2.453, -2.871, -2.935, -1.079, -1.740, -1.978, -1.192, -0.408, -1.011, -1.279 and -1.082 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 12 years. This is in line with pecking order theory.

Similarly the coefficients of Average size are -0.0001, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, -0.0000, and -0.0000 respectively. The highest and lowest coefficients are 0.0000 and -0.0001 respectively. The

t values are -1.266, -0.679, -0.824, -1.607, -0.068, -1.336, -0.690, -0.846, -1.091, -1.802, -1.135, -0.259, 0.287, 0.297, 0.369, 0.108, -0.420, -0.480 and -0.298 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for only 3 years.

The F values are 2.879, 3.113, 1.951, 2.184, 3.336, 5.514, 5.773, 2.794, 2.973, 4.538, 3.586, 0.587, 1.289, 1.512, 0.558, 0.078, 0.552, 1.158, and 0.446. It is worth mentioning here that out of 19 years under study, significant F value is found only for 8 years. This tends to suggest that for these 8 years model with these 3 variables fits well.

c. With RUN 3:

On running the regression of D/E ratio on GFA/TGA, OPI/Sale and Average size, it can be observed that R^2 are 0.1140, 0.1843, 0.0857, 0.0406, 0.1374, 0.2346, 0.2425, 0.0871, 0.0853, 0.1599, 0.0658, 0.0212, 0.0240, 0.0590, 0.0665, 0.0312, 0.1703, 0.3095 and 0.2389 respectively. The values of $\bar{R}^2$ are 0.0492, 0.1231, 0.0171, -0.0296, 0.0743, 0.1786, 0.1870, 0.0203, 0.0184, 0.0984, -0.0026, -0.0505, -0.0474, -0.0099, -0.0018, -0.0397, 0.0666, 0.2232 and 0.1437 respectively. The highest $\bar{R}^2$ is 0.2232 (1998) and the lowest $\bar{R}^2$ is -0.0510 (1992).

The coefficients of GFA/TGA are 1.6167, -3.9113, -0.7792, 0.0007, -2.6758, -3.2314, -3.3026, -1.7088, -0.8243, -1.2130, -0.3893, -0.6534, -0.6793, -0.5558, 0.3447, 0.3991, 1.7727, 2.0228 and 0.7163 respectively. The t values are 0.553, -2.590, -0.531,

0.022, -2.549, -3.042, -3.463, -1.661, -0.935, -1.333, -0.364, -0.508, 0.706, -0.631, 0.341, 0.390, 1.510, 2.222 and 0.743 respectively. It is worth mentioning here that negative significant impact is found for 6 years. Also positive significant t value is found for 2 years. This is in line with trade-off theory. For all other years the impact of GFA/TGA on D/E ratio is found to be insignificant.

The coefficients of OPI/Sale are found to be -0.1005, 0.0201, -0.0397, -0.0190, 0.0112, 0.0077, 0.0026, -0.0051, -0.0258, -0.0311, -0.0304, -0.0145, -0.0089, -0.0108, -0.0425, -0.0263, -0.0483, -0.0596 and -0.0658. The t values are -1.883, 0.608, -1.270, -0.467, 0.410, 0.295, 0.120, -0.223, -1.103, -1.733, -1.034, -0.548, -0.471, -1.404, -1.631, -1.120, -2.052, -2.903 and -2.706 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 7 years only. This is in line with pecking order theory. For all other years the impact of OPI/Sale on D/E is found to be insignificant.

Similarly the coefficients of Average size are -0.0001, -0.0000, -0.0000, -0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000 and 0.0000 respectively. The highest and lowest coefficients are 0.0000 and -0.0001. The t values are -1.418, -0.451, -0.769, -1.254, 0.258, -1.018, -0.514, -0.555, -0.613, -1.257, -0.599, -0.073, 0.540, 0.639, 0.557, 0.561, 0.383, 0.440 and 0.383 respectively. Out of 19 years, negative significant impact is found for

only 1 year. For all other years the impact of Average size on D/E ratio is found to be insignificant.

The F values are found to be 1.759, 3.012, 1.249, 0.578, 2.176, 4.189, 4.374, 1.304, 1.275, 2.601, 0.963, 0.296, 0.366, 0.857, 0.974, 0.440, 1.642, 3.586 and 2.510. Here out of 19 years under study, significant F value is found only for 4 years. This tends to suggest that only for 4 years the model with these variables fits well.

d. With RUN 4:

Considering the D/E ratio to be a dependent variable, and GFA/TGA, OPI/TGA, OPI/Sale and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.29. From the Table it can be observed that R^2 are 0.1751, 0.2594, 0.1286, 0.1723, 0.2898, 0.3823, 0.3810, 0.2332, 0.1845, 0.2610, 0.2210, 0.0468, 0.1525, 0.1028, 0.0674, 0.0350, 0.1792, 0.3190 and 0.2469 respectively. $\bar{R}^2$ are found to be 0.0927, 0.1834, 0.0393, 0.0896, 0.2188, 0.3206, 0.3191, 0.1565, 0.1029, 0.1871, 0.1431, -0.0485, 0.0677, 0.0131, -0.0259, -0.0615, 0.0365, 0.2005 and 0.1159 respectively. The highest $\bar{R}^2$ is found to be 0.3206 (1986) and the lowest $\bar{R}^2$ is found to be -0.0615 (1996).

The coefficients of GFA/TGA are found to be -1.3228, -5.8883, -2.2233, -0.0027, -3.7822, -4.7378, -4.6215, -3.2007, -1.6476, -2.0661, -1.6215, -1.6871, -2.3015, -1.0502, 0.2257, 0.5317, 1.9409, 2.2409 and

0.8393 respectively. The t values are -0.398, -3.338, -1.245, -0.088, -3.652, -4.378, -4.726, -2.918, -1.787, -2.203, -1.501, -1.038, -2.051, -1.117, 0.185, 0.489, 1.566, 2.238 and 0.831 respectively. It is worth mentioning here that negative significant impact is found for 9 years. This is contradictory to trade-off theory. The positive significant impact is found for 2 years. This is in line with trade-off theory. This is very surprising that contradicting impact of the same variable is found for different years.

The coefficients of OPI/TGA are -0.1613, -0.1223, -0.0750, -0.1219, -0.0871, -0.0893, -0.0976, -0.0889, -0.0602, -0.0838, -0.1067, -0.0507, -0.0847, -0.0342, -0.0067, 0.0142, 0.0170, 0.0189 and 0.0159. The t values are -1.722, -1.988, -1.387, -2.523, -2.930, -3.093, -2.991, -2.760, -2.205, -2.340, -2.823, -1.038, -2.462, -1.398, -0.193, 0.395, 0.499, 0.564 and 0.495 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 12 years. This is in line with pecking order theory.

The coefficients of OPI/Sale are -0.0167, 0.0943, 0.0098, 0.0659, 0.0780, 0.0858, 0.0694, 0.0557, 0.0155, 0.0228, 0.0281, 0.0210, 0.0563, -0.0035, -0.0381, -0.0341, -0.0600, -0.0695 and -0.0748. The t values are -0.235, 1.921, 0.208, 1.292, 2.296, 2.479, 2.329, 1.819, 0.532, 0.797, 0.821, 0.486, 1.768, -0.378, -1.099, -1.103, -1.793, -2.550 and -2.434 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 6 years. This is in line with pecking order theory.

Similarly the coefficients of Average size are -0.0001, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000 and 0.0000 respectively. The highest and lowest coefficients are 0.0000 and -0.0001 respectively. The values of t are found to be -1.272, -0.238, -0.794, -1.686, -0.096, -1.425, -1.360, -1.445, -1.199, -1.938, -1.350, -0.378, -0.356, 0.349, 0.564, 0.589, 0.503, 0.521 and 0.467 respectively. Only for 1 year Average size is found to have positive significant effect.

The F value are 4.963, 3.790, 1.439, 2.082, 4.080, 6.190, 6.154, 3.041, 2.262, 3.532, 2.837, 0.491, 1.799, 1.146, 0.723, 0.362, 1.255, 2.693 and 1.845. It is worth mentioning here that out of 19 years under study, significant F value is found only for 7 years, indicating thereby the good explanatory power of four variables for changes in D/E ratio.

e. With RUN 5:

Considering the D/E ratio to be a dependent variable, and NFA/TNA and PBT/TNA as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.29. From the Table it can be observed that R^2 are 0.0079, 0.0995, 0.2118, 0.1965, 0.2376, 0.2264, 0.1698, 0.2654, 0.3345, 0.4427, 0.4403, 0.2609, 0.2976, 0.3955, 0.2921, 0.2486, 0.2305, 0.2818 and 0.2877 respectively. $\bar{R}^2$ are found to be -0.0393, 0.0556, 0.1738, 0.1582, 0.2013, 0.1895, 0.1302, 0.2304,

0.3028, 0.4162, 0.4136, 0.2257, 0.2642, 0.3667, 0.2590, 0.2128, 0.1689, 0.2243 and 0.2308 respectively. The highest $\bar{R}^2$ is 0.4162 (1990) and the lowest $\bar{R}^2$ is -0.0393 (1981).

The coefficients of NFA/TNA are found to be -0.6528, -2.6218, -1.2014, -0.1481, -2.1092, -2.5416, -2.3101, -1.4360, -0.9362, -1.7115, -1.5403, -1.7734, -1.6810, -2.3777, -1.4976, -1.2532, -0.1897, 0.0188 and -0.8459 respectively. The t values are -0.260, -1.905, -1.010, -0.104, -2.074, -2.492, -2.182, -1.633, -1.289, -2.143, -1.980, -1.753, -2.288, -3.485, -2.080, -1.557, -0.190, 0.021 and -0.869 respectively. It is worth mentioning here that negative significant impact is found for 11 years. This is not in line with trade-off theory. For all other years the impact of NFA/TNA on D/E ratio is found to be insignificant.

The coefficients of PBT/TNA are -0.0406, -0.0485, -0.1015, -0.1101, -0.0620, -0.0486, -0.0620, -0.0786, -0.0752, -0.1010, -0.1294, -0.0998, -0.0808, -0.0859, -0.0432, -0.0376, -0.0608, -0.0447 and -0.0630 respectively. The t values are -0.558, -1.192, -3.296, -3.190, -3.295, -2.787, -2.514, -3.849, -4.590, 5.748, -5.739, -3.807, -4.098, -5.092, -4.118, -3.724, -2.677, -2.892 and -3.152 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for as many as 17 years. This is in line with pecking order theory. Only for two years the impact of PBT/TNA on D/E ratio is found to be insignificant.

The F values are 0.168, 2.265, 5.509, 5.134, 6.546, 6.145, 4.294, 7.586, 10.553, 16.684, 16.517, 7.412, 8.898, 13.738, 8.691, 6.947, 3.743, 4.904 and 5.050. It is worth mentioning here that out of 19 years under study, significant F value is found for 17 years, indicating thereby the significant dependence of D/E ratio on independent variables NFA/TNA and PBT/TNA.

f. With RUN 6:

Considering the D/E ratio to be a dependent variable, and NFA/TNA, PBT/TNA and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.29. From the Table it can be observed that R^2 are 0.0375, 0.1179, 0.2321, 0.2472, 0.2378, 0.2714, 0.1834, 0.2835, 0.3576, 0.4860, 0.4612, 0.2609, 0.3057, 0.4275, 0.2965, 0.2503, 0.2334, 0.2862 and 0.2886 respectively. $\bar{R}^2$ are -0.0330, 0.0518, 0.1746, 0.1921, 0.1820, 0.2181, 0.1236, 0.2310, 0.3106, 0.4484, 0.4217, 0.2068, 0.2549, 0.3856, 0.2450, 0.1954, 0.1375, 0.1970 and 0.1997 respectively. The highest $\bar{R}^2$ is 0.4484 (1990) and the lowest $\bar{R}^2$ is -0.0330 (1981).

The coefficients of NFA/TNA are found to be -0.3621, -2.3417, -0.9780, 0.1370, -2.1057, -2.4025, -2.2618, -1.4258, -0.8887, -1.6294, -1.3868, -1.7734, -1.8287, -2.7802, -1.6079, -1.3237, -0.0656 0.1551 and -0.9013 respectively. It is important to note here that out of 19 years under study, for 17 years the coefficient is found to be negative. The t values are

-0.144, -1.658, -0.810, 0.097, -2.045, -2.389, -2.125, -1.622, -1.228, -2.096, -1.774, -1.681, -2.376, -3.846, -2.105, -1.565, -0.060, 0.158 and -0.862 respectively. It is worth mentioning here that negative significant impact is found for 11 years. Again this is not in line with trade-off theory. For all other years the impact of NFA/TNA on D/E ratio is found to be insignificant.

The coefficients of PBT/TNA are -0.0396, -0.0458, -0.1022, -0.1138, -0.0621, -0.0486, -0.0621, -0.0794, -0.0752, -0.1010, -0.1289, -0.0998, -0.0810, -0.0883, -0.0436, -0.0379, -0.0600, -0.0439 and -0.0636. The t values are -0.546, -1.122, -3.323, -3.359, -3.252, -2.839, -2.509, -3.891, -4.616, -5.912, -5.755, -3.756, -4.083, -5.290, -4.104, -3.697, -2.577, -2.760 and -3.072 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for as many as 17 years. This is in line with pecking order theory.

Similarly the coefficients of Average size are -0.0001, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, -0.0000 and 0.0000 respectively. The highest and lowest coefficients are 0.0000 and -0.0001 respectively. The t values are -1.121, -0.914, -1.029, -1.663, -0.098, -1.591, -0.826, -1.018, -1.217, -1.859, -1.261, -0.00004, 0.692, 1.513, 0.468, 0.306, -0.302, -0.386 and 0.169 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for only 3 years and positive significant impact is for only 1 year. For all other 15 years the impact of

Average size on D/E ratio was found to be insignificant.

The F values are 0.532, 1.782, 4.031, 4.488, 4.264, 5.090, 3.068, 5.407, 7.609, 12.924, 11.496, 4.824, 6.018, 10.203, 5.759, 4.563, 2.435, 3.207 and 3.245. It is worth mentioning here that out of 19 years under study, significant F value is found for 15 years. This tends to suggest that for 15 years the selected model fits well for explaining changes in D/E.

g. With RUN 7:

Considering the D/E ratio to be a dependent variable, and NFA/TNA, OPI/Sale and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.29. From the Table it can be observed that R^2 are 0.1545, 0.0917, 0.0877, 0.0555, 0.0463, 0.1291, 0.0580, 0.0274, 0.0696, 0.1235, 0.0701, 0.0156, 0.0264, 0.0803, 0.0661, 0.0359, 0.1570, 0.3044 and 0.2450 respectively. $\bar{R}^2$ are 0.0926, 0.0235, 0.0192, -0.0137, -0.0235, 0.0654, -0.0110, -0.0438, 0.0015, 0.0594, 0.0020, -0.0564, -0.0448, 0.0130, -0.0022, -0.0346, 0.0516, 0.2174 and 0.1506 respectively. The highest $\bar{R}^2$ is found to be 0.2174 for the year 1998 and the lowest $\bar{R}^2$ is found to be -0.0564 for the year 1992.

Similarly the coefficients of NFA/TNA are 4.5081, -0.3468, 0.8845 1.4712, -1.6356, -2.1100, -1.4628, -0.2806, 0.3675, 0.0360, 0.6258, -0.1970, -0.7138,

-0.9438, 0.2969, 0.6355, 1.6145, 2.0194 and 0.8560 respectively. It is important to note here that out of 19 years under study, for 10 years the coefficients are found to be positive. The t values are 1.511, -1.395, 0.609, 0.803, -1.400, -1.778, -1.270, -0.269, 0.408, 0.036, 0.568, -0.157, -0.775, -1.165, 0.313, 0.594, 1.366, 2.173 and 0.867 respectively. It is worth mentioning here that negative significant impact is found for 4 years and positive significant impact is found for 2 years. The latter is in line with trade-off theory. For all other years the impact of NFA/TNA on D/E ratio is found to be insignificant. It is very important to note here that the impact of one factor is contradictory for different years.

The coefficients of OPI/Sale are -0.1379, 0.0095, -0.0552, -0.0384, 0.0138, 0.0062, -0.0008, -0.0143, -0.0346, -0.0348, -0.0424, -0.0169, -0.0068, -0.0106, -0.0424, -0.0294, -0.0461, -0.0601 and -0.0665. The t values are -2.452, 0.258, -1.720, -0.817, 0.465, 0.212, -0.031, -0.598, -1.421, -1.880, -1.397, -0.614, -0.353, -1.394, -1.606, -1.228, -1.966, -2.905 and -2.740 respectively. Out of 19 years under study, negative significant impact is found for 10 years. This is in line with pecking order theory. Also positive significant impact is found for 1 year. This is in line with trade-off theory.

Similarly the coefficients of Average size are -0.0001, -0.0000, -0.0000, -0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000 and 0.0000 respectively. The highest and lowest coefficients are 0.0000 and -0.0001 respectively. The

values of t are -1.595, -0.898, -1.079, -1.399, 0.226, -1.428, -0.745, -0.599, -0.619, -1.338, -0.625, -0.152, 0.558, 0.864, 0.532, 0.570, 0.278, 0.298 and 0.303 respectively. It is worth mentioning here that out of 19 years, negative significant impact is found only for 4 years. For all other years the impact of Average size on D/E ratio is found to be insignificant.

The F values are 2.497, 1.345, 1.281, 0.802, 0.663, 2.025, 0.841, 0.385, 1.022, 1.926, 1.030, 0.217, 0.371, 1.193, 0.968, 0.509, 1.490, 3.500 and 2.596, It is worth mentioning here that out of 19 years under study, significant F value is found only for 1 year. This tends to suggest that only for 1 year the model fits well.

h. With RUN 8:

Considering the D/E ratio to be a dependent variable, and NFA/TNA, PBT/TNA, OPI/Sale and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.29. From the Table it can be observed that R^2 are 0.1658, 0.1330, 0.2321, 0.2665, 0.3415, 0.3473, 0.2360, 0.3296, 0.3719, 0.4867, 0.4830, 0.3196, 0.4153, 0.4426, 0.3013, 0.2608, 0.2818, 0.3849 and 0.3463 respectively. $\bar{R}^2$ are 0.0823, 0.0441, 0.1534, 0.1932, 0.2757, 0.2820, 0.1596, 0.2625, 0.3091, 0.4354, 0.4313, 0.2516, 0.3569, 0.3868, 0.2315, 0.1868, 0.1569, 0.2779 and 0.2326 respectively. The highest $\bar{R}^2$ is found to be 0.4354 (1990) and the lowest $\bar{R}^2$ is 0.0441 (1982).

The coefficients of NFA/TNA are 5.6891, -3.2413, -0.9917, -0.9902, -3.0221, -3.6370, -3.2649, -2.2377, -1.2954, -1.6980, -2.1326, -1.1582, -3.1550, -3.0165, -1.3242, -0.8704, 0.6246, 1.0705 and -0.2768 respectively. The t values are 1.672, -1.812, -0.654, -0.554, -2.918, -3.245, -2.711, -2.259, -1.541, -2.023, -2.210, -2.492, -3.653, -3.985, -1.409, -0.835, 0.512, 1.022 and -0.248 respectively. It is worth mentioning here that negative significant impact is found for 12 years. Also positive significant impact is found for 1 year. This is in line with trade-off theory. For remaining years the impact of NFA/TNA on D/E is found to be insignificant.

The coefficients of PBT/TNA are 0.0580, -0.0620, -0.1026, -0.1356, -0.0867, -0.0710, -0.0888, -0.1003, -0.0853, -0.1031, -0.1461, -0.1340, -0.1190, -0.0985, -0.0417, -0.0365, -0.0492, -.0293 and -0.0453. The t values are 0.735, -1.364, -2.709, -3.392, -4.235, -3.657, -3.053, -4.246, -4.388, -5.321, -5.652, -4.228, -5.158, -5.098, -3.670, -3.488, -1.999, -1.735 and -1.888 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for as many as 18 years. The findings is in line with pecking order theory.

The coefficients of OPI/Sale are -0.1619, 0.0335, 0.0006, 0.0507, 0.0711, 0.0650, 0.0453, 0.0394, 0.0230, 0.0038, 0.0347, 0.0527, 0.0521, 0.0072, -0.0129, -0.0162, -0.0295, -0.0428 and -0.0389. The t values are -2.480, 0.825, 0.015, 1.026, 2.510, 2.157, 1.661, 1.658, 0.954, 0.234, 1.299, 1.858, 2.738 1.041, -0.528, 0.752, -1.246, -1.921 and -1.425 respectively. It is worth mentioning here that

TABLE VI.29

YEARWISE MULTIPLE REGRESSIONS OF DEBT-EQUITY RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1981								
Intercept	5.7369	5.9165	3.5154	5.7141	3.1243	3.4008	3.2054	2.5543
GFA/TGA	-2.5576	-1.8639	1.6167	-1.3228				
	(-1.100)	(-0.786)	(0.553)	(-0.398)				
OPI/TGA	-0.1691	-0.1763		-0.1613				
	(-2.490)*	(-2.604)*		(-1.722)**				
AVG Size		-0.0001	-0.0001	-0.0001		-0.0001	-0.0001	-0.0002
		(-1.266)	(-1.418)***	(-1.272)		(-1.121)	(-1.595)***	(-1.657)***
OPI/Sale			-0.1005	-0.0167			-0.1379	-0.1619
			(-1.883)**	(-0.235)			(-2.452)*	(-2.480)*
NFA/TNA					-0.6528	-0.3621	4.5081	5.6891
					(-0.260)	(-0.144)	(1.511)***	(1.672)***
PBT/TNA					-0.0406	-0.0396		0.0580
					(-0.558)	(-0.546)		(0.735)
R-square	0.1417	0.1740	0.1140	0.1751	0.0079	0.0375	0.1545	0.1658
F-value	(3.467)**	(2.879)**	(1.759)	(2.123)	(0.168)	(0.532)	(2.497)	(1.987)
R-bar sqr	0.1008	0.1136	0.0492	0.0927	-0.0393	-0.0330	0.0926	0.0823
Year 1982								
Intercept	4.3417	4.3769	3.8345	5.3118	3.5032	3.5448	3.0272	3.5465
GFA/TGA	-3.8702	-3.6224	-3.9113	-5.8883				
	(-2.985)*	(-2.673)*	(-2.590)*	(-3.338)*				
OPI/TGA	-0.0297	0.0324		-0.1223				
	(-0.728)	(-0.786)		(-1.988)**				
AVG Size		-0.0000	-0.0000	0.0000		-0.0000	-0.0000	-0.0000
		(-0.679)	(-0.451)	(-0.238)		(-0.914)	(-0.898)	(-0.647)
OPI/Sale			0.0201	0.0943			0.0095	0.0335
			(0.608)	(1.921)**			(0.258)	(0.825)
NFA/TNA					-2.6218	-2.3417	-2.3468	-3.2413
					(-1.905)**	(-1.658)***	(-1.395)***	(-1.812)**
PBT/TNA					-0.0485	-0.0458		-0.0620
					(-1.192)	(-1.122)		(-1.364)***
R-square	0.1800	0.1893	0.1843	0.2594	0.0995	0.1179	0.0917	0.1330
F-value	(4.499)**	(3.113)**	(3.012)**	(3.415)**	(2.265)	(1.782)	(1.345)	(1.496)
R-bar sqr	0.1400	0.1285	0.1231	0.1834	0.0556	0.0518	0.0235	0.0441

cont.

TABLE VI.29 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1983								
Intercept	3.9310	3.9764	3.0187	4.0831	3.4941	3.5693	2.5676	3.5705
GFA/TGA	-2.2374	-1.9806	-0.7792	-2.2233				
	(-1.730)**	(-1.484)***	(-0.531)	(-1.245)				
OPI/TGA	-0.0632	-0.0665		-0.0750				
	(-1.826)**	(-1.902)**		(-1.387)***				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.824)	(-0.769)	(-0.794)		(-1.029)	(-1.079)	(-1.004)
OPI/Sale			-0.0397	0.0098			-0.0552	0.0006
			(-1.270)	(0.208)			(-1.720)**	(0.015)
NFA/TNA					-1.2014	-0.9780	0.8845	-0.9917
					(-1.010)	(-0.810)	(0.609)	(-0.654)
PBT/TNA					-0.1015	-0.1022		-0.1026
					(-3.296)*	(-3.323)*		(-2.709)*
R-square	0.1129	0.1277	0.0857	0.1286	0.2118	0.2321	0.0877	0.2321
F-value	(2.608)	(1.951)	(1.249)	(1.439)	(5.509)*	(4.031)**	(1.281)	(2.948)**
R-bar sqr	0.0696	0.0623	0.0171	0.0393	0.1738	0.1746	0.0192	0.1534
Year 1984								
Intercept	3.0539	3.4363	2.6249	3.2136	3.2656	3.4617	2.3562	3.4664
GFA/TGA	0.0056	0.0015	0.0007	-0.0027				
	(0.180)	(0.048)	(0.022)	(-0.088)				
OPI/TGA	-0.0720	-0.0807		-0.1219				
	(-1.954)**	(-2.205)**		(-2.523)*				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.607)***	(-1.254)	(-1.686)***		(-1.663)***	(-1.399)***	(-1.502)***
OPI/Sale			-0.0190	0.0659			-0.0384	0.0507
			(-0.467)	(1.292)			(-0.817)	(1.026)
NFA/TNA					-0.1481	0.1370	1.4712	-0.9902
					(-0.104)	(0.097)	(0.803)	(-0.554)
PBT/TNA					-0.1101	-0.1138		-0.1356
					(-3.190)*	(-3.359)*		(-3.392)*
R-square	0.0835	0.1378	0.0406	0.1723	0.1965	0.2472	0.0555	0.2665
F-value	(1.913)	(2.184)	(0.578)	(2.082)	(5.134)**	(4.488)*	(0.802)	(3.633)**
R-bar sqr	0.0398	0.0747	-0.0296	0.0896	0.1582	0.1921	-0.0137	0.1932

cont.

TABLE VI.29 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1985								
Intercept	3.9768	3.9863	3.1363	4.0241	3.3304	3.3398	2.3773	3.0515
GFA/TGA	-3.0252	-3.0248	-2.6758	-3.7822				
	(-2.968)*	(-2.932)*	(-2.549)*	(-3.652)*				
OPI/TGA	-0.0411	-0.0413		-0.0871				
	(-1.818)**	(-1.783)**		(-2.930)*				
AVG Size		-0.0090	0.0000	-0.0000		-0.0000	0.0000	0.0000
		(-0.068)	(0.259)	(-0.096)		(-0.098)	(0.226)	(0.096)
OPI/Sale			0.0112	0.0780			0.0138	0.0711
			(0.410)	(2.296)**			(0.465)	(2.510)*
NFA/TNA					-2.1092	-2.1057	-1.6356	-3.0221
					(-2.074)**	(-2.045)**	(-1.400)***	(-2.918)*
PBT/TNA					-0.0620	-0.0621		-0.0867
					(-3.295)*	(-3.252)*		(-4.235)*
R-square	0.1961	0.1962	0.1374	0.2898	0.2376	0.2378	0.0463	0.3415
F-value	(5.123)*	(3.336)**	(2.176)	(4.080)*	(6.546)*	(4.264)**	(0.663)	(5.187)*
R-bar sqr	0.1578	0.1374	0.0743	0.2188	0.2013	0.1820	-0.0235	0.2757
Year 1986								
Intercept	4.0763	4.1571	3.5084	4.4856	3.2374	3.3628	2.7507	3.2477
GFA/TGA	-3.6420	-3.4008	-3.2314	-4.7378				
	(-3.687)*	(-3.417)*	(-3.042)*	(-4.378)*				
OPI/TGA	-0.033	-0.0371		-0.0893				
	(-1.580)***	(-1.770)**		(-3.093)*				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.336)***	(-1.018)	(-1.425)***		(-1.591)**	(-1.428)***	(-1.438)**
OPI/Sale			0.0077	0.0858			0.0062	0.0650
			(0.295)	(2.479)*			(0.212)	(2.157)**
NFA/TNA					-2.5416	-2.4025	-2.1100	-3.6370
					(-2.492)*	(-2.389)*	(-1.778)**	(-3.245)*
PBT/TNA					-0.0486	-0.0486		-0.0710
					(-2.787)*	(-2.839)*		(-3.657)*
R-square	0.2564	0.2875	0.2346	0.3823	0.2264	0.2714	0.1291	0.3473
F-value	(7.242)*	(5.514)*	(4.189)**	(6.190)*	(6.145)*	(5.090)*	(2.025)	(5.321)*
R-bar sqr	0.2210	0.2353	0.1786	0.3206	0.1895	0.2181	0.0654	0.2820

cont.

TABLE VI.29 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1987								
Intercept	4.1248	4.1819	3.5253	4.6399	3.1844	3.2593	2.4841	3.3570
GFA/TGA	-3.6737	-3.6105	-3.3036	-4.6215				
	(-4.027)*	(-3.914)*	(-3.463)*	(-4.726)*				
OPI/TGA	-0.0391	-0.0406		-0.0976				
	(-1.740)**	(-1.788)**		(-2.991)*				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.690)	(-0.514)	(-1.360)***		(-0.826)	(-0.745)	(-1.102)
OPI/Sale			0.0026	0.0694			-0.0008	0.0453
			(0.120)	(2.329)*			(-0.031)	(1.661)***
NFA/TNA					-2.3101	-2.2618	-1.4628	-3.2649
					(-2.182)**	(-2.125)**	(-1.270)**	(-2.711)*
PBT/TNA					-0.0620	-0.0621		-0.0888
					(-2.514)*	(-2.509)*		(-3.053)*
R-square	0.2888	0.2970	0.2425	0.3810	0.1698	0.1834	0.0580	0.2360
F-value	(8.528)*	(5.773)*	(4.374)*	(6.154)*	(4.294)**	(3.068)**	(0.841)	(3.089)**
R-bar sqr	0.2550	0.2455	0.1870	0.3191	0.1302	0.1236	-0.0110	0.1596
Year 1988								
Intercept	3.4917	3.5678	2.8517	4.0111	3.0615	3.1511	2.2494	3.1971
GFA/TGA	-2.1895	-2.1350	-1.7088	-3.2007				
	(-2.310)**	(-2.240)**	(-1.661)***	(-2.918)*				
OPI/TGA	-0.0447	-0.0468		-0.0889				
	(-1.961)**	(-2.034)**		(-2.760)*				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.846)	(-0.555)	(-1.445)***		(-1.018)	(-0.599)	(-1.431)***
OPI/Sale			-0.0051	0.0557			-0.0143	0.0394
			(-0.223)	(1.819)**			(-0.598)	(1.658)***
NFA/TNA					-1.4360	-1.4258	-0.2806	-2.2377
					(-1.633)***	(-1.622)***	(-0.269)	(-2.259)**
PBT/TNA					-0.0786	-0.0794		-0.1003
					(-3.849)*	(-3.891)*		(-4.246)*
R-square	0.1552	0.1697	0.0871	0.2332	0.2654	0.2835	0.0274	0.3296
F-value	(3.859)**	(2.794)	(1.304)	(3.041)**	(7.586)*	(5.407)*	(0.385)	(4.916)*
R-bar sqr	0.1150	0.1090	0.0203	0.1565	0.2304	0.2310	-0.0438	0.2625

cont.

TABLE VI.29 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1989								
Intercept	3.2452	3.3166	2.6768	3.3737	2.9461	3.0191	2.2865	3.0126
GFA/TGA	-1.5091	-1.4351	-0.8243	-1.6476				
	(-1.834)**	(-1.742)**	(-0.935)	(-1.787)**				
OPI/TGA	-0.0496	-0.0509		-0.0602				
	(-2.390)**	(-2.453)*		(-2.205)**				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.091)	(-0.613)	(-1.199)		(-1.217)	(-0.619)	(-1.444)***
OPI/Sale			-0.0258	0.0155			-0.0346	0.0230
			(-1.103)	(0.532)			(-1.421)***	(0.954)
NFA/TNA					-0.9362	-0.8887	0.3675	-1.2954
					(-1.289)**	(-1.228)	(0.408)	(-1.541)***
PBT/TNA					-0.0752	-0.0752		-0.0853
					(-4.590)*	(-4.616)*		(-4.388)*
R-square	0.1548	0.1787	0.0853	0.1845	0.3345	0.3576	0.0696	0.3719
F-value	(3.847)**	(2.973)*	(1.275)	(2.262)	(10.553)*	(7.609)*	(1.022)	(5.922)*
R-bar sqr	0.1146	0.1186	0.0184	0.1029	0.3028	0.3106	0.0015	0.3091
Year 1990								
Intercept	3.5788	3.7580	3.1500	3.9131	3.5258	3.6429	2.6531	3.6429
GFA/TGA	-1.8742	-1.7706	-1.2130	-2.0661				
	(-2.134)**	(-2.065)**	(-1.333)***	(-2.203)**				
OPI/TGA	-0.0555	-0.0608		-0.0838				
	(-2.577)*	(-2.871)*		(-2.340)**				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.802)**	(-1.257)	(-1.938)**		(-1.859)**	(-1.338)***	(-1.847)**
OPI/Sale			-0.0311	0.0228			-0.0348	0.0038
			(-1.733)**	(0.797)			(-1.880)**	(0.234)
NFA/TNA					-1.7115	-1.6294	0.0360	-1.6980
					(-2.143)**	(-2.096)**	(0.036)	(-2.023)**
PBT/TNA					-0.1010	-0.1010		-0.1031
					(-5.748)*	(-5.912)*		(-5.321)*
R-square	0.1898	0.2493	0.1599	0.2610	0.4427	0.4860	0.1235	0.4867
F-value	(4.921)**	(4.538)*	(2.601)	(3.532)**	(16.684)*	(12.924)*	(1.926)	(9.483)*
R-bar sqr	0.1513	0.1943	0.0984	0.1871	0.4162	0.4484	0.0594	0.4354

cont.

TABLE VI.29 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1991								
Intercept	3.8209	3.8719	2.8519	4.0015	3.8230	3.8662	2.6117	3.8853
GFA/TGA	-1.3212	-1.1541	-0.3893	-1.6215				
	(-1.459)***	(-1.262)	(-0.364)	(-1.501)***				
OPI/TGA	-0.0861	-0.0879		-0.1067				
	(-2.871)*	(-2.935)*		(-2.823)*				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.135)	(-0.599)	(-1.350)		(-1.261)	(-0.625)	(-1.603)***
OPI/Sale			-0.0304	0.0281			-0.0424	0.0347
			(-1.034)	(0.821)			(-1.397)***	(1.299)
NFA/TNA					-1.5403	-1.3868	0.6258	-2.1326
					(-1.980)**	(-1.774)**	(0.568)	(-2.210)**
PBT/TNA					-0.1294	-0.1289		-0.1461
					(-5.739)*	(-5.755)*		(-5.652)*
R-square	0.1830	0.2079	0.0658	0.2210	0.4403	0.4612	0.0701	0.4830
F-value	(4.703)**	(3.586)**	(0.963)	(2.837)**	(16.517)*	(11.496)*	(1.030)	(9.342)*
R-bar sqr	0.1441	0.1499	0.0026	0.1431	0.4136	0.4217	0.0020	0.4313
Year 1992								
Intercept	3.2518	3.2659	2.7998	3.4870	3.7930	3.7930	2.6071	3.9590
GFA/TGA	-1.2536	-1.1878	-0.6534	-1.6871				
	(-1.038)	(-0.952)	(-0.508)	(-1.038)				
OPI/TGA	-0.0309	-0.0319		-0.0507				
	(-1.065)	(-1.079)		(-1.038)				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	0.0000
		(-0.259)	(-0.073)	(-0.378)		(-0.000)	(-0.152)	(-0.026)
OPI/Sale			-0.0145	0.0210			-0.0169	0.0527
			(-0.548)	(0.486)			(-0.614)	(1.858)**
NFA/TNA					-1.7734	-1.7734	-0.1970	-3.1582
					(-1.753)**	(-1.681)***	(-0.157)	(-2.492)*
PBT/TNA					-0.0998	-0.0998		-0.1340
					(-3.807)*	(-3.756)*		(-4.228)*
R-square	0.0396	0.0412	0.0212	0.0468	0.2609	0.2609	0.0156	0.3196
F-value	(0.867)	(0.587)	(0.296)	(0.491)	(7.412)*	(4.824)*	(0.217)	(4.697)*
R-bar sqr	-0.0061	-0.0290	-0.0505	-0.0485	0.2257	0.2068	-0.0564	0.2516

cont.

TABLE VI.29 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1993								
Intercept	3.0060	3.0010	2.4921	3.5515	3.3863	3.3823	2.4009	3.5994
GFA/TGA	-1.0529	-1.1175	-0.6793	-2.3015				
	(-1.188)	(-1.210)	(-0.706)	(-2.051)**				
OPI/TGA	-0.0348	-0.0341		-0.0847				
	(-1.810)**	(-1.740)**		(-2.462)*				
AVG Size		0.0000	0.0000	-0.0000		0.0000	0.0000	0.0000
		(0.287)	(0.540)	(-0.356)		(0.692)	(0.558)	(0.507)
OPI/Sale			-0.0089	0.0563			-0.0068	0.0521
			(-0.471)	(1.768)**			(-0.353)	(2.738)*
NFA/TNA					-1.6810	-1.8287	-0.7138	-3.1550
					(-2.288)**	(-2.376)**	(-0.775)	(-3.653)*
PBT/TNA					-0.0808	-0.0810		-0.1190
					(-4.098)*	(-4.083)*		(-5.158)*
R-square	0.0844	0.0862	0.0240	0.1525	0.2976	0.3057	0.0264	0.4153
F-value	(1.935)	(1.289)	(0.336)	(1.799)	(8.898)*	(6.018)*	(0.371)	(7.104)*
R-bar sqr	0.0408	0.0193	-0.0474	0.0677	0.2642	0.2549	-0.0448	0.3569
Year 1994								
Intercept	2.7349	2.7313	2.1269	2.6741	3.4677	3.5265	2.1722	3.6124
GFA/TGA	-1.0667	-1.1349	-0.5558	-1.0502				
	(-1.235)	(-1.257)	(-0.631)	(-1.117)				
OPI/TGA	-0.0403	-0.0394		-0.0342				
	(-2.062)**	(-1.978)**		(-1.398)***				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(0.297)	(0.639)	(0.349)		(1.513)***	(0.864)	(1.517)***
OPI/Sale			-0.0108	-0.0035			-0.0106	0.0072
			(-1.404)***	(-0.378)			(-1.394)***	(1.041)
NFA/TNA					-2.3777	-2.7802	-0.9438	-3.0165
					(-3.485)*	(-3.846)*	(-1.165)	(-3.985)*
PBT/TNA					-0.0859	-0.0883		-0.0985
					(-5.092)*	(-5.290)*		(-5.098)*
R-square	0.0977	0.0996	0.0590	0.1028	0.3955	0.4275	0.0803	0.4426
F-value	(2.274)	(1.512)	(0.857)	(1.146)	(13.738)*	(10.203)*	(1.193)	(7.939)*
R-bar sqr	0.0547	0.0338	-0.0099	0.0131	0.3667	0.3856	0.0130	0.3868

cont.

TABLE VI.29 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1995								
Intercept	2.2196	2.2529	1.9457	2.0197	2.6959	2.7025	1.9982	2.7169
GFA/TGA	-0.5380	-0.6268	0.3447	0.2257				
	(-0.618)	(-0.688)	(0.341)	(0.185)				
OPI/TGA	-0.0288	-0.0314		-0.0067				
	(-1.147)	(-1.192)		(-0.193)				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(0.369)	(0.557)	(0.564)		(0.468)	(0.532)	(0.582)
OPI/Sale			-0.0425	-0.0381			-0.0424	-0.0129
			(-1.631)***	(-1.099)			(-1.606)***	(-0.528)
NFA/TNA					-1.4976	-1.6079	0.2969	-1.3242
					(-2.080)**	(-2.105)**	(0.313)	(-1.409)***
PBT/TNA					-0.0432	-0.0436		-0.0417
					(-4.118)*	(-4.104)*		(-3.670)*
R-square	0.0361	0.0392	0.0665	0.0674	0.2921	0.2965	0.0661	0.3013
F-value	(0.785)	(0.558)	(0.974)	(0.723)	(8.691)*	(5.759)*	(0.968)	(4.313)*
R-bar sqr	-0.0099	-0.0311	-0.0018	-0.0259	0.2590	0.2450	-0.0022	0.2315
Year 1996								
Intercept	1.7861	1.7900	1.6660	1.5530	2.4793	2.4798	1.6520	2.4479
GFA/TGA	-0.1604	-0.1765	0.3991	0.5317				
	(-0.187)	(-0.201)	(0.390)	(0.489)				
OPI/TGA	-0.0104	-0.0113		0.0142				
	(-0.398)	(-0.408)		(0.395)				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(0.108)	(0.561)	(0.589)		(0.306)	(0.570)	(0.627)
OPI/Sale			-0.0263	-0.0341			-0.0294	-0.0162
			(-1.120)	(-1.103)			(-1.228)	(-0.752)
NFA/TNA					-1.2532	-1.3237	0.6355	-0.8704
					(-1.557)***	(-1.565)***	(0.594)	(-0.835)
PBT/TNA					-0.0376	-0.0279		-0.0365
					(-3.724)*	(-3.697)*		(-3.488)*
R-square	0.0054	0.0056	0.0312	0.0350	0.2486	0.2503	0.0359	0.2608
F-value	(0.113)	(0.078)	(0.440)	(0.362)	(6.947)*	(4.563)	(0.509)	(3.527)**
R-bar sqr	-0.0420	-0.0671	-0.0397	-0.0615	0.2128	0.1954	-0.0346	0.1868

cont.

TABLE VI.29 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1997								
Intercept	1.4918	1.4705	1.2933	1.1491	2.2192	2.2019	1.4820	2.1444
GFA/TGA	0.7850	0.9237	1.7727	1.9409				
	(0.724)	(0.802)	(1.510)***	(1.566)***				
OPI/TGA	-0.0267	-0.0257		0.0170				
	(-1.077)	(-1.011)		(0.499)				
AVG Size		-0.0000	0.0000	0.0000		-0.0000	0.0000	0.0000
		(-0.420)	(0.383)	(0.503)		(-0.302)	(0.278)	(0.210)
OPI/Sale			-0.0483	-0.0600			-0.0461	-0.0295
			(-2.052)**	(-1.793)**			(-1.966)**	(-1.246)
NFA/TNA					-0.1897	-0.0656	1.6145	0.6246
					(-0.190)	(-0.060)	(1.366)***	(0.512)
PBT/TNA					-0.0608	-0.0600		-0.0492
					(-2.677)*	(-2.577)*		(-1.999)**
R-square	0.0578	0.0645	0.1703	0.1792	0.2305	0.2334	0.1570	0.2818
F-value	(0.765)	(0.552)	(1.642)	(1.255)	(3.743)**	(2.435)	(1.490)	(2.256)
R-bar sqr	-0.0177	-0.0524	0.0666	0.0365	0.1689	0.1375	0.0516	0.1569
Year 1998								
Intercept	1.4505	1.4253	1.2136	1.0078	1.9313	1.9136	1.4063	1.8671
GFA/TGA	0.9792	1.1132	2.0228	2.2409				
	(1.040)	(1.118)	(2.222)**	(2.238)**				
OPI/TGA	-0.0381	-0.0363		0.0189				
	(-1.374)***	(-1.279)		(0.564)				
AVG Size		-0.0000	0.0000	0.0000		-0.0000	0.0000	0.0000
		(-0.480)	(0.440)	(0.521)		(-0.386)	(0.298)	(0.256)
OPI/Sale			-0.0596	-0.0695			-0.0601	-0.0428
			(-2.903)*	(-2.550)*			(-2.905)*	(-1.921)**
NFA/TNA					0.0188	0.1551	2.0194	1.0705
					(0.021)	(0.158)	(2.173)**	(1.022)
PBT/TNA					-0.0447	-0.0439		-0.0293
					(-2.892)*	(-2.760)*		(-1.735)**
R-square	0.1181	0.1265	0.3095	0.3190	0.2818	0.2862	0.3044	0.3849
F-value	(1.674)	(1.158)	(3.586)**	(2.693)	(4.904)**	(3.207)**	(3.500)**	(3.359)**
R-bar sqr	0.0475	0.0173	0.2232	0.2005	0.2243	0.1970	0.2174	0.2779

cont.

TABLE VI.29 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1999								
Intercept GFA/TGA	1.6784 0.1598 (0.155)	1.6891 0.2234 (0.208)	1.8080 0.7163 (0.743)	1.6618 0.8393 (0.831)	2.2785	2.2846	1.8418	2.3271
OPI/TGA	-0.0306 (-1.099)	-0.0307 (-1.082)		0.0159 (0.495)				
AVG Size		-0.0000 (-0.298)	0.0000 (0.383)	0.0000 (0.467)		0.0000 (0.169)	0.0000 (0.303)	0.0000 (0.418)
OPI/Sale			-0.0658 (-2.706)*	-0.0748 (-2.434)**			-0.0665 (-2.740)*	-0.0389 (-1.425)***
NFA/TNA					-0.8459 (-0.869)	-0.9013 (-0.862)	0.8560 (0.867)	-0.2768 (-0.248)
PBT/TNA					-0.0630 (-3.152)*	-0.0636 (-3.072)*		-0.0453 (-1.888)**
R-square F-value R-bar sqr	0.0493 (0.649) -0.0267	0.0529 (0.446) -0.0655	0.2389 (2.510) 0.1437	0.2469 (1.845) 0.1159	0.2877 (5.050)* 0.2308	0.2886 (3.245)** 0.1997	0.2450 (2.596) 0.1506	0.3463 (3.046)** 0.2326

*, **, *** indicates significance at 1%, 5% and 10% level respectively.

out of 19 years under study, positive significant impact is found for 7 years. This is in line with trade-off theory. Also negative significant impact is found for 2 years. It is in line with pecking order theory. For all other years the impact of OPI/Sale on D/E ratio is found to be insignificant.

Similarly the coefficients of Average size are -0.0001, -0.0000, -0.0000, -0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000 and 0.0000 respectively. The highest and lowest coefficients are 0.0000 and -0.0001 respectively. The t values are -1.657, -0.647, -1.004, -1.502, 0.096, -1.438, -1.102, -1.431, -1.444, -1.847, -1.603, -0.026, 0.507, 1.517, 0.582, 0.627, 0.210, 0.256 and 0.418 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 7 years. Also positive significant t value is found for 1 year. For all other 11 years the impact of Average size on D/E ratio was found to be insignificant.

The F values are 1.987, 1.496, 2.948, 3.633, 5.187, 5.321, 3.089, 4.916, 5.922, 9.483, 9.342, 4.697, 7.104, 7.939, 4.313, 3.527, 2.256, 3.359 and 3.046. It is worth mentioning here that out of 19 years under study, significant F value is found for 16 years. This indicates that with selection of these four independent variables the model fits well.

II. LONG-TERM DEBT TO TOTAL ASSETS RATIO:

a. With RUN 1:

Considering the LTD/TA ratio to be a dependent variable, and GFA/TGA and OPI/TGA as independent

variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.30. From the Table it can be observed that R^2 are 0.3560, 0.2589, 0.2399, 0.0308, 0.1661, 0.2874, 0.2742, 0.3517, 0.3503, 0.4810, 0.4981, 0.3903, 0.4982, 0.4564, 0.2440, 0.1942, 0.5463, 0.4314, and 0.4071 respectively. $\bar{R}^2$ are 0.3253, 0.2227, 0.2028, -0.0154, 0.1263, 0.2534, 0.2397, 0.3208, 0.3194, 0.4562, 0.4742, 0.3613, 0.4744, 0.4305, 0.2080, 0.1558, 0.5010, 0.3859 and 0.3597 respectively. The highest $\bar{R}^2$ is 0.5010 (1997) and the lowest $\bar{R}^2$ is -0.0154 (1984).

The coefficients of GFA/TGA are 0.4649, 0.3649, 0.3150, -0.0001, 0.2272, 0.2926, 0.2286, 0.3673, 0.2978, 0.3704, 0.4274, 0.3254, 0.3387, 0.3593, 0.3229, 0.3512, 0.4639, 0.3856 and 0.2228 respectively. It is important to note here that out of 19 years under study, for 18 years the coefficient is found to be negative. The t values are 4.746, 3.733, 3.371, -0.061, 2.883, 3.954, 3.896, 4.769, 4.689, 6.136, 6.343, 5.021, 6.221, 5.471, 3.682, 3.126, 4.593, 3.281 and 2.525 respectively. It is worth mentioning here that positive significant impact is found for 18 years. This is in line with trade-off theory.

The coefficients of OPI/TGA are -0.0010, 0.0004, -0.0008, -0.0026, 0.0007, 0.0029, 0.0024, 0.0013, 0.0001, -0.0004, -0.0007, 0.0002, -0.0002, -0.0003, 0.0008, 0.0001, -0.0081, -0.0085 and -0.0070. It is important to note here that out of 19 years under

study, for 10 years the coefficients are found to be negative. The t values are -0.358, 0.122, -0.333, -1.149, 0.410, 1.823, 1.631, 0.717, 0.090, -0.250, -0.332, 0.133, -0.162, -0.235, 0.303, 0.042, -3.490, -2.463 and -2.930 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found only for 3 years. This is in line with pecking order theory. For all other 16 years the impact of OPI/TGA on LTD/TA ratio is found to be insignificant.

The F values are 11.609, 7.160, 6.471, 0.667, 4.182, 8.468, 7.935, 11.391, 11.324, 19.459, 20.840, 13.444, 20.853, 17.631, 6.779, 5.060, 15.049, 9.484 and 8.582. It is worth mentioning here that out of 19 years under study, significant F value is found for 18 years. This tends to suggest that for 18 years for these two variables model fits well for explaining changes in LTD/TA.

b. With RUN 2:

Considering the LTD/TA ratio to be a dependent variable, and GFA/TGA, OPI/TGA and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.30. From the Table it can be observed that R^2 are 0.4643, 0.3559, 0.3996, 0.0942, 0.2152, 0.3758, 0.2982, 0.3850, 0.3598, 0.4964, 0.5118, 0.3980, 0.5487, 0.5048, 0.2654, 0.1943, 0.5528, 0.4315 and 0.4071 respectively. $\bar{R}^2$ are 0.4251, 0.3076, 0.3546, 0.0279, 0.1577, 0.3301, 0.2468, 0.3400, 0.3130, 0.4596, 0.4761, 0.3539, 0.5157, 0.4686, 0.2116,

0.1354, 0.4969, 0.3604 and 0.3330 respectively. The highest $\bar{R}^2$ is 0.5157 (1993) and the lowest $\bar{R}^2$ is 0.0279 (1984).

The coefficients of GFA/TGA are 0.5267, 0.4242, 0.3772, -0.0004, 0.2279, 0.3238, 0.2355, 0.3750, 0.3019, 0.3749, 0.4392, 0.3156, 0.3106, 0.3259, 0.2967, 0.3495, 0.4457, 0.3841 and 0.2233 respectively. It is important to note here that out of 19 years under study, for 18 years the coefficient is found to be positive. The t values are 5.667, 4.447, 4.376, -0.204, 2.945, 4.542, 4.012, 4.927, 4.716, 6.216, 6.444, 4.741, 5.764, 4.968, 3.271, 3.030, 4.173, 3.074 and 2.431 respectively. It is worth mentioning here that positive significant impact is found for 8 years. This is in line with trade-off theory. For all other years the impact of GFA/TGA on LTD/TA ratio is found to be insignificant.

The coefficients of OPI/TGA are -0.0017, 0.0002, -0.0013, -0.0031, 0.0003, 0.0023, 0.0022, 0.0010, 0.0000, -0.0006, -0.0009, 0.0004, 0.0001, 0.0000, 0.0000, 0.0000, -0.0082, -0.0085 and -0.0070 respectively. It is important to note here that out of 19 years under study, for 11 years the coefficient is found to be positive. The t values are -0.625, 0.065, -0.572, -1.411, 0.151, 1.557, 1.519, 0.565, 0.046, -0.405, -0.387, 0.233, 0.100, 0.040, 0.007, 0.015, -3.487, -2.399 and -2.871 respectively. It is worth mentioning here that out of 19 years under study, negative significant t value is found only for 4 years. This is in line with pecking order theory. Also positive significant effect is found for 2 years. This

is in line with trade-off theory. For other 13 years the impact of OPI/TGA on LTD/TA ratio is found to be insignificant.

Similarly the coefficients of Average size are -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000 and -0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are -2.879, -2.454, -3.262, -1.694, -1.602, -2.410, -1.182, -1.491, -0.780, -1.123, -1.073, 0.722, 2.142, 2.002, 1.091, 0.087, 0.591, 0.042 and -0.032 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 7 years. Also positive significant impact is found for 2 years. For other 10 years the impact of Average size on LTD/TA ratio is found to be insignificant.

The F value are 11.845, 7.366, 8.876, 1.421, 3.747, 8.228, 5.806, 8.556, 7.682, 13.473, 14.327, 9.034, 16.618, 13.933, 4.937, 3.296, 9.888, 6.071 and 5.493. It is worth mentioning here that out of 19 years under study, significant F values are found for 18 years. This tends to suggest that for 18 years the model fits well.

c. With RUN 3:

Considering the LTD/TA ratio to be a dependent variable, and GFA/TGA, OPI/Sale and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.30. From the Table it can be observed that R^2 are

0.4961, 0.3783, 0.4024, 0.1383, 0.3463, 0.5155, 0.3409, 0.3912, 0.3611, 0.4950, 0.5106, 0.4099, 0.5543, 0.5079, 0.2661, 0.2039, 0.4360, 0.3914 and 0.3484 respectively. $\bar{R}^2$ are 0.4593, 0.3317, 0.3576, 0.0752, 0.2985, 0.4800, 0.2926, 0.3467, 0.3143, 0.4580, 0.4748, 0.3667, 0.5217, 0.4718, 0.2124, 0.1457, 0.3655, 0.3154 and 0.2669 respectively. The highest $\bar{R}^2$ is 0.5217 for the year 1998 and the lowest $\bar{R}^2$ is 0.0752 for the year 1992.

The coefficients of GFA/TGA are 0.4297, 0.3777, 0.3666, -0.0008, 0.2041, 0.2379, 0.1948, 0.3471, 0.2968, 0.3801, 0.4360, 0.2927, 0.3000, 0.3261, 0.3066, 0.2985, 0.5266, 0.4990 and 0.2860 respectively. The t values are 4.008, 3.795, 4.111, -0.463, 2.941, 3.678, 3.438, 4.454, 4.575, 6.273, 5.935, 4.355, 5.554, 5.227, 3.002, 2.208, 4.055, 3.753 and 2.965 respectively. It is worth mentioning here that positive significant impact is found for 18 years. This is in line with trade-off theory.

The coefficients of OPI/Sale are 0.0034, 0.0026, 0.0014, 0.0047, 0.0052, 0.0061, 0.0029, 0.0015, 0.0005, -0.0003, 0.0005, 0.0013, 0.0008, -0.0003, -0.0005, 0.0022, -0.0056, -0.0058 and -0.0056 respectively. The t values are 1.734, 1.204, 0.718, 2.048, 2.873, 3.865, 2.261, 0.860, 0.285, -0.213, 0.229, 0.939, 0.724, -0.504, -0.203, 0.703, -2.162, -1.948 and -2.310 respectively. It is worth mentioning here that out of 19 years under study, positive significant t value is found for 5 years. It is in line with trade-off theory. Also negative significant t value is found for 3 years. This is in line with

pecking order theory. For other 11 years the impact of OPI/Sale on LTD/TA ratio is found to be insignificant.

Similarly the coefficients of Average size are -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, 0.0000, 0.0000 and 0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are -2.455, -2.279, -3.159, -1.419, -1.503, -2.605, -1.647, -1.695, -0.830, -1.065, -1.076, 0.645, 2.068, 2.046, 1.141, -0.275, 1.124, 0.507 and 0.590 respectively. It is worth mentioning here that out of 19 years, negative significant t values are for 8 year. Also positive significant t value is found for 2 years. For other years the impact of Average size on LTD/TA ratio is found to be insignificant.

The F values are 13.456, 8.114, 8.979, 2.193, 7.241, 14.539, 7.068, 8.782, 7.723, 13.395, 14.260, 9.491, 16.999, 14.103, 4.956, 3.501, 6.185, 5.145 and 4.276. It is worth mentioning here that out of 19 years under study, significant F value is found for 18 years. This tends to suggest that for 18 years the model fits well.

d. With RUN 4:

Considering the LTD/TA ratio to be a dependent variable, and GFA/TGA, OPI/TGA, OPI/Sale ratios and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.30. From the Table it can be observed that R^2 are 0.5729, 0.4114, 0.4480, 0.4299,

0.4362, 0.5435, 0.3415, 0.3913, 0.3616, 0.4969, 0.5159, 0.4198, 0.5632, 0.5097, 0.2667, 0.2102, 0.5528, 0.4403 and 0.4265 respectively. $\bar{R}^2$ are 0.5302, 0.3510, 0.3914, 0.3729, 0.3799, 0.4978, 0.2756, 0.3304, 0.2977, 0.4466, 0.4674, 0.3618, 0.5195, 0.4607, 0.1934, 0.1313, 0.4750, 0.3430 and 0.3268. The highest $\bar{R}^2$ is 0.5302 (1981) and the lowest $\bar{R}^2$ is 0.0128 (1995).

The coefficients of GFA/TGA are 0.2695, 0.2654, 0.2453, -0.0011, 0.1395, 0.1877, 0.1893, 0.3439, 0.2917, 0.3700, 0.4145, 0.2494, 0.2647, 0.3361, 0.3178, 0.2734, 0.4448, 0.4217, and 0.2444 respectively. The t values are 2.314, 2.140, 2.230, -0.761, 1.992, 2.636, 2.946, 3.793, 4.061, 5.568, 5.126, 2.921, 3.957, 4.940, 2.635, 1.907, 3.624, 2.987 and 2.564 respectively. It is worth mentioning here that positive significant t value is found for 18 years. This is in line with trade-off theory.

The coefficients of OPI/TGA are -0.0088, -0.0068, -0.0061, -0.0107, -0.0051, -0.0030, -0.0004, -0.0002, -0.0004, -0.0010, -0.0019, -0.0021, -0.0018, 0.0007, 0.0006, -0.0027, -0.0082, -0.0067 and -0.0054. The t values are -2.681, -1.479, -1.795, -4.523, -2.526, -1.567, -0.192, -0.072, -0.177, -0.388, -0.657, -0.827, -0.900, 0.391, 0.181, -0.566, -2.451, -1.417 and -1.771 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 9 years. This is in line with pecking order theory.

The coefficients of OPI/Sale are 0.0080, 0.0067, 0.0054, 0.0121, 0.0091, 0.0087, 0.0032, 0.0016,

0.0007, 0.0004, 0.0015, 0.0028, 0.0022, -0.0004, -0.0009, 0.0037, 0.0000, -0.0023 and -0.0026. The t values are 3.189, 1.917, 1.849, 4.854, 3.960, 3.833, 1.622, 0.642, 0.329, 0.187, 0.579, 1.226, 1.150, -0.633, -0.270, 0.898, 0.0016, -0.603 and -0.883 respectively. It is worth mentioning here that out of 19 years under study, positive significant impact is found for 7 years. This is in line with trade-off theory.

Similarly the coefficients of Average size are -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, 0.0000, 0.0000, and 0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are -2.352, -2.044, -3.219, -2.362, -1.908, -2.795, -1.617, -1.611, -0.838, -1.121, -1.201, 0.368, 1.598, 2.062, 1.110, -0.322, 0.496, 0.277 and 0.252 respectively. It is worth mentioning here that out of 19 years, negative significant t value is for 8 years. Also positive significant t value is found for 2 years. For other 9 years the impact of Average size on LTD/TA ratio is found to be insignificant.

The F values are 13.413, 6.813, 7.914, 7.541, 7.738, 11.905, 5.186, 6.428, 5.663, 9.876, 10.655, 7.235, 12.892, 10.397, 3.637, 2.662, 7.107, 4.523 and 4.277. It is worth mentioning here that for all 19 years, F value is found significant. This necessarily indicates that the model fits well for all years.

e. With RUN 5:

Considering the LTD/TA ratio to be a dependent variable, and NFA/TNA and PBT/TNA as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.30. From the Table it can be observed that R^2 are 0.5472, 0.3845, 0.3506, 0.4818, 0.3436, 0.2895, 0.3078, 0.3391, 0.4933, 0.6167, 0.6196, 0.4515, 0.4732, 0.4721, 0.2834, 0.2814, 0.6021, 5149 and 0.5696, respectively. The values of $\bar{R}^2$ are 0.5256, 0.3545, 0.3189, 0.4571, 0.3123, 0.2557, 0.2748, 0.3076, 0.4692, 0.5985, 0.6015, 0.4254, 0.4481, 0.4469, 0.2492, 0.2471, 0.5702, 0.4761 and 0.5352 respectively. The highest $\bar{R}^2$ is 0.6015 (1991) and the lowest $\bar{R}^2$ is 0.2391 (1996).

The coefficients of NFA/TNA are 0.5709, 0.4279, 0.3806, 0.3639, 0.3101, 0.3092, 0.2641, 0.3583, 0.3455, 0.4330, 0.4766, 0.3325, 0.2875, 0.3024, 0.2430, 0.3657, 0.3445, 0.2823 and 0.1467 respectively. The t values are 6.917, 4.813, 4.617, 5.373, 4.327, 4.133, 4.290, 4.630, 6.190, 7.614, 7.829, 5.666, 5.440, 4.843, 2.946, 3.185, 3.569, 2.449 and 1.793 respectively. It is worth mentioning here that positive significant impact is found for all years. This is in line with trade-off theory.

The coefficients of PBT/TNA are -0.0009, -0.0023, 0.0000, -0.0040, -0.0013, 0.0005, 0.0011, 0.0029, -0.0000, -0.0011, -0.0005, 0.0005, -0.0013, -0.0016, -0.0019, -0.0016, -0.0084, -0.0065 and -0.0073. The t values are -0.370, -0.821, 0.035, -2.476, -0.982,

0.387, 0.774, 1.606, -0.055, -0.874, -0.262, 0.311, -0.911, -1.051, -1.576, -1.110, -3.839, -3.272 and -4.321 respectively. This is worth mentioning here that out of 19 years under study, negative significant impact is found for 5 years. It is in line with pecking order theory. Also positive significant impact is found for 1 year. This is in line with trade-off theory. For all other 13 years the impact of PBT/TNA on LTD/TA ratio is found to be insignificant.

The F values are 25.376, 12.807, 11.065, 19.523, 10.992, 8.557, 9.336, 10.775, 20.443, 33.793, 34.210, 17.287, 18.862, 18.778, 8.304, 8.222, 18.912, 13.268 and 16.542. It is worth mentioning here that for all 19 years, F value is found to be significant. This implies that the variables selected in run 5 fits well for explanation of changes in LTD/TA.

f. With RUN 6:

Considering the LTD/TA ratio to be a dependent variable, and NFA/TNA, PBT/TNA and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.30. From the Table it is observed that the values of R^2 are 0.6093, 0.4617, 0.4881, 0.5878, 0.4075, 0.3625, 0.3295, 0.3595, 0.4998, 0.6277, 0.6338, 0.4575, 0.5250, 0.5116, 0.3023, 0.2812, 0.6034, 0.5154 and 0.5726 respectively. The values of $\bar{R}^2$ are 0.5807, 0.4214, 0.4497, 0.5576, 0.3642, 0.3159, 0.2804, 0.3126, 0.4632, 0.6005, 0.6070, 0.4178, 0.4902, 0.4759, 0.2513, 0.2290, 0.5538, 0.4548 and 0.5192

respectively. The highest $\bar{R}^2$ is 0.6070 (1991) and the lowest $\bar{R}^2$ is 0.2207 (1996).

The coefficients of NFA/TNA are 0.5914, 0.4691, 0.4208, 0.3882, 0.3151, 0.3227, 0.2679, 0.3593, 0.3478, 0.4366, 0.4886, 0.3226, 0.2565, 0.2586, 0.2148, 0.3688, 0.3332, 0.2892 and 0.1353 respectively. The t values are 7,581, 5.460, 5.603, 6.303, 4.570, 4.483, 4.363, 4.659, 6.186, 7.683, 7.982, 5.300, 4.853, 3.955, 2.480, 3.054, 3.142, 2.296 and 1.544 respectively. It is worth mentioning here that positive significant impact is found for all years. This is in line with trade-off theory.

The coefficients of PBT/TNA are -0.0008, -0.0016, -0.0000, -0.0044, -0.0015, 0.0005, 0.0011, 0.0028, -0.0000, -0.0011, -0.0004, 0.0004, -0.0013, -0.0019, -0.0020, -0.0016, -0.0085, -0.0064 and -0.0074. The t values are -0.362, -0.618, -0.015, -2.952, -1.206, 0.400, 0.770, 1.562, -0.055, -0.876, -0.262, 0.272, -0.980, -1.249, -1.680, -1.084, -3.776, -3.154 and -4.256 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 5 years. This is in line with pecking order theory. Also positive significant impact is found for 1 year. This is in line with trade-off theory.

Similarly the coefficients of Average size are -0.0001, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, 0.0000, -0.0000 and 0.0000 respectively. The highest and lowest

coefficients are ±0.0000 for all years. The t values are -2.554, -2.395, -3.279, -3.247, -2.104, -2.167, -1.152, -1.142, -0.731, -1.100, -1.258, 0.673, 2.114, 1.822, 1.056, -0.094, 0.284, -0.154 and 0.413 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 6 years. And positive significant t value is for 2 years. For all other 11 years the impact of Average size on LTD/TA ratio is found to be insignificant.

The F values are 21.316, 11.437, 12.715, 19.486, 9.401, 7.771, 6.715, 7.670, 13.655, 23.045, 23.651, 11.525, 15.103, 14.317, 5.922, 5.355, 12.172, 8.508 and 10.719. It is worth mentioning here that for all 19 years, F value is significant. This tends to suggest that the model with variables selected in this run fits well.

g. With RUN 7:

Considering the LTD/TA ratio to be a dependent variable, and NFA/TNA, OPI/Sale and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.30. From the Table it is observed that the values of R^2 are 0.6107, 0.4612, 0.4895, 0.5042, 0.4603, 0.4909, 0.3622, 0.3321, 0.5045, 0.6281, 0.6379, 0.4580, 0.5143, 0.4965, 2564, 0.2624, 0.4753, 0.4209 and 0.4065 respectively. $\bar{R}^2$ are 0.5822, 0.4208, 0.4512, 0.4679, 0.4208, 0.4536, 0.3155, 0.2832, 0.4683, 0.6009, 0.6114, 0.4184, 0.4787, 0.4597, 0.2020, 0.2084, 0.4097, 0.3485 and 0.3323 respectively. The highest $\bar{R}^2$ is found to be 0.6114

for the year 1991 and the lowest $\bar{R}^2$ is found to be 0.2020 for the year 1995.

The coefficients of NFA/TNA are 0.5645, 0.4531, 0.4109, 0.4332, 0.2918, 0.2292, 0.2224, 0.3048, 0.3612, 0.4609, 0.5144, 0.3089, 0.2696, 0.2989, 0.2782, 0.3982, 0.5521, 0.5279 and 0.3281 respectively. The t values are 5.735, 4.772, 5.159, 5.535, 4.374, 3.300, 3.685, 3.801, 6.234, 8.253, 7.876, 4.928, 4.992, 5.078, 2.891, 2.917, 4.412, 4.003 and 3.465 respectively. It is worth mentioning here that positive significant impact is found for all years. This is in line with trade-off theory.

The coefficients of OPI/Sale are 0.0010, 0.0012, 0.0006, -0.0012, 0.0040, 0.0055, 0.0022, 0.0015, -0.0010, -0.0009, -0.0013, 0.0005, 0.0002, -0.0003, -0.0006, 0.0009, -0.0055, -0.0062 and -0.0058. The t values are 0.520, 0.583, 0.331, -0.579, 2.367, 3.246, 1.651, 0.811, -0.628, -0.898, -0.728, 0.339, 0.184, -0.531, -0.229, 0.280, -2.217, -2.099 and -2.515 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for only 3 years. It is in line with pecking order theory. Also positive significant t value is found for 3 years. It is in line with trade-off theory. Thus contradictory findings are observed for same variable.

Similarly the coefficients of Average size are -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, 0.0000, 0.0000 and 0.0000 respectively. The highest and lowest

coefficients are ±0.0000 for all years. The t values are -2.441, -2.356, -3.251, -2.845, -1.819, -2.140, -1.394, -1.321, -0.551, -1.059, -1.027, 0.674, 2.056, 1.708, 0.922, -0.304, 0.787, 0.234 and 0.325 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 8 years. Also positive significant impact is found for 2 years. Here again contradictory results are observed.

The F value are 21.435, 11.412, 12.786, 13.898, 11.655, 13.176, 7.760, 6.795, 13.916, 23.080, 24.080, 11.550, 14.469, 13.478, 4.712, 4.861, 7.246, 5.814 and 5.479. It is worth mentioning here that for 19 years, F values are found to be significant. This tends to suggest that the model fits well.

h. With RUN 8:

Considering the LTD/TA ratio to be a dependent variable, and NFA/TNA, PBT/TNA, OPI/Sale and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.30. From the Table it is observed that values of R^2 are 0.6156, 0.4728, 0.4902, 0.6000, 0.5581, 0.5196, 0.3625, 0.3595, 0.5059, 0.6306, 0.6381, 0.4582, 0.5359, 0.5118, 0.3042, 0.2856, 0.6314, 0.5348 and 0.5844 respectively. The values of $\bar{R}^2$ are 0.5771, 0.4187, 0.4379, 0.5600, 0.5139, 0.4715, 0.2988, 0.2594, 0.4565, 0.5937, 0.6020, 0.4040, 0.4894, 0.4629, 0.2346, 0.2141, 0.5673, 0.4539 and 0.5121 respectively. The highest $\bar{R}^2$ is found to be 0.6020

(1991) and the lowest $\bar{R}^2$ is found to be 0.2099 (1996).

The coefficients of NFA/TNA are 0.5266, 0.4210, 0.4026, 0.3354, 0.2312, 0.1868, 0.2173, 0.3595, 0.3712, 0.4485, 0.5202, 0.3127, 0.2218, 0.2564, 0.1950, 0.3276, 0.4036, 0.3524 and 0.1658 respectively. The t values are 4.686, 4.161, 4.541, 4.307, 3.589, 2.538, 3.102, 4.002, 5.656, 7.335, 6.788, 4.108, 3.472, 3.696, 1.827, 2.192, 3.443, 2.488 and 1.716 respectively. It is worth mentioning here that positive significant impact is found for all years. This is in line with trade-off theory.

The coefficients of PBT/TNA are -0.0019, -0.0027, -0.0005, -0.0054, -0.0038, -0.0020, -0.0002, 0.0028, 0.0005, -0.0007, 0.0003, 0.0002, -0.0023, -0.0020, -0.0021, -0.0017, -0.0074, -0.0054 and -0.0065. The t values are -0.713, -0.927, -0.224, -3.094, -2.976, -1.545, -0.147, 1.308, 0.338, -0.523, 0.149, 0.091, -1.364, -1.117, -1.657, -1.140, -3.121, -2.373 and -3.137 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 8 years. This is in line with pecking order theory. Also positive significant impact is found for 1 year. This is in line with trade-off theory. For remaining 10 years the impact of PBT/TNA on LTD/TA ratio is found to be insignificant. Thus here also contradictory findings are observed.

The coefficients of OPI/Sale are 0.0017, 0.0021, 0.0009, 0.0024, 0.0065, 0.0072, 0.0023, -0.0000 -0.0013, -0.0007, -0.0015, 0.0004, 0.0014, 0.0000, 0.0009, 0.0015, -0.0030, -0.0029 and -0.0019

respectively. The t values are 0.804, 0.905, 0.396, 1.104, 3.692, 3.616, 1.440, -0.004, -0.705, -0.558, -0.694, 0.220, 0.968, 0.103, 0.323, 0.477, -1.321, -0.980 and -0.806 respectively. It is worth mentioning here that out of 19 years under study, positive significant impact is found for 3 years. This is in line with trade-off theory. Also negative significant t value is found for 1 year. This is in line with pecking order theory. For all other 15 years the impact of OPI/Sale on LTD/TA ratio is found to be insignificant.

The coefficient of Average size are -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, 0.0000, 0.0000 and 0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are -2.333, -2.155, -3.205, -3.067, -2.105, -2.093, -1.385, -1.089, -0.483, -1.061, -0.984, 0.662, 2.022, 1.800, 0.929, -0.311, 0.786, 0.181 and 0.544 respectively. It is worth mentioning here that out of 19 years, negative significant impact is found for 7 years. Also positive significant t value is found for 2 years.

The F values are 16.011, 8.744, 9.374, 14.997, 12.629, 10.814, 5.686, 5.612, 10.240, 17.072, 17.635, 8.455, 11.545, 10.481, 4.371, 3.997, 9.849, 6.610 and 8.085. It is worth mentioning here that for 19 years, F value is found to be significant. Indicating thereby the significant dependence of LTD/TA ratio on independent variables NFA/TNA, PBT/TNA, OPI/Sale and Average size. Thus the model fits well.

TABLE VI.30
YEARWISE MULTIPLE REGRESSIONS OF LONG-TERM DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1981								
Intercept	-0.0965	-0.0805	-0.1042	0.0157	-0.0822	-0.0627	-0.0745	-0.0536
GFA/TGA	0.4649	0.5267	0.4297	0.2695				
	(4.746)*	(5.667)*	(4.008)*	(2.314)**				
OPI/TGA	-0.0010	-0.0017		-0.0088				
	(-0.358)	(-0.625)		(-2.681)*				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-2.879)*	(-2.455)*	(-2.352)**		(-2.554)*	(-2.441)*	(-2.333)**
OPI/Sale			0.0034	0.0080			0.0010	0.0017
			(1.734)**	(3.189)*			(0.520)	(0.804)
NFA/TNA					0.5709	0.5914	0.5645	0.5266
					(6.917)*	(7.581)*	(5.731)*	(4.686)*
PBT/TNA					-0.0009	-0.0008		-0.0019
					(-0.370)	(-0.362)		(-0.713)
R-square	0.3560	0.4643	0.4961	0.5729	0.5472	0.6093	0.6107	0.6156
F-value	(11.609)*	(11.845)*	(13.456)*	(13.413)*	(25.376)*	(21.316)*	(21.435)*	(16.011)*
R-bar sqr	0.3253	0.4251	0.4593	0.5302	0.5256	0.5807	0.5822	0.5771
Year 1982								
Intercept	-0.0692	-0.0651	-0.0741	0.0073	-0.0206	-0.0142	-0.0374	-0.0151
GFA/TGA	0.3649	0.4242	0.3777	0.2654				
	(3.733)*	(4.447)*	(3.795)*	(2.140)**				
OPI/TGA	0.0004	0.0002		-0.0068				
	(0.122)	(0.065)		(-1.479)***				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-2.454)*	(-2.279)**	(-2.044)**		(-2.395)**	(-2.356)**	(-2.155)**
OPI/Sale			0.0026	0.0067			0.0012	0.0021
			(1.204)	(1.917)**			(0.583)	(0.905)
NFA/TNA					0.4279	0.4691	0.4531	0.4210
					(4.813)*	(5.460)*	(4.772)*	(4.161)*
PBT/TNA					-0.0023	-0.0016		-0.0027
					(-0.821)	(-0.618)		(-0.927)
R-square	0.2589	0.3559	0.3783	0.4114	0.3845	0.4617	0.4612	0.4728
F-value	(7.160)*	(7.366)*	(8.114)*	(6.813)*	(12.807)*	(11.437)*	(11.412)*	(8.744)*
R-bar sqr	0.2227	0.3076	0.3317	0.3510	0.3545	0.4214	0.4208	0.4187

cont.

TABLE VI.30 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1983								
Intercept	-0.0321	-0.0243	-0.0516	0.0357	-0.0236	-0.0071	-0.0110	-0.0058
GFA/TGA	0.3150	0.3772	0.3666	0.2453				
	(3.371)*	(4.376)*	(4.111)*	(2.230)**				
OPI/TGA	-0.0008	-0.0013		-0.0061				
	(-0.333)	(-0.572)		(-1.795)**				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-3.262)*	(-3.159)*	(-3.219)*		(-3.279)*	(-3.251)*	(-3.205)*
OPI/Sale			0.0014	0.0054			0.0006	0.0009
			(0.718)	(1.849)**			(0.331)	(0.396)
NFA/TNA					0.3806	0.4208	0.4109	0.4026
					(4.617)*	(5.603)*	(5.159)*	(4.541)*
PBT/TNA					0.0000	-0.0000		-0.0005
					(0.035)	(-0.015)		(-0.224)
R-square	0.2399	0.3996	0.4024	0.4480	0.3506	0.4881	0.4895	0.4902
F-value	(6.471)*	(8.876)*	(8.979)*	(7.914)*	(11.065)*	(12.715)*	(12.786)*	(9.374)*
R-bar sqr	0.2028	0.3546	0.3576	0.3914	0.3189	0.4497	0.4512	0.4379
Year 1984								
Intercept	0.1370	0.1614	0.0688	0.1204	0.0162	0.0329	-0.0109	0.0332
GFA/TGA	-0.0001	-0.0004	-0.0008	-0.0011				
	(-0.061)	(-0.204)	(-0.463)	(-0.761)				
OPI/TGA	-0.0026	-0.0031		-0.0107				
	(-1.149)	(-1.411)***		(-4.523)*				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.694)*	(-1.419)*	(-2.362)**		(-3.247)*	(-2.845)*	(-3.067)*
OPI/Sale			0.0047	0.0121			-0.0012	0.0024
			(2.048)**	(4.854)*			(-0.579)	(1.104)
NFA/TNA					0.3639	0.3882	0.4332	0.3354
					(5.373)*	(6.303)*	(5.535)*	(4.307)*
PBT/TNA					-0.0040	-0.0044		-0.0054
					(-2.476)*	(-2.952)*		(-3.094)*
R-square	0.0308	0.0942	0.1383	0.4299	0.4818	0.5878	0.5042	0.6000
F-value	(0.667)	(1.421)	(2.193)	(7.541)*	(19.523)*	(19.486)*	(13.898)*	(14.997)*
R-bar sqr	-0.0154	0.0279	0.0752	0.3729	0.4571	0.5576	0.4679	0.5600

cont.

TABLE VI.30 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1985								
Intercept	-0.0269	-0.0102	-0.0575	-0.0058	-0.0012	0.0123	-0.0436	-0.0141
GFA/TGA	0.2272	0.2279	0.2041	0.1395				
	(2.883)*	(2.945)*	(2.941)*	(1.992)**				
OPI/TGA	0.0007	0.0003		-0.0051				
	(0.410)	(0.151)		(-2.526)*				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.602)***	(-1.503)***	(-1.908)**		(-2.104)**	(-1.819)**	(-2.105)**
OPI/Sale			0.0052	0.0091			0.0040	0.0065
			(2.873)*	(3.960)*			(2.367)**	(3.692)*
NFA/TNA					0.3101	0.3151	0.2918	0.2312
					(4.327)*	(4.570)*	(4.374)*	(3.589)*
PBT/TNA					-0.0013	-0.0015		-0.0038
					(-0.982)	(-1.206)		(-2.976)*
R-square	0.1661	0.2152	0.3463	0.4362	0.3436	0.4075	0.4603	0.5581
F-value	(4.182)**	(3.747)**	(7.241)*	(7.738)*	(10.992)*	(9.401)*	(11.655)*	(12.629)*
R-bar sqr	0.1263	0.1577	0.2985	0.3799	0.3123	0.3642	0.4208	0.5139
Year 1986								
Intercept	-0.0899	-0.0795	-0.0786	-0.0460	-0.0251	-0.0129	-0.0393	-0.0255
GFA/TGA	0.2926	0.3238	0.2379	0.1877				
	(3.954)*	(4.542)*	(3.678)*	(2.636)*				
OPI/TGA	0.0029	0.0023		-0.0030				
	(1.823)**	(1.557)***		(-1.567)***				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-2.410)*	(-2.605)*	(-2.795)*		(-2.167)**	(-2.140**	(-2.093)**
OPI/Sale			0.0061	0.0087			0.0055	0.0072
			(3.865)*	(3.833)*			(3.246)*	(3.616)*
NFA/TNA					0.3092	0.3227	0.2292	0.1868
					(4.133)*	(4.483)*	(3.300)*	(2.538)*
PBT/TNA					0.0005	0.0005		-0.0020
					(0.387)	(0.400)		(-1.545)***
R-square	0.2874	0.3758	0.5155	0.5435	0.2895	0.3625	0.4909	0.5196
F-value	(8.468)*	(8.228)*	(14.539)*	(11.905)*	(8.557)*	(7.771)*	(13.176)*	(10.814)*
R-bar sqr	0.2534	0.3301	0.4800	0.4978	0.2557	0.3159	0.4536	0.4715

cont.

TABLE VI.30 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1987								
Intercept	-0.0590	-0.0528	-0.0365	-0.0318	-0.0192	-0.0131	-0.0107	-0.0082
GFA/TGA	0.2286	0.2355	0.1948	0.1893				
	(3.896)*	(4.012)*	(3.438)*	(2.946)*				
OPI/TGA	0.0024	0.0022		-0.0004				
	(1.631)***	(1.519)***		(-0.192)				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.182)	(-1.647)***	(-1.617)***		(-1.152)	(-1.394)***	(-1.385)***
OPI/Sale			0.0029	0.0032			0.0022	0.0023
			(2.261)**	(1.622)***			(1.651)***	(1.440)***
NFA/TNA					0.2641	0.2679	0.2224	0.2173
					(4.290)*	(4.363)*	(3.685)*	(3.102)*
PBT/TNA					0.0011	0.0011		-0.0002
					(0.774)	(0.770)		(-0.147)
R-square	0.2742	0.2982	0.3409	0.3415	0.3078	0.3295	0.3622	0.3625
F-value	(7.935)*	(5.806)*	(7.068)*	(5.186)*	(9.336)*	(6.715)*	(7.760)*	(5.686)*
R-bar sqr	0.2397	0.2468	0.2926	0.2756	0.2748	0.2804	0.3155	0.2988
Year 1988								
Intercept	-0.0989	-0.0882	-0.0777	-0.0752	-0.0540	-0.0452	-0.0187	-0.0452
GFA/TGA	0.3673	0.3750	0.3471	0.3439				
	(4.769)*	(4.927)*	(4.454)*	(3.793)*				
OPI/TGA	0.0013	0.0010		-0.0002				
	(0.717)	(0.565)		(-0.072)				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.491)***	(-1.695)**	(-1.611)***		(-1.142)	(-1.321)	(-1.089)
OPI/Sale			0.0015	0.0016			0.0015	-0.0000
			(0.860)	(0.642)			(0.811)	(-0.004)
NFA/TNA					0.3583	0.3593	0.3048	0.3595
					(4.630)*	(4.659)*	(3.801)*	(4.002)*
PBT/TNA					0.0029	0.0028		0.0028
					(1.606)***	(1.562)***		(1.308)***
R-square	0.3517	0.3850	0.3912	0.3913	0.3391	0.3595	0.3321	0.3595
F-value	(11.391)*	(8.556)*	(8.782)*	(6.428)*	(10.775)*	(7.670)*	(6.795)*	(5.612)*
R-bar sqr	0.3208	0.3400	0.3467	0.3304	0.3076	0.3126	0.2832	0.2954

cont.

TABLE VI.30 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1989								
Intercept GFA/TGA	-0.0687 0.2978 (4.689)*	-0.0648 0.3019 (4.716)*	-0.0663 0.2968 (4.575)*	-0.0620 0.2917 (4.061)*	-0.0412	-0.0378	-0.0331	-0.0374
OPI/TGA	0.0001 (0.090)	0.0000 (0.046)		-0.0004 (-0.177)				
AVG Size		-0.0000 (-0.780)	-0.0000 (-0.830)	-0.0000 (-0.838)		-0.0000 (-0.731)	-0.0000 (-0.551)	-0.0000 (-0.483)
OPI/Sale			0.0005 (0.285)	0.0007 (0.329)			-0.0010 (-0.628)	-0.0013 (-0.705)
NFA/TNA					0.3455 (6.190)*	0.3478 (6.186)*	0.3612 (6.234)*	0.3712 (5.656)*
PBT/TNA					-0.0000 (-0.055)	-0.0000 (-0.055)		0.0005 (0.338)
R-square F-value R-bar sqr	0.3503 (11.324)* 0.3194	0.3598 (7.682)* 0.3130	0.3611 (7.723)* 0.3143	0.3616 (5.663)* 0.2977	0.4933 (20.443)* 0.4692	0.4998 (13.655)* 0.4632	0.5045 (13.916)* 0.4683	0.5059 (10.240)* 0.4565
Year 1990								
Intercept GFA/TGA	-0.0828 0.3704 (6.136)*	-0.0750 0.3749 (6.216)*	-0.0814 0.3801 (6.273)*	-0.0724 0.3700 (5.568)*	-0.0478	-0.0428	-0.0499	-0.0428
OPI/TGA	-0.0004 (-0.250)	-0.0006 (-0.405)		-0.0010 (-0.388)				
AVG Size		-0.0000 (-1.123)	-0.0000 (-1.065)	-0.0000 (-1.121)		-0.0000 (-1.100)	-0.0000 (-1.059)	-0.0000 (-1.061)
OPI/Sale			-0.0003 (-0.213)	0.0004 (0.187)			-0.0009 (-0.898)	-0.0007 (-0.558)
NFA/TNA					0.4330 (7.614)*	0.4366 (7.683)*	0.4609 (8.253)*	0.4485 (7.335)*
PBT/TNA					-0.0011 (-0.874)	-0.0011 (-0.876)		-0.0007 (-0.523)
R-square F-value R-bar sqr	0.4810 (19.459)* 0.4562	0.4964 (13.473)* 0.4596	0.4950 (13.395)* 0.4580	0.4969 (9.876)* 0.4466	0.6167 (33.793)* 0.5985	0.6277 (23.045)* 0.6005	0.6281 (23.080)* 0.6009	0.6306 (17.072)* 0.5937

cont.

TABLE VI.30 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1991								
Intercept GFA/TGA	-0.0867 0.4274 (6.343)*	-0.0831 0.4392 (6.444)*	-0.0963 0.4360 (5.935)*	-0.0763 0.4145 (5.126)*	-0.0541	-0.0508	-0.0489	-0.0516
OPI/TGA	-0.0007 (-0.332)	-0.0009 (-0.387)		-0.0019 (-0.657)				
AVG Size		-0.0000 (-1.073)	-0.0000 (-1.076)	-0.0000 (-1.201)		-0.0000 (-1.258)	-0.0000 (-1.027)	-0.0000 (-0.984)
OPI/Sale			0.0005 (0.229)	0.0015 (0.579)			-0.0013 (-0.728)	-0.0015 (-0.694)
NFA/TNA					0.4766 (7.829)*	0.4886 (7.982)*	0.5144 (7.876)*	0.5202 (6.788)*
PBT/TNA					-0.0005 (-0.262)	-0.0004 (-0.241)		0.0003 (0.149)
R-square F-value R-bar sqr	0.4981 (20.840)* 0.4742	0.5118 (14.327)* 0.4761	0.5106 (14.260)* 0.4748	0.5159 (10.655)* 0.4674	0.6196 (34.210)* 0.6015	0.6338 (23.651)* 0.6070	0.6379 (24.080)* 0.6114	0.6381 (17.635)* 0.6020
Year 1992								
Intercept GFA/TGA	-0.0573 0.3254 (5.021)*	-0.0594 0.3156 (4.741)*	-0.0589 0.2927 (4.355)*	-0.0301 0.2494 (2.921)*	-0.0222	-0.0225	-0.0195	-0.0213
OPI/TGA	0.0002 (0.133)	0.0004 (0.233)		-0.0021 (-0.827)				
AVG Size		0.0000 (0.722)	0.0000 (0.645)	0.0000 (0.368)		0.0000 (0.673)	0.0000 (0.674)	0.0000 (0.662)
OPI/Sale			0.2927 (0.939)	0.0028 (1.226)			0.0005 (0.339)	0.0004 (0.220)
NFA/TNA					0.3325 (5.666)*	0.3226 (5.300)*	0.3089 (4.928)*	0.3127 (4.108)*
PBT/TNA					0.0005 (0.311)	0.0004 (0.272)		0.0002 (0.091)
R-square F-value R-bar sqr	0.3903 (13.444)* 0.3613	0.3980 (9.034)* 0.3539	0.4099 (9.491)* 0.3667	0.4198 (7.235)* 0.3618	0.4515 (17.287)* 0.4254	0.4575 (11.525)* 0.4178	0.4580 (11.550)* 0.4184	0.4582 (8.455)* 0.4040

cont.

TABLE VI.30 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1993								
Intercept	-0.0403	-0.0425	-0.0443	-0.0212	0.0251	0.0243	0.0065	0.0299
GFA/TGA	0.3387	0.3106	0.3000	0.2647				
	(6.221)*	(5.764)*	(5.554)*	(3.957)*				
OPI/TGA	-0.0002	0.0001		-0.0018				
	(-0.162)	(0.100)		(-0.900)				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(2.142)**	(2.068)**	(1.598)***		(2.114)**	(2.056)**	(2.022)**
OPI/Sale			0.0008	0.0022			0.0002	0.0014
			(0.724)	(1.150)			(0.184)	(0.968)
NFA/TNA					0.2875	0.2565	0.2696	0.2218
					(5.440)*	(4.853)*	(4.992)*	(3.472)*
PBT/TNA					-0.0013	-0.0013		-0.0023
					(-0.911)	(-0.980)		(-1.364)***
R-square	0.4982	0.5487	0.5543	0.5632	0.4732	0.5250	0.5143	0.5359
F-value	(20.853)*	(16.618)*	(16.999)*	(12.892)*	(18.862)*	(15.103)*	(14.469)*	(11.545)*
R-bar sqr	0.4744	0.5157	0.5217	0.5195	0.4481	0.4902	0.4787	0.4894
Year 1994								
Intercept	-0.0605	-0.0622	-0.0581	-0.0692	0.0121	0.0185	-0.0096	0.0193
GFA/TGA	0.3593	0.3259	0.3261	0.3361				
	(5.471)*	(4.968)*	(5.227)*	(4.940)*				
OPI/TGA	-0.0003	0.0000		0.0007				
	(-0.235)	(0.040)		(0.391)				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(2.002)**	(2.046)**	(2.062)**		(1.822)**	(1.708)**	(1.800)**
OPI/Sale			-0.0003	-0.0004			-0.0003	0.0000
			(-0.504)	(-0.633)			(-0.531)	(0.103)
NFA/TNA					0.3024	0.2586	0.2981	0.2564
					(4.843)*	(3.955)*	(5.078)*	(3.696)*
PBT/TNA					-0.0016	-0.0019		-0.0020
					(-1.051)	(-1.249)		(-1.117)
R-square	0.4564	0.5048	0.5079	0.5097	0.4721	0.5116	0.4965	0.5118
F-value	(17.631)*	(13.933)*	(14.103)*	(10.397)*	(18.778)*	(14.317)*	(13.478)*	(10.481)*
R-bar sqr	0.4305	0.4686	0.4718	0.4607	0.4469	0.4759	0.4597	0.4629

cont.

TABLE VI.30 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1995								
Intercept	-0.0466	-0.0368	-0.0356	-0.0426	0.0448	0.0465	0.0087	0.0455
GFA/TGA	0.3229	0.2967	0.3066	0.3178				
	(3.682)*	(3.271)*	(3.002)*	(2.635)*				
OPI/TGA	0.0008	0.0000		0.0006				
	(0.303)	(0.007)		(0.181)				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(1.092)	(1.141)	(1.110)		(1.056)	(0.922)	(0.929)
OPI/Sale			-0.0005	-0.0009			-0.0006	0.0009
			(-0.203)	(-0.270)			(-0.229)	(0.323)
NFA/TNA					0.2430	0.2148	0.2782	0.1950
					(2.946)*	(2.480)*	(2.891)*	(1.827)**
PBT/TNA					-0.0019	-0.0020		-0.0021
					(-1.576)***	(-1.660)***		(-1.657)***
R-square	0.2440	0.2654	0.2661	0.2667	0.2834	0.3023	0.2564	0.3042
F-value	(6.779)*	(4.937)*	(4.956)*	(3.637)**	(8.304)*	(5.922)*	(4.712)*	(4.371)*
R-bar sqr	0.2080	0.2116	0.2124	0.1934	0.2492	0.2513	0.2020	0.2346
Year 1996								
Intercept	-0.0294	-0.0290	-0.0249	-0.0036	0.0158	0.0158	-0.0186	0.0187
GFA/TGA	0.3512	0.3495	0.2985	0.2734				
	(3.126)*	(3.030)*	(2.208)**	(1.907)**				
OPI/TGA	0.0001	0.0000		-0.0027				
	(0.042)	(0.015)		(-0.566)				
AVG Size		0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(0.087)	(-0.275)	(-0.322)		(-0.094)	(-0.304)	(-0.311)
OPI/Sale			0.0022	0.0037			0.0009	0.0015
			(0.703)	(0.898)**			(0.280)	(0.477)***
NFA/TNA					0.3675	0.3688	0.3982	0.3276
					(3.185)*	(3.054)*	(2.917)*	(2.192)**
PBT/TNA					-0.0016	-0.0016		-0.0017
					(-1.110)	(-1.084)		(-1.140)
R-square	0.1942	0.1943	0.2039	0.2102	0.2814	0.2812	0.2624	0.2856
F-value	(5.060)**	(3.296)**	(3.501)**	(2.662)**	(8.222)*	(5.355)*	(4.861)*	(3.997)*
R-bar sqr	0.1558	0.1354	0.1457	0.1313	0.2471	0.2290	0.2084	0.2141

cont.

TABLE VI.30 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1997								
Intercept	0.0167	0.0194	-0.0504	0.0197	0.0921	0.0936	-0.0116	0.0878
GFA/TGA	0.4639	0.4457	0.5266	0.4448				
	(4.593)*	(4.173)*	(4.055)*	(3.624)*				
OPI/TGA	-0.0081	-0.0082		-0.0082				
	(-3.490)*	(-3.487)*		(-2.451)*				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(0.591)	(1.124)	(0.496)		(0.284)	(0.787)	(0.786)
OPI/Sale			-0.0056	0.0000			-0.0055	-0.0030
			(-2.162)**	(0.016)			(-2.217)**	(-1.321)***
NFA/TNA					0.3445	0.3332	0.5521	0.4036
					(3.569)*	(3.142)*	(4.412)*	(3.443)*
PBT/TNA					-0.0084	-0.0085		-0.0074
					(-3.839)*	(-3.776)*		(-3.121)*
R-square	0.5463	0.5528	0.4360	0.5528)	0.6021	0.6034	0.4753	0.6314
F-value	(15.049)*	(9.888)*	(6.185)*	(7.107)*	(18.912)*	(12.172)*	(7.246)*	(9.849)*
R-bar sqr	0.5010	0.4969	0.3655	0.4750	0.5702	0.5538	0.4097	0.5673
Year 1998								
Intercept	0.0652	0.0654	-0.0213	0.0515	0.1081	0.1071	0.0187	0.1039
GFA/TGA	0.3856	0.3841	0.4990	0.4217				
	(3.281)*	(3.074)*	(3.753)*	(2.987)*				
OPI/TGA	-0.0085	-0.0085		-0.0067				
	(-2.463)**	(-2.399)**		(-1.417)***				
AVG Size		0.0000	0.0000	0.0000		-0.0000	0.0000	0.0000
		(0.042)	(0.507)	(0.277)		(-0.154)	(0.234)	(0.181)
OPI/Sale			-0.0058	-0.0023			-0.0062	-0.0029
			(-1.948)**	(-0.603)			(-2.099)**	(-0.980)
NFA/TNA					0.2823	0.2892	0.5279	0.3524
					(2.449)**	(2.296)**	(4.003)*	(2.488)*
PBT/TNA					-0.0065	-0.0064		-0.0054
					(-3.272)*	(-3.154)*		(-2.373)**
R-square	0.4314	0.4315	0.3914	0.4403	0.5149	0.5154	0.4209	0.5348
F-value	(9.484)*	(6.071)*	(5.145)*	(4.523)*	(13.268)*	(8.508)*	(5.814)*	(6.610)*
R-bar sqr	0.3859	0.3604	0.3154	0.3430	0.4761	0.4548	0.3485	0.4539

cont.

TABLE VI.30 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1999								
Intercept GFA/TGA	0.0990 0.2228 (2.525)*	0.0991 0.2233 (2.431)**	0.0488 0.2860 (2.965)*	0.0981 0.2444 (2.564)*	0.1322	0.1334	0.0660	0.1355
OPI/TGA	-0.0070 (-2.930)*	-0.0070 (-2.871)*		-0.0054 (-1.771)**				
AVG Size		-0.0000 (-0.032)	0.0000 (0.590)	0.0000 (0.252)		0.0000 (0.413)	0.0000 (0.325)	0.0000 (0.544)
OPI/Sale			-0.0056 (-2.310)**	-0.0026 (-0.883)			-0.0058 (-2.515)*	-0.0019 (-0.806)
NFA/TNA					0.1467 (1.793)**	0.1353 (1.544)***	0.3281 (3.465)*	0.1658 (1.726)***
PBT/TNA					-0.0073 (-4.321)*	-0.0074 (-4.256)*		-0.0065 (-3.137)*
R-square F-value R-bar sqr	0.4071 (8.582)* 0.3597	0.4071 (5.493)* 0.3330	0.3484 (4.276)** 0.2669	0.4265 (4.277)* 0.3268	0.5696 (16.542)* 0.5352	0.5726 (10.719)* 0.5192	0.4065 (5.479)* 0.3323	0.5844 (8.085)* 0.5121

*, **, *** indicates significance at 1%, 5% and 10% level respectively.

III. TOTAL DEBT TO TOTAL ASSETS RATIO:

a. With RUN 1:

Considering the TD/TA ratio to be a dependent variable, and GFA/TGA and OPI/TGA as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.31. From the Table it is observed that the values of R^2 are 0.1680, 0.0785, 0.0822, 0.0763, 0.1171, 0.0809, 0.1282, 0.0866, 0.1730, 0.1839, 0.1581, 0.0990, 0.0549, 0.0628, 0.0353, 0.0250, 0.0716, 0.1324 and 0.0933 respectively. $\bar{R}^2$ are 0.1284, 0.0347, 0.0385, 0.0323, 0.0751, 0.0371, 0.0867, 0.0431, 0.1337, 0.1450, 0.1180, 0.0561, 0.0099, 0.0182, -0.0107, -0.0214, -0.0026, 0.0630 and 0.0207 respectively. The highest $\bar{R}^2$ is 0.1450 (1990) and the lowest $\bar{R}^2$ is -0.0214 (1996).

The coefficients of GFA/TGA are -0.2413, -0.2270, -0.1896, 0.0019, -0.2601, -0.2743, -0.2990, -0.1128, -0.1339, -0.1405, -0.1074, -0.2386, -0.1386, -0.1306, -0.1037, 0.1302, 0.2459, 0.3007 and 0.2027 respectively. The t values are -2.100, -1.775, -1.358, 0.660, -1.893, -1.913, -2.386, -0.805, -1.285, -1.476, -1.175, -2.075, -1.298, -0.957, -0.809, 0.979, 1.286, 1.683 and 1.267 respectively. It is worth mentioning here that negative significant impact is found for 8 years. This is in line with Ferri and Jones. Also for one year positive significant impact was found. This is in line with trade-off theory. For remaining years the impact of GFA/TGA on TD/TA ratio is found to be insignificant.

The coefficients of OPI/TGA are -0.0074, -0.0038, -0.0062, -0.0061, -0.0054, -0.0016, -0.0036, -0.0066, -0.0075, -0.0067, -0.0081, -0.0031, -0.0027, -0.0050, -0.0038, 0.0007, -0.0029, -0.0041 and -0.0035. The t values are -2.217, -0.985, -1.681, -1.771, -1.789, -0.528, -1.180, -1.947, -2.866, -2.879, -2.686, -1.106, -1.160, -1.626, -1.015, -0.173, -0.664, -0.788 and -0.810 respectively. It is worth mentioning here that out of 19 years under study, negative significant t value is found for 9 years. This is in line with pecking order theory for these years. For remaining years the impact of OPI/TGA on TD/TA ratio is found to be insignificant.

The F values are 4.241, 1.790, 1.881, 1.735, 2.785, 1.848, 3.088, 1.990, 4.394, 4.731, 3.942, 2.308, 1.220, 1.407, 0.768, 0.539, 0.965, 1.907 and 1.286. It is worth mentioning here that out of 19 years under study, significant F value is found for 5 years. This tends to suggest that only for 5 years out of 19 years the model fits well.

b. With RUN 2:

Considering the TD/TA ratio to be a dependent variable, and GFA/TGA, OPI/TGA and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.31. From the Table it is observed that values of R^2 are 0.1941, 0.1107, 0.1217, 0.1217, 0.1260, 0.0867, 0.1438, 0.0896, 0.2033, 0.2172, 0.1630, 0.1088, 0.0638, 0.0663, 0.0437, 0.0260, 0.0755, 0.1344 and 0.0949 respectively. The values of $\bar{R}^2$ are 0.1352,

0.0456, 0.0575, 0.0574, 0.0620, 0.0199, 0.0811, 0.0230, 0.1450, 0.1599, 0.1017, 0.0436, -0.0047, -0.0020, -0.0262, -0.0453, -0.0401, 0.0262 and -0.0183 respectively. The highest $\bar{R}^2$ is found to be 0.1599 (1990) and the lowest $\bar{R}^2$ is found to be -0.0453 (1996).

The coefficients of GFA/TGA are -0.2100, -0.1871, -0.1484, 0.0016, -0.2596, -0.2606, -0.3098, -0.1092, -0.1232, -0.1321, -0.0100, -0.2547, -0.1555, -0.1449, -0.1250, 0.1349, 0.2643, 0.3131 and 0.1958 respectively. The t values are -1.785, -1.425, -1.048, 0.544, -1.877, -1.772, -2.453, -0.769, -1.187, -1.398, -1.070, -2.154, -1.402, -1.017, -0.933, 0.988, 1.300, 1.651 and 1.177. It is worth mentioning here that negative significant impact is found for 8 years. This is in line with Ferri and Jones. For other years the impact of GFA/TGA on TD/TA ratio is found to be insignificant.

The coefficients of OPI/TGA are -0.0078, -0.0040, -0.0066, -0.0068, -0.0058, -0.0018, -0.0034, -0.0067, -0.0077, -0.0071, -0.0082, -0.0028, -0.0025, -0.0048, -0.0044, 0.0010, -0.0028, -0.0040 and -0.0035. The t values are -2.313, -1.051, -1.803, -1.989, -1.858, -0.592, -1.089, -1.955, -2.950, -3.061, -2.683, -0.994, -1.065, -1.539, -1.130, 0.223, -0.617, -0.736 and -0.792 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 9 years. This is in line with pecking order theory. For remaining years the impact of OPI/TGA on TD/TA ratio is found to be insignificant.

Similarly the coefficients of Average size are -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, -0.0000, 0.0000 and 0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are -1.153, -1.217, -1.358, -1.455, -0.645, -0.513, 0.863, -0.372, -1.248, -1.322, -0.491, 0.670, 0.624, 0.394, 0.602, -0.205, -0.316, -0.234 and 0.208 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 3 years. This is in line with the findings of Gupta. For all other years the impact of Average size on TD/TA ratio is found to be insignificant.

The F value are 3.292, 1.701, 1.894, 1.893, 1.970, 1.298, 2.295, 1.345, 3.487, 3.792, 2.661, 1.668, 0.932, 0.971, 0.625, 0.365, 0.653, 1.242 and 0.839. It is worth mentioning here that out of 19 years under study, significant F value is found for 3 years. This tends to suggest that only for 3 years the selected variables have good explanatory power.

c. With RUN 3:

Considering the TD/TA ratio to be a dependent variable, and GFA/TGA, OPI/Sale and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.31. From the Table it is observed that the values of R^2 are 0.1071, 0.0892, 0.0951, 0.0686, 0.0731, 0.0794, 0.1190, 0.0118, 0.0944, 0.1268, 0.0440, 0.1076, 0.0463, 0.0394, 0.0182, 0.0305, 0.1752, 0.3051

and 0.2958 respectively. The values of $\bar{R}^2$ are 0.0418, 0.0226, 0.0289, 0.0005, 0.0052, 0.0120, 0.0546, -0.0606, 0.0281, 0.0629, -0.0260, 0.0423, -0.0235, -0.0309, -0.0536, -0.0404, 0.0721, 0.2183 and 0.2077 respectively. The highest $\bar{R}^2$ is found to be 0.2183 for the year 1998 and the lowest $\bar{R}^2$ is -0.0606 (1988).

The coefficients of GFA/TGA are -0.1156, -0.1453, -0.0165, 0.0017, -0.1901, -0.2422, -0.2819, -0.0335, -0.0212, -0.0637, -0.0229, -0.1913, -0.1150, 0.0739, -0.0693, 0.1808, 0.4024, 0.4561 and 0.2665 respectively. The t values are 0.785, -1.028, -0.110, 0.580, -1.358, -1.592, -2.209, -0.220, -0.189, -0.636, -0.213, -1.586, -1.018, -0.536, -0.453, 1.126, 1.936, 2.610 and 1.814 respectively. It is worth mentioning here that negative significant impact is found for 4 years. This is in line with Ferri and Jones. Also positive significant impact is found for 3 years. This is in line with trade-off theory. For remaining 12 years the impact of GFA/TGA on TD/TA ratio is found to be insignificant.

The coefficients of OPI/Sale are -0.0025, -0.0010, -0.0045, -0.0044, -0.0035, -0.0005, -0.0000, -0.0018, -0.0049, -0.0040, -0.0032, -0.0024, -0.0013, -0.0013, -0.0017, -0.0018, -0.0076, -0.0101 and -0.0102 respectively. The t values are -0.913, -0.335, -1.397, -1.182, -0.956, -0.134, -0.025, -0.540, -1.652, -2.038, -1.095, -0.965, -0.600, -1.073, -0.423, -0.491, -1.825, -2.564 and -2.766 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is

found for 6 years. This is in line with pecking order theory. For other years the impact of OPI/Sale on TD/TA ratio is found to be insignificant.

Similarly the coefficients of Average size are -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000 and 0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are -1.099, -1.192, -1.339, -1.207, -0.956, -0.442, 0.954, -0.060, -0.589, -0.762, -0.027, 0.875, 0.817, 0.662, 0.428, 0.122, 0.424, 0.643 and 0.944 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 1 year. This is in line with Gupta. For all other 18 years the impact of Average size on TD/TA ratio is found to be insignificant.

The F values are 1.639, 1.339, 1.437, 1.007, 1.077, 1.178, 1.846, 0.163, 1.425, 1.984, 0.628, 1.648, 0.663, 0.561, 0.254, 0.430, 1.700, 3.513 and 3.360. It is worth mentioning here that out of 19 years under study, significant F value is found only for 2 years. This tends to suggest that only for 2 years the model fits well.

d. With RUN 4:

Considering the TD/TA ratio to be a dependent variable, and GFA/TGA, OPI/TGA, OPI/Sale and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.31. From the Table it is observed that values

of R^2 are 0.2081, 0.1241, 0.1218, 0.1220, 0.1286, 0.0909, 0.1736, 0.1224, 0.2039, 0.2224, 0.1697, 0.1107, 0.0696, 0.0679, 0.0475, 0.0422, 0.2014, 0.3397 and 0.3213 respectively. $\bar{R}^2$ are 0.1289, 0.0365, 0.0339, 0.0342, 0.0415, 0.0000, 0.0910, 0.0347, 0.1243, 0.1446, 0.0866, 0.0217, -0.0235, -0.0253, -0.0477, -0.0536, 0.0625, 0.2249 and 0.2032 respectively. The highest $\bar{R}^2$ is found to be 0.2249 (1998) and the lowest $\bar{R}^2$ is found to be 0.0536 (1996).

The coefficients of GFA/TGA are -0.3054, -0.2768, -0.1430, 0.0015, -0.2760, -0.2973, -0.3846, -0.2182, -0.1320, -0.1532, -0.1332, -0.2263, -0.1970, -0.1357, -0.1710, 0.2176, 0.4537, 0.5360 and 0.3012 respectively. The t values are -1.866, -1.583, -0.759, 0.521, -1.871, -1.735, -2.743, -1.307, -1.132, -1.476, -1.201, -1.467, -1.411, -0.914, -0.961, 1.280, 2.089, 2.841 and 1.982 respectively. It is worth mentioning here that negative significant impact is found for 9 years. This is in line with Ferri and Jones. Also positive significant impact is for 3 years. This is in line with trade-off theory. For all other years the impact of GFA/TGA on TD/TA ratio is found to be insignificant.

The coefficients of OPI/TGA are -0.0104, -0.0079, -0.0064, -0.0072, -0.0068, -0.0033, -0.0076, -0.0110, -0.0081, -0.0088, -0.0095, -0.0017, -0.0043, -0.0043, -0.0057, 0.0039, 0.0052, 0.0069 and 0.0045. The t values are -2.259, -1.262, -1.101, -1.559, -1.597, -0.714, -1.625, -2.246, -2.345, -2.218, -2.461, -0.370, -1.000, -1.106, -0.109, 0.698, 0.868, 1.098

and 0.929 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 8 years. This is in line with pecking order theory.

The coefficients of OPI/Sale are 0.0030, 0.0039, -0.0002, 0.0006, 0.0017, 0.0024, 0.0051, 0.0057, 0.0006, 0.0016, 0.0020, -0.0012, 0.0020, -0.0004, 0.0021, -0.0040, -0.0112, -0.0137 and -0.0128. The t values are 0.841, 0.782, -0.044, 0.126, 0.349, 0.430, 1.202, 1.223, 0.173, 0.516, 0.568, -0.291, 0.498, -0.260, 0.399, -0.822, -1.904, -2.675 and -2.770 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found only for 3 years. It is in line with pecking order theory. For all other years the impact of OPI/Sale on TD/TA ratio is found to be insignificant.

Similarly the coefficients of Average size are -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000 and 0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are -0.920, -1.026, -1.341, -1.442, -0.642, -0.509, 0.490, -0.773, -1.216, -1.398, -0.659, 0.717, 0.400, 0.426, 0.513, 0.183, 0.649, 0.818 and 1.108 respectively. It is worth mentioning here that out of 19 years, negative significant impact is found for 3 years. This is in line with Gupta. For all other 16 years the impact of Average size on TD/TA ratio is found to be insignificant.

The F value are 2.628, 1.416, 1.386, 1.390, 1.476, 1.000, 2.101, 1.395, 2.561, 2.860, 2.043, 1.244, 0.748, 0.728, 0.499, 0.441, 1.450, 2.958 and 2.722. It is worth mentioning here that out of 19 years under study, significant F value is found only for 4 years. Indicating thereby good explanatory power of GFA/TGA, OPI/TGA, OPI/Sale and Average size for changes in TD/TA only for 4 years.

e. With RUN 5:

Considering the TD/TA to be a dependent variable, and NFA/TNA and PBT/TNA as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.31. From the Table it is observed that the values of R^2 are 0.1464, 0.0343, 0.1443, 0.2260, 0.1604, 0.0809, 0.0824, 0.1256, 0.3045, 0.2742, 0.2588, 0.1627, 0.0905, 0.1383, 0.2043, 0.3387, 0.1450, 0.2359 and 0.3110, respectively. $\bar{R}^2$ is found to be 0.1058, -0.0117, 0.1035, 0.1891, 0.1204, 0.0371, 0.0387, 0.0839, 0.2714, 0.2396, 0.2235, 0.1228, 0.0472, 0.0972, 0.1664, 0.3072, 0.0766, 0.1748 and 0.2559 respectively. The highest $\bar{R}^2$ is found to be 0.3072 for the year 1996 and the lowest $\bar{R}^2$ is found to be -0.0117 for the year 1982.

The coefficients of NFA/TNA are -0.1536, -0.0947, -0.0648, -0.1280, -0.1703, -0.2328, -0.2176, -0.0821, -0.1276, -0.1239, -0.1398, -0.2736, -0.1685, -0.2368, -0.2081, -0.0300, 0.1267, 0.1708 and 0.0736 respectively. The t values are -1.313, -0.726, -0.504, -0.985, -1.241, -1.604, -1.576, -0.602, -1.342,

-1.259, -1.572, -2.586, -1.697, -1.876, -1.851, -0.253, 0.676, 0.960 and 0.485 respectively. It is worth mentioning here that negative significant impact is found for 9 years. This is in line with Ferri and Jones. For all other years the impact of NFA/TNA on TD/TA ratio is found to be insignificant.

The coefficients of PBT/TNA are -0.0086, -0.0042, -0.0091, -0.0109, -0.0069, -0.0032, -0.0050, -0.0078, -0.0092, -0.0086, -0.0098, -0.0054, -0.0043, -0.0077, -0.0052, -0.0065, -0.0072, -0.0063 and -0.0089. The t values are -2.546, -1.076, -2.661, -3.459, -2.731, -1.271, -1.549, -2.455, -4.276, -3.980, -3.799, -1.972, -1.632, -2.464, -3.195, -4.379, -1.685, -2.052 and -2.866 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 17 years. This is in line with pecking order theory.

The F values are 3.602, 0.746, 3.541, 6.132, 4.011, 1.847, 1.885, 3.016, 9.193, 7.932, 7.333, 4.080, 2.089, 3.369, 5.391, 10.753, 2.119, 3.859 and 5.642. Here out of 19 years under study, significant F value is found for 13 years. Indicating thereby that the model with variables NFA/TNA, and PBT/TNA fits well.

f. With RUN 6:

Considering the TD/TA ratio to be a dependent variable, and NFA/TNA, PBT/TNA and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.31. From the Table it is observed that values of R^2

are 0.1784, 0.0762, 0.1926, 0.2669, 0.1684, 0.0912, 0.0945, 0.1277, 0.3296, 0.2926, 0.2614, 0.1818, 0.1069, 0.1622, 0.2129, 0.3388, 0.1478, 0.2372 and 0.3212 respectively. The values of $\bar{R}^2$ are 0.1182, 0.0086, 0.1335, 0.2133, 0.1076, 0.0247, 0.0283, 0.0638, 0.2805, 0.2409, 0.2074, 0.1220, 0.0416, 0.1009, 0.1553, 0.2904, 0.0410, 0.1418 and 0.2365 respectively. The highest $\bar{R}^2$ is found to be 0.2904 for the year 1996 and the lowest $\bar{R}^2$ is found to be 0.0086 for the year 1982.

The coefficients of NFA/TNA are -0.1384, -0.0602, -0.0341, -0.1043, -0.1672, -0.2241, -0.2233, -0.0816, -0.1213, -0.1181, -0.1345, -0.2994, -0.1935, -0.2908, -0.2327, -0.0329, 0.1475, 0.1850 and 0.0428 respectively. The t values are -1.185, -0.457, -0.267, -0.808, -1.209, -1.528, -1.606, -0.592, -1.282, -1.200, -1.478, -2.745, -1.867, -2.146, -1.955, -0.264, 0.717, 0.951 and 0.265 respectively. It is worth mentioning here that negative significant impact is found for 7 years. This is in line with Ferri and Jones. For all other years the impact of NFA/TNA on TD/TA ratio is found to be insignificant.

The coefficients of PBT/TNA are -0.0086, -0.0039, -0.0093, -0.0112, -0.0071, -0.0032, -0.0050, -0.0078, -0.0092, -0.0086, -0.0098, -0.0056, -0.0044, -0.0080, -0.0053, -0.0065, -0.0070, -0.0062 and -0.0093 respectively. The t values are -2.548, -0.983, -2.747, -3.604, -2.757, -1.264, -1.537, -2.439, -4.303, -3.982, -3.753, -2.022, -1.640, -2.561, -3.218, -4.316, -1.612, -1.963 and -2.892 respectively. It is worth mentioning here that out of 19 years under

study, negative significant impact is found for 17 years. This is in line with pecking order theory. For other years the impact of PBT/TNA on TD/TA is found to be insignificant.

Similarly the coefficients of Average size are -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, -0.0000 and 0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are -1.263, -1.362, -1.566, -1.512, -0.629, -0.682, 0.743, -0.312, -1.238, -1.034, -0.379, 0.980, 0.869, 1.083, 0.668, 0.086, -0.270, -0.203 and 0.604 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 3 years. This is in line with finding of Gupta. For other years the impact of Average size on TD/TA ratio is found to be insignificant.

The F values are 2.967, 1.126, 3.260, 4.975, 2.768, 1.371, 1.427, 2.000, 6.718, 5.654, 4.837, 3.037, 1.636, 2.646, 3.696, 7.002, 1.385, 2.488 and 3.788. It is worth mentioning here that out of 19 years under study, F value is found significant for 10 years. This tends to suggest that for these 10 years R^2 is significant and null hypothesis is rejected.

g. With RUN 7:

Considering the TD/TA to be a dependent variable, and NFA/TNA, OPI/Sale and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.31. From

the Table it is observed that values of R^2 are 0.0974, 0.0658, 0.1130, 0.0628, 0.0356, 0.0559, 0.0424, 0.0128, 0.0976, 0.1211, 0.0444, 0.1124, 0.0525, 0.0542, 0181, 0.0500, 0.1597, 0.3117 and 0.3175 respectively. The values of $\bar{R}^2$ is found to be 0.0314, -0.0026, 0.0480, -0.0058, -0.0350, -0.0132, -0.0277, -0.0595, 0.0316, 0.0568, -0.0255, 0.0474, -0.0169, -0.0150, -0.0538, -0.0196, 0.0547, 0.2257 and 0.2322 respectively. The highest $\bar{R}^2$ is found to be 0.2322 for the year 1999 and the lowest $\bar{R}^2$ is -0.0595 (1988).

The coefficients of NFA/TNA are 0.0636, 0.0067, 0.1308, 0.0475, -0.0641, -0.1944, -0.1584, 0.0452, 0.0486, 0.0399, 0.0285, -0.1940, -0.1234, -0.1229, -0.0638, 0.2435, 0.3770, 0.4715 and 0.3035 respectively. The t values are 0.411, 0.046, 0.914, 0.281, -0.424, -1.205, -1.099, 0.302, 0.427, 0.369, 0.257, -1.658, -1.144, -0.965, -0.446, 1.460, 1.799, 2.666 and 2.040 respectively. It is worth mentioning here that positive significant impact is found for 4 years. This is in line with trade-off theory. Also negative significant impact is found for 2 years. It is in line with Ferri and Jones. For all other years the impact of NFA/TNA on TD/TA ratio is found to be insignificant.

The coefficients of OPI/Sale are -0.0044, -0.0023, -0.0058, -0.0048, -0.0036, -0.0003, -0.0001, -0.0024, -0.0055, -0.0044, -0.0038, -0.0019, -0.0010, -0.0013, -0.0016, -0.0026, -0.0072, -0.0103 and -0.0105. The t values are -1.459, -0.709, -1.786, -1.109, -0.951, -0.066, -0.041, -0.698, -1.794,

-2.182, -1.256, -0.748, -0.424, -1.061, -0.410, -0.709, -1.727, -2.621 and -2.860 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 7 years. It is in line with pecking order theory. For remaining years the impact of OPI/Sale on TD/TA ratio is found to be insignificant.

Similarly the coefficient of Average size are -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000 and 0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are -1.467, -1.525, -1.572, -1.287, -0.461, -0.670, 0.730, -0.054, -0.579, -0.829, -0.040, 0.867, 0.850, 0.841, 0.457, 0.116, 0.282, 0.460 and 0.781 respectively. It is worth mentioning here that out of 19 years, negative significant impact is found for only 3 years. This is in line with finding of Gupta. For all other 16 years the impact of Average size on TD/TA ratio is found to be insignificant.

The F value is found to be 1.475, 0.963, 1.740, 0.915, 0.504, 0.808, 0.605, 0.177, 1.479, 1.883, 0.635, 1.730, 0.757, 0.783, 0.252, 0.719, 1.521, 3.623 and 3.722. It is worth mentioning here that out of 19 years under study, significant F value is found only for 2 years. This tends to suggest that only for 2 years the model fits well.

h. With RUN 8:

Considering the TD/TA to be a dependent variable, and NFA/TNA, PBT/TNA, OPI/Sale and Average size as

independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.31. From the Table it is observed that values of R^2 are 0.1807, 0.0788, 0.1968, 0.2777, 0.1707, 0.1026, 0.1153, 0.1368, 0.3311, 0.3014, 0.2673, 0.1865, 0.1172, 0.1629, 0.2206, 0.3389, 0.2009, 0.3400 and 0.3905 respectively. The values of $\bar{R}^2$ is found to be 0.0988, -0.0133, 0.1165, 0.2055, 0.0877, 0.0128, 0.0269, 0.0505, 0.2642, 0.2315, 0.1940, 0.1052, 0.0289, 0.0792, 0.1426, 0.2728, 0.0619, 0.2253 and 0.2845 respectively. The highest $\bar{R}^2$ is found to be 0.2845 for the year 1999 and the lowest $\bar{R}^2$ is found to be 0.0133 for the year 1982.

The coefficients of NFA/TNA are -0.0975, -0.0324, 0.0022, -0.1826, -0.1847, -0.2866, -0.3015, -0.1332, -0.1385, -0.0920, -0.1729, -0.3377, -0.2416, -0.2988, -0.2853, -0.0246, 0.2761, 0.3638 and 0.1512 respectively. The t values are -0.576, -0.207, 0.014, -1.111, -1.236, -1.670, -1.874, -0.833, -1.247, -0.871, -1.514, -2.481, -1.917, -2.079, -1.952, -0.159, 1.208, 1.753 and 0.887 respectively. It is worth mentioning here that negative significant impact is found for 7 years. This is in line with the findings of Ferri and Jones. The positive significant t value is found for 1 year. This is in line with trade-off theory. For remaining years the impact of NFA/TNA on TD/TA ratio is found to be insignificant.

The coefficients of PBT/TNA are -0.0079, -0.0033, -0.0083, -0.0127, -0.0075, -0.0043, -0.0071, -0.0091, -0.0096, -0.0078, -0.0107, -0.0065, -0.0058, -0.0084,

-0.0057, -0.0065, -0.0050, -0.0033 and -0.0061. The t values are -2.016, -0.751, -2.043, -3.450, -2.553, -1.443, -1.816, -2.397, -3.737, -3.213, -3.488, -1.909, -1.712, -2.280, -3.224, -4.181, -1.088, -0.993 and -1.659 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 16 years. This is in line with pecking order. For remaining years the impact of PBT/TNA on TD/TA ratio is found to be insignificant.

The coefficients of OPI/Sale are -0.0011, -0.0012, -0.0017, 0.0035, 0.0013, 0.0033, 0.0035, 0.0025, 0.0010, -0.0014, 0.0018, 0.0015, 0.0019, 0.0002, 0.0024, -0.0003, -0.0055, -0.0084 and -0.0067. The t values are -0.337, -0.339, -0.457, 0.775, 0.330, 0.714, 0.969, 0.652, 0.305, -0.708, 0.566, 0.479, 0.681, 0.187, 0.629, -0.093, -1.239, -1.893 and -1.615 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 2 years. This is in line with pecking order theory. For remaining 17 years the impact of OPI/Sale on TD/TA ratio is found to be insignificant.

Similarly the coefficient of Average size are -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000 and 0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are -1.291, -1.388, -1.584, -1.381, -0.594, -0.603, 0.574, -0.467, -1.260, -0.990, -0.528, 0.964, 0.801, 1.070, 0.484, 0.119, 0.237, 0.429 and 0.895

TABLE VI.31

YEARWISE MULTIPLE REGRESSIONS OF TOTAL DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1981								
Intercept	0.8326	0.8407	0.7344	0.8763	0.7684	0.7828	0.6883	0.7771
GFA/TGA	-0.2413	-0.2100	-0.1156	-0.3054				
	(-2.100)**	(-1.785)**	(-0.785)	(-1.866)**				
OPI/TGA	-0.0074	-0.0078		-0.0104				
	(-2.217)**	(-2.313)**		(-2.259)**				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.153)	(-1.099)	(-0.920)		(-1.263)	(-1.467)***	(-1.291)
OPI/Sale			-0.0025	0.0030			-0.0044	-0.0011
			(-0.913)	(0.841)			(-1.495)***	(-0.337)
NFA/TNA					-0.1536	-0.1384	0.0636	-0.0975
					(-1.313)***	(-1.185)	(0.411)	(-0.576)
PBT/TNA					-0.0086	-0.0086		-0.0079
					(-2.546)*	(-2.548)*		(-2.016)**
R-square	0.1680	0.1941	0.1071	0.2081	0.1464	0.1784	0.0974	0.1807
F-value	(4.241)**	(3.292)**	(1.639)	(2.628)**	(3.602)**	(2.967)**	(1.475)	(2.205)
R-bar sqr	0.1284	0.1352	0.0418	0.1289	0.1058	0.1182	0.0314	0.0988
Year 1982								
Intercept	0.7953	0.7993	0.7435	0.8390	0.7138	0.7207	0.6938	0.7213
GFA/TGA	-0.2270	-0.1871	-0.1453	-0.2768				
	(-1.775)**	(-1.425)***	(-1.028)	(-1.583)***				
OPI/TGA	-0.0038	-0.0040		-0.0079				
	(-0.985)	(-1.051)		(-1.262)				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.217)	(-1.192)	(-1.026)		(-1.362)***	(-1.525)***	(-1.388)***
OPI/Sale			-0.0010	0.0039			-0.0023	-0.0012
			(-0.335)	(0.782)			(-0.709)	(-0.339)
NFA/TNA					-0.0947	-0.0602	0.0067	-0.0324
					(-0.726)	(-0.457)	(0.046)	(-0.207)
PBT/TNA					-0.0042	-0.0039		-0.0033
					(-1.076)	(-0.983)		(-0.751)
R-square	0.0785	0.1107	0.0892	0.1241	0.0343	0.0762	0.0658	0.0788
F-value	(1.790)	(1.701)	(1.339)	(1.416)	(0.746)	(1.126)	(0.963)	(0.855)
R-bar sqr	0.0347	0.0456	0.0226	0.0365	-0.0117	0.0086	-0.0026	-0.0133

cont.

TABLE VI.31 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1983								
Intercept	0.8010	0.8078	0.7145	0.8054	0.7471	0.7613	0.6786	0.7586
GFA/TGA	-0.1896	-0.1484	-0.0165	-0.1430				
	(-1.358)***	(-1.048)	(-0.110)	(-0.759)				
OPI/TGA	-0.0062	-0.0066		-0.0064				
	(-1.681)***	(-1.803)**		(-1.101)				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.358)***	(-1.339)***	(-1.341)***		(-1.566)***	(-1.572)***	(-1.584)***
OPI/Sale			-0.0045	-0.0002			-0.0058	-0.0017
			(-1.397***	(-0.044)			(-1.786)**	(-0.457)
NFA/TNA					-0.0648	-0.0341	0.1308	0.0022
					(-0.504)	(-0.267)	(0.914)	(0.014)
PBT/TNA					-0.0091	-0.0093		-0.0083
					(-2.661)*	(-2.747)*		(-2.043)**
R-square	0.0822	0.1217	0.0951	0.1218	0.1443	0.1926	0.1130	0.1968
F-value	(1.881)	(1.894)	(1.437)	(1.386)	(3.541)**	(3.260)**	(1.740)	(2.450)
R-bar sqr	0.0385	0.0575	0.0289	0.0339	0.1035	0.1335	0.0480	0.1165
Year 1984								
Intercept	0.6873	0.7197	0.6829	0.7176	0.7624	0.7787	0.6752	0.7790
GFA/TGA	0.0019	0.0016	0.0017	0.0015				
	(0.660)	(0.544)	(0.580)	(0.521)				
OPI/TGA	-0.0061	-0.0068		-0.0072				
	(-1.771)**	(-1.989)**		(-1.559)***				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.455)***	(-1.207)	(-1.442)***		(-1.512)***	(-1.287)	(-1.381)***
OPI/Sale			-0.0044	0.0006			-0.0048	0.0035
			(-1.182)	(0.126)			(-1.109)	(0.775)
NFA/TNA					-0.1280	-0.1043	0.0475	-0.1826
					(-0.985)	(-0.808)	(0.281)	(-1.111)
PBT/TNA					-0.0109	-0.0112		-0.0127
					(-3.459)*	(-3.604)*		(-3.450)*
R-square	0.0763	0.1217	0.0686	0.1220	0.2260	0.2669	0.0628	0.2777
F-value	(1.735)	(1.893)	(1.007)	(1.390)	(6.132)*	(4.975)*	(0.915)	(3.845)*
R-bar sqr	0.0323	0.0574	0.0005	0.0342	0.1891	0.2133	-0.0058	0.2055

cont.

TABLE VI.31 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1985								
Intercept	0.7974	0.8094	0.7412	0.8102	0.7297	0.7378	0.6737	0.7323
GFA/TGA	-0.2601	-0.2596	-0.1901	-0.2760				
	(-1.893)**	(-1.877)**	(-1.358)***	(-1.871)**				
OPI/TGA	-0.0054	-0.0058		-0.0068				
	(-1.789)**	(-1.858)**		(-1.597)***				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.645)	(-0.956)	(-0.642)		(-0.629)	(-0.461)	(-0.594)
OPI/Sale			-0.0035	0.0017			-0.0036	0.0013
			(-0.956)**	(0.349)			(-0.951)	(0.330)
NFA/TNA					-0.1703	-0.1673	-0.0641	-0.1847
					(-1.241)	(-1.209)	(-0.424)	(-1.236)
PBT/TNA					-0.0069	-0.0071		-0.0075
					(-2.731)*	(-2.757)*		(-2.553)*
R-square	0.1171	0.1260	0.0731	0.1286	0.1604	0.1684	0.0356	0.1707
F-value	(2.785)	(1.970)	(1.077)	(1.476)	(4.011)**	(2.768)	(0.504)	(2.058)
R-bar sqr	0.0751	0.0620	0.0052	0.0415	0.1204	0.1076	-0.0350	0.0877
Year 1986								
Intercept	0.7434	0.7480	0.7213	0.7570	0.7006	0.7084	0.6726	0.7026
GFA/TGA	-0.2743	-0.2606	-0.2422	-0.2973				
	(-1.913)**	(-1.772)**	(-1.592)***	(-1.735)**				
OPI/TGA	-0.0016	-0.0018		-0.0033				
	(-0.528)	(-0.592)		(-0.714)				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.513)	(-0.442)	(-0.509)		(-0.682)	(-0.670)	(-0.603)
OPI/Sale			-0.0005	0.0024			-0.0003	0.0033
			(-0.134)	(0.430)			(-0.066)	(0.714)
NFA/TNA					-0.2328	-0.2241	-0.1944	-0.2866
					(-1.604)***	(-1.528)***	(-1.205)	(-1.670)***
PBT/TNA					-0.0032	-0.0032		-0.0043
					(-1.271)	(-1.264)		(-1.443)***
R-square	0.0809	0.0867	0.0794	0.0909	0.0809	0.0912	0.0559	0.1026
F-value	(1.848)	(1.298)	(1.178)	(1.000)	(1.847)	(1.371)	(0.808)	(1.143)
R-bar sqr	0.037	0.0199	0.0120	0.0000	0.0371	0.0247	-0.0132	0.0128

cont.

TABLE VI.31 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1987								
Intercept	0.7650	0.7552	0.7022	0.7890	0.6926	0.6838	0.6221	0.6914
GFA/TGA	-0.2990	-0.3098	-0.2819	-0.3846				
	(-2.386)**	(-2.453)*	(-2.209)**	(-2.743)*				
OPI/TGA	-0.0036	-0.0034		-0.0076				
	(-1.180)	(-1.089)		(-1.625)***				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(0.863)	(0.954)	(0.490)		(0.743)	(0.730)	(0.574)
OPI/Sale			-0.0000	0.0051			-0.0001	0.0035
			(-0.025)	(1.202)			(-0.041)	(0.969)
NFA/TNA					-0.2176	-0.2233	-0.1584	-0.3015
					(-1.576)***	(-1.606)***	(-1.099)	(-1.874)**
PBT/TNA					-0.0050	-0.0050		-0.0071
					(-1.549)***	(-1.537)***		(-1.816)**
R-square	0.1282	0.1438	0.1190	0.1736	0.0824	0.0945	0.0424	0.1153
F-value	(3.088)	(2.295)	(1.846)	(2.101)	(1.885)	(1.427)	(0.605)	(1.304)
R-bar sqr	0.0867	0.0811	0.0546	0.0910	0.0387	0.0283	-0.0277	0.0269
Year 1988								
Intercept	0.7237	0.7287	0.6305	0.7740	0.6848	0.6891	0.6057	0.6921
GFA/TGA	-0.1128	-0.1092	-0.0335	-0.2182				
	(-0.805)	(-0.769)	(-0.220)	(-1.307)***				
OPI/TGA	-0.0066	-0.0067		-0.0110				
	(-1.947)**	(-1.955)**		(-2.246)**				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.372)	(-0.060)	(-0.773)		(-0.312)	(-0.054)	(-0.467)
OPI/Sale			-0.0018	0.0057			-0.0024	0.0025
			(-0.540)	(1.223)			(-0.698)	(0.652)
NFA/TNA					-0.0821	-0.0816	0.0452	-0.1332
					(-0.602)	(-0.592)	(0.302)	(-0.833)
PBT/TNA					-0.0078	-0.0078		-0.0091
					(-2.455)*	(-2.439)*		(-2.397)**
R-square	0.0866	0.0896	0.0118	0.1224	0.1256	0.1277	0.0128	0.1368
F-value	(1.990)	(1.345)	(0.163)	(1.395)	(3.016)	(2.000)	(0.177)	(1.585)
R-bar sqr	0.0431	0.0230	-0.0606	0.0347	0.0839	0.0638	-0.0595	0.0505

cont.

TABLE VI.31 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1989								
Intercept	0.7497	0.7600	0.6686	0.7624	0.7223	0.7320	0.6501	0.7318
GFA/TGA	-0.1339	-0.1232	-0.0212	-0.1320				
	(-1.285)	(-1.187)	(-0.189)	(-1.132)				
OPI/TGA	-0.0075	-0.0077		-0.0081				
	(-2.866)*	(-2.950)*		(-2.345)**				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.248)	(-0.589)	(-1.216)		(-1.238)	(-0.579)	(-1.260)
OPI/Sale			-0.0049	0.0006			-0.0055	0.0010
			(-1.652)***	(0.173)			(-1.794)**	(0.305)
NFA/TNA					-0.1276	-0.1213	0.0486	-0.1385
					(-1.342)***	(-1.282)	(0.427)	(-1.247)
PBT/TNA					-0.0092	-0.0092		-0.0096
					(-4.276)*	(-4.303)*		(-3.737)*
R-square	0.1730	0.2033	0.0944	0.2039	0.3045	0.3296	0.0976	0.3311
F-value	(4.394)**	(3.487)**	(1.425)	(2.561)	(9.193)*	(6.718)*	(1.479)	(4.950)*
R-bar sqr	0.1337	0.1450	0.0281	0.1243	0.2714	0.2805	0.0316	0.2642
Year 1990								
Intercept	0.7439	0.7584	0.6894	0.7695	0.7203	0.7286	0.6533	0.7286
GFA/TGA	-0.1405	-0.1321	-0.0637	-0.1532				
	(-1.476)***	(-1.398)***	(-0.636)	(-1.476)***				
OPI/TGA	-0.0067	-0.0071		-0.0088				
	(-2.879)*	(-3.061)*		(-2.218)**				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-1.322)***	(-0.762)	(-1.398)***		(-1.034)	(-0.829)	(-0.990)
OPI/Sale			-0.0040	0.0016			-0.0044	-0.0014
			(-2.038)**	(0.516)			(-2.182)**	(-0.708)
NFA/TNA					-0.1239	-0.1181	0.0399	-0.0920
					(-1.259)	(-1.200)	(0.369)	(-0.871)
PBT/TNA					-0.0086	-0.0086		-0.0078
					(-3.980)*	(-3.982)*		(-3.213)*
R-square	0.1839	0.2172	0.1268	0.2224	0.2742	0.2926	0.1211	0.3014
F-value	(4.731)**	(3.792)*	(1.984)	(2.860)**	(7.932)*	(5.654)*	(1.883)	(4.314)*
R-bar sqr	0.1450	0.1599	0.0629	0.1446	0.2396	0.2409	0.0568	0.2315

cont.

TABLE VI.31 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1991								
Intercept	0.7612	0.7635	0.6698	0.7727	0.7477	0.7492	0.6572	0.7502
GFA/TGA	-0.1074	-0.0100	-0.0291	-0.1332				
	(-1.175)	(-1.070)	(-0.213)	(-1.201)				
OPI/TGA	-0.0081	-0.0082		-0.0095				
	(-2.686)*	(-2.683)*		(-2.461)**				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.491)	(-0.027)	(-0.659)		(-0.379)	(-0.040)	(-0.528)
OPI/Sale			-0.0032	0.0020			-0.0038	0.0018
			(-1.095)	(0.568)			(-1.256)	(0.566)
NFA/TNA					-0.1398	-0.1345	0.0285	-0.1729
					(-1.572)***	(-1.478)***	(0.257)	(-1.514)***
PBT/TNA					-0.0098	-0.0098		-0.0107
					(-3.799)*	(-3.753)*		(-3.488)*
R-square	0.1581	0.1630	0.0440	0.1697	0.2588	0.2614	0.0444	0.2673
F-value	(3.942)**	(2.661)	(0.628)	(2.043)**	(7.333)*	(4.837)*	(0.635)	(3.647)**
R-bar sqr	0.1180	0.1017	-0.0260	0.0866	0.2235	0.2074	-0.0255	0.1940
Year 1992								
Intercept	0.7573	0.7479	0.7120	0.7353	0.7465	0.7457	0.6846	0.7502
GFA/TGA	-0.2386	-0.2547	-0.1913	-0.2263				
	(-2.075)**	(-2.154)**	(-1.586)***	(-1.467)***				
OPI/TGA	-0.0031	-0.0038		-0.0017				
	(-1.106)	(-0.994)		(-0.370)				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(0.670)	(0.875)	(0.717)		(0.980)	(0.867)	(0.964)
OPI/Sale			-0.0024	-0.0012			-0.0019	-0.0015
			(-0.965)	(-0.291)			(-0.748)	(-0.479)
NFA/TNA					-0.2736	-0.2994	-0.1940	-0.3377
					(-2.586)*	(-2.745)*	(-1.658)***	(-2.481)**
PBT/TNA					-0.0054	-0.0056		-0.0065
					(-1.972)**	(-2.022)**		(-1.909)**
R-square	0.0990	0.1088	0.1076	0.1107	0.1627	0.1818	0.1124	0.1865
F-value	(2.308)	(1.668)	(1.648)	(1.244)	(4.080)**	(3.037)**	(1.730)	(2.293)
R-bar sqr	0.0561	0.0436	0.0433	0.0217	0.1228	0.1220	0.0474	0.1052

cont.

TABLE VI.31 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1993								
Intercept	0.6904	0.6891	0.6548	0.7083	0.6908	0.6901	0.6399	0.6980
GFA/TGA	-0.1386	-0.1555	-0.1150	-0.1970				
	(-1.298)	(-1.402)***	(-1.018)	(-1.411)***				
OPI/TGA	-0.0027	-0.0025		-0.0043				
	(-1.160)	(-1.065)		(-1.000)				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(0.624)	(0.817)	(0.400)		(0.869)	(0.850)	(0.801)
OPI/Sale			-0.0013	0.0020			-0.0010	0.0019
			(-0.600)	(0.498)			(-0.424)	(0.681)
NFA/TNA					-0.1685	-0.1935	-0.1234	-0.2416
					(-1.697)**	(-1.867)**	(-1.444)***	(-1.917)**
PBT/TNA					-0.0043	-0.0044		-0.0058
					(-1.632)***	(-1.640)***		(-1.712)**
R-square	0.0549	0.0638	0.0463	0.0696	0.0905	0.1069	0.0525	0.1172
F-value	(1.220)	(0.932)	(0.663)	(0.748)	(2.089)	(1.636)	(0.757)	(1.327)
R-bar sqr	0.0099	-0.0047	-0.0235	-0.0235	-0.0472	0.0416	-0.0169	0.0289
Year 1994								
Intercept	0.6854	0.6838	0.6092	0.6776	0.7259	0.7338	0.6144	0.7367
GFA/TGA	-0.1306	-0.1449	-0.0739	-0.1357				
	(-0.957)	(-1.017)	(-0.536)	(-0.914)				
OPI/TGA	-0.0050	-0.0048		-0.0043				
	(-1.626)***	(-1.539)***		(-1.106)				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(0.394)	(0.662)	(0.426)		(1.083)	(0.841)	(1.070)
OPI/Sale			-0.0013	-0.0004			-0.0013	0.0002
			(-1.073)	(-0.260)			(-1.061)	(0.187)
NFA/TNA					-0.2368	-0.2908	-0.1229	-0.2988
					(-1.876)**	(-2.146)**	(-0.965)	(-2.079)**
PBT/TNA					-0.0077	-0.0080		-0.0084
					(-2.464)*	(-2.561)*		(-2.280)**
R-square	0.0628	0.0663	0.0394	0.0679	0.1383	0.1622	0.0542	0.1629
F-value	(1.407)	(0.971)	(0.561)	(0.728)	(3.369)**	(2.646)	(0.783)	(1.946)
R-bar sqr	0.0182	-0.0020	-0.0309	-0.0253	0.0972	0.1009	-0.0150	0.0792

cont.

TABLE VI.31 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1995								
Intercept GFA/TGA	0.6374 -0.1037 (-0.809)	0.6454 -0.1250 (-0.933)	0.5947 -0.0693 (-0.453)	0.6580 -0.1710 (-0.961)	0.6842	0.6857	0.5848	0.6830
OPI/TGA	-0.0038 (-1.015)	-0.0044 (-1.130)		-0.0057 (-1.109)				
AVG Size		0.0000 (0.602)	0.0000 (0.428)	0.0000 (0.513)		0.0000 (0.668)	0.0000 (0.457)	0.0000 (0.484)
OPI/Sale			-0.0017 (-0.423)	0.0021 (0.399)			-0.0016 (-0.410)	0.0026 (0.629)
NFA/TNA					-0.2081 (-1.851)**	-0.2327 (-1.955)**	-0.0638 (-0.446)	-0.2853 (-1.952)**
PBT/TNA					-0.0052 (-3.195)*	-0.0053 (-3.218)*		-0.0057 (-3.224)**
R-square F-value R-bar sqr	0.0353 (0.768) -0.0107	0.0437 (0.625) -0.0262	0.0182 (0.254) -0.0536	0.0475 (0.499) -0.0477	0.2043 (5.391)* 0.1664	0.2129 (3.696)** 0.1553	0.0181 (0.252) 0.0538	0.2206 (2.830)** 0.1426
Year 1996								
Intercept GFA/TGA	0.4932 0.1302 (0.979)	0.4921 0.1349 (0.988)	0.4957 0.1808 (1.126)	0.4644 0.2176 (1.280)	0.6413	0.6413	0.4991	0.6407
OPI/TGA	0.0007 (0.173)	0.0010 (0.223)		0.0039 (0.698)				
AVG Size		-0.0000 (-0.205)	0.0000 (0.122)	0.0000 (0.183)		0.0000 (0.086)	0.0000 (0.116)	0.0000 (0.119)
OPI/Sale			-0.0018 (-0.491)	-0.0040 (-0.822)			-0.0026 (-0.709)	-0.0003 (0.093)
NFA/TNA					-0.0300 (-0.253)	-0.0329 (-0.264)	0.2435 (1.460)***	-0.0246 (-0.159)
PBT/TNA					-0.0065 (-4.379)*	-0.0065 (-4.316)*		-0.0065 (-4.181)*
R-square F-value R-bar sqr	0.0250 (0.539) -0.0214	0.0260 (0.365) -0.0453	0.0305 (0.430) -0.0404	0.0422 (0.441) -0.0536	0.3387 (10.753)* 0.3072	0.3388 (7.002)* 0.2904	0.0500 (0.719) -0.0196	0.3389 (5.127)* 0.2728

cont.

TABLE VI.31 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1997								
Intercept	0.4730	0.4702	0.4543	0.4104	0.5758	0.5729	0.4946	0.5621
GFA/TGA	0.2459	0.2643	0.4024	0.4537				
	(1.286)	(1.300)	(1.936)**	(2.089)**				
OPI/TGA	-0.0029	-0.0028		0.0052				
	(-0.664)	(-0.616)		(0.868)				
AVG Size		-0.0000	0.0000	0.0000		-0.0000	0.0000	0.0000
		(-0.316)	(0.424)	(0.649)		(-0.270)	(0.282)	(0.237)
OPI/Sale			-0.0076	-0.0112			-0.0072	-0.0055
			(-1.825)**	(-1.904)**			(-1.727)**	(-1.239)
NFA/TNA					0.1207	0.1475	0.3770	0.2761
					(0.676)	(0.717)	(1.799)**	(1.208)
PBT/TNA					-0.0072	-0.0070		-0.0050
					(-1.685)***	(-1.612)***		(-1.088)
R-square	0.0716	0.0755	0.1752	0.2014	0.1450	0.1478	0.1597	0.2009
F-value	(0.965)	(0.653)	(1.700)	(1.450)	(2.119)	(1.385)	(1.521)	(1.445)
R-bar sqr	-0.0026	-0.0401	0.0721	0.0625	0.0766	0.0410	0.0547	0.0619
Year 1998								
Intercept	0.4495	0.4472	0.4400	0.3647	0.5427	0.5408	0.4795	0.5318
GFA/TGA	0.3007	0.3131	0.4561	0.5360				
	(1.683)**	(1.651)***	(2.610)***	(2.841)**				
OPI/TGA	-0.0041	-0.0040		0.0069				
	(-0.788)	(-0.736)		(1.098)**				
AVG Size		-0.0000	0.0000	0.0000		-0.0000	0.0000	0.0000
		(-0.234)	(0.673)	(0.818)		(-0.203)	(0.460)	(0.429)
OPI/Sale			-0.0101	-0.0137			-0.0103	-0.0084
			(-2.564)*	(-2.675)*			(-2.621)*	(-1.893)**
NFA/TNA					0.1708	0.1050	0.4715	0.3638
					(0.960)	(0.951)	(2.666)*	(1.753)***
PBT/TNA					-0.0063	-0.0062		-0.0033
					(-2.052)**	(-1.963)**		(-0.993)
R-square	0.1324	0.1344	0.3051	0.3397	0.2359	0.2372	0.3117	0.3400
F-value	(1.907)	(1.242)	(3.513)**	(2.959)**	(3.859)**	(2.488)	(3.623)**	(2.963)**
R-bar sqr	0.0630	0.0262	0.2183	0.2249	0.1748	0.1418	0.2257	0.2253

cont.

TABLE VI.31 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1999								
Intercept GFA/TGA	0.4663 0.2027 (1.267)	0.4651 0.1958 (1.177)	0.5018 0.2665 (1.814)**	0.4605 0.3012 (1.982)**	0.5730	0.5763	0.5185	0.5837
OPI/TGA	-0.0035 (-0.810)	-0.0035 (-0.792)		0.0045 (0.929)				
AVG Size		0.0000 (0.208)	0.0000 (0.944)	0.0000 (1.108)		0.0000 (0.604)	0.0000 (0.781)	0.0000 (0.895)
OPI/Sale			-0.0102 (-2.766)*	-0.0128 (-2.770)*			-0.0105 (-2.860)*	-0.0067 (-1.615)***
NFA/TNA					0.0736 (0.485)	0.0428 (0.265)	0.3035 (2.040)	0.1512 (0.887)
PBT/TNA					-0.0089 (-2.866)*	-0.0093 (-2.892)*		-0.0061 (-1.659)***
R-square F-value R-bar sqr	0.0933 (1.286) 0.0207	0.0949 (0.839) -0.0183	0.2958 (3.360)** 0.2077	0.3213 (2.722)** 0.2032	0.3110 (5.642)* 0.2559	0.3213 (3.788)** 0.2365	0.3175 (3.722)** 0.2322	0.3905 (3.684)** 0.2845

*, **, *** indicates significance at 1%, 5% and 10% level respectively.

respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 3 years. This is in line with finding of Gupta. For all other 16 years the impact of Average size on TD/TA ratio is found to be insignificant.

The F values are 2.205, 0.855, 2.450, 3.845, 2.058, 1.143, 1.304, 1.585, 4.950, 4.314, 3.647, 2.293, 1.327, 1.946, 2.830, 5.127, 1.445, 2.963 and 3.684. It is worth mentioning here that out of 19 years under study, significant F value is found for 7 years, indicating thereby that only for 7 years out of 19 years, selected variables have good explanatory power.

IV. TOTAL EQUITY TO TOTAL ASSETS RATIO:

a. With RUN 1:

Considering the TE/TA ratio to be a dependent variable, and GFA/TGA and OPI/TGA as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.32. From the Table it can be observed that the values of R^2 are 0.1655, 0.0768, 0.0936, 0.1349, 0.1658, 0.2080, 0.2209, 0.1122, 0.1645, 0.1791, 0.1583, 0.0597, 0.0678, 0.0951, 0.0463, 0.0302, 0.0918, 0.1598 and 0.1245 respectively. The values of $\bar{R}^2$ is found to be 0.1258, 0.0328, 0.0505, 0.0937, 0.1261, 0.1703, 0.1838, 0.0699, 0.1247, 0.1400, 0.1183, 0.0150, 0.0234, 0.0521, 0.0008, -0.0160, 0.0191, 0.0926 and 0.0545 respectively. The highest $\bar{R}^2$ is 0.1838 (1987) and the lowest $\bar{R}^2$ is -0.0160 (1996).

The coefficients of GFA/TGA are 0.2394, 0.2246, 0.1833, -0.0017, 0.2474, 0.3412, 0.3797, 0.2334, 0.1689, 0.1170, 0.0745, 0.1450, 0.1236, 0.1208, 0.0646, -0.1414, -0.2891, -0.3287 and -0.1965 respectively. The t values are 2.089, 1.757, 1.332, -0.628, 2.032, 2.602, 3.253, 1.867, 1.725, 1.327, 0.871, 1.446, 1.302, 1.066, 0.542, -1.141, -1.508, -1.853 and -1.050 respectively. It is worth mentioning here that negative significant impact is found for only 2 years. This is in line with trade-off theory. Also positive significant impact is found for 10 years. For remaining 7 years the impact of GFA/TGA on TE/TA ratio is found to be insignificant.

The coefficients of OPI/TGA are 0.0073, 0.0037, 0.0068, 0.0085, 0.0066, 0.0069, 0.0052, 0.0051, 0.0064, 0.0062, 0.0078, 0.0027, 0.0030, 0.0053, 0.0047, 0.0010, 0.0029, 0.0048 and 0.0071. The t values are 2.189, 0.963, 1.884, 2.509, 2.449, 2.491, 1.807, 1.685, 2.586, 2.880, 2.766, 1.128, 1.448, 2.070, 1.368, 0.270, 0.665, 0.926 and 1.417 respectively. It is worth mentioning here that out of 19 years under study, positive significant effect is found for 14 years. It is in line with pecking order theory. For all other years the impact of OPI/TGA on TE/TA ratio is found to be insignificant.

The F values are 4.165, 1.747, 2.169, 3.274, 4.174, 5.514, 5.953, 2.653, 4.135, 4.581, 3.950, 1.334, 1.526, 2.208, 1.019, 0.654, 1.263, 2.378 and 1.778. It is worth mentioning here that out of 19 years under study, significant F value is found for 8 years. This tends to suggest that for 8 years the

selected variables have good explanatory power for dependent variables.

b. With RUN 2:

Considering the TE/TA ratio to be a dependent variable, and GFA/TGA, OPI/TGA and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.32. From the Table it can be observed that values of R^2 are 0.1899, 0.1038, 0.1171, 0.1657, 0.1666, 0.2327, 0.2215, 0.1123, 0.1756, 0.2294, 0.1692, 0.0627, 0.0839, 0.1072, 0.0644, 0.0337, 0.0926, 0.1606 and 0.1250 respectively. The values of $\bar{R}^2$ are found to be 0.1306, 0.0382, 0.0525, 0.1047,0.1056, 0.1765, 0.1645, 0.0474, 0.1153, 0.1730, 0.1084, -0.0059, 0.0169, 0.0419, -0.0041, -0.0370, -0.0208, 0.0557 and 0.0157 respectively. The highest $\bar{R}^2$ is 0.1599 (1990) and the lowest $\bar{R}^2$ is -0.0453 (1996).

The coefficients of GFA/TGA are 0.2093, 0.1882, 0.1518, -0.0015, 0.2473, 0.3136, 0.3776, 0.2272, 0.1629, 0.1075, 0.0643, 0.1526, 0.1439, 0.1431, 0.0938, -0.1331, -0.2978, -0.3368 and -0.1920 respectively. The t values are found to be 1.781, 1.429, 1.078, -0.516, 2.007, 2.360, 3.182, 1.836, 1.649, 1.241, 0.737, 1.475, 1.466, 1.215, 0.756, -1.047, -1.459, -1.786 and -0.985. It is worth mentioning here that positive significant impact is found for 9 years. The negative significant impact is found for 2 years. The latter is in line with trade-off theory.

The coefficients of OPI/TGA are 0.0076, 0.0039, 0.0071, 0.0091, 0.0067, 0.0074, 0.0052, 0.0051, 0.0065, 0.0067, 0.0079, 0.0026, 0.0028, 0.0050, 0.0055, 0.0015, 0.0029, 0.0047 and 0.0071. The t values are 2.280, 1.021, 1.965, 2.679, 2.420, 2.640, 1.795, 1.663, 2.609, 3.137, 2.784, 1.054, 1.325, 1.934, 1.551, 0.367, 0.633, 0.881 and 1.388 respectively. It is worth mentioning here that out of 19 years under study, positive significant effect is found for 14 years. It is in line with pecking order theory.

Similarly the coefficients of Average size are 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000 and -0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are 1.111, 1.111, 1.045, 1.231, 0.192, 1.148, 0.178, 0.077, 0.743, 1.638, 0.731, -0.362, -0.849, -0.744, -0.891, -0.386, 0.148, 0.153 and -0.117 respectively. It is worth mentioning here that out of 19 years, positive significant impact is found for only 1 year. For remaining 18 years the impact of Average size on TE/TA ratio is found to be insignificant.

The F values are 3.204, 1.582, 1.813, 2.714, 2.731, 4.144, 3.888, 1.729, 2.911, 4.068, 2.782, 0.915, 1.251, 1.641, 0.941, 0.477, 0.816, 1.531 and 1.143. It is worth mentioning here that out of 19 years under study, significant F value is found only for 5 years. This tends to suggest that only for 5 years the model fits well.

c. With RUN 3:

Considering the TE/TA to be a dependent variable, and GFA/TGA, OPI/Sale and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.32. From the Table it can be observed that the values of R^2 are 0.1043, 0.0833, 0.0859, 0.0571, 0.0499, 0.1025, 0.1604, 0.0525, 0.0634, 0.1171, 0.0307, 0.0391, 0.0448, 0.0758, 0.0677, 0.0797, 0.2066, 0.3620 and 0.3119 respectively. The values of $\bar{R}^2$ are found to be 0.0388, 0.0162, 0.0190, -0.0119, 0.0197, 0.0369, 0.0990, -0.0168, -0.0051, 0.0525, -0.0402, -0.0312, -0.0252, 0.0082, -0.0005, 0.0123, 0.1075, 0.2822 and 0.2259 respectively. The highest $\bar{R}^2$ is 0.2822 (1998) and the lowest $\bar{R}^2$ is -0.0402 (1991).

The coefficients of GFA/TGA are 0.1176, 0.1478, 0.0084, -0.0016, 0.1876, 0.2672, 0.3368, 0.1969, 0.0881, 0.0464, -0.0011, 0.1178, 0.1190, 0.0688, -0.0448, -0.2443, -0.4469, -0.4965 and -0.2948 respectively. The t values are 0.800, 1.044, 0.056, -0.528, 1.452, 1.805, 2.743, 1.461, 0.825, 0.499, -0.011, 1.102, 1.176, 0.602, -0.322, -1.671, -2.163, -2.938 and -1.704 respectively. It is worth mentioning here that negative significant impact is found for 4 years. This is in line with trade-off theory. Also positive significant impact is found for 4 years. Thus for the same variable contradictory results are observed in different years.

The coefficients of OPI/Sale are 0.0024, 0.0010, 0.0049, 0.0048, -0.0011, -0.0004, -0.0002, -0.0002,

0.0029, 0.0034, 0.0025, 0.0006, -0.0001, 0.0015, 0.0057, 0.0050, 0.0082, 0.0112 and 0.131 respectively. The t value is found to be 0.886, 0.318, 1.527, 1.274, -0.315, -0.114, -0.065, -0.079, 1.040, 1.837, 0.890, 0.275, -0.068, 1.491, 1.600, 1.479, 1.977, 2.932 and 2.994 respectively. It is worth mentioning here that out of 19 years under study, positive significant impact is found for 8 years. This in line with pecking order theory.

Similarly, the coefficients of Average size are 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, 0.0000, 0.0000, -0.0000, 0.0000, 0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000 and -0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are 1.058, 1.087, 1.030, 0.868, -0.223, 0.701, 0.014, -0.082, 0.294, 1.046, 0.288, -0.525, -0.989, -1.084, -0.971, -1.011, -0.648, -0.842 and -0.910 respectively. It is worth mentioning here that for all 19 years under study the impact of Average size on TE/TA is found to be insignificant.

The F values are 1.592, 1.241, 1.285, 0.827, 0.717, 1.561, 2.611, 0.758, 0.925, 1.812, 0.433, 0.556, 0.640, 1.121, 0.993, 1.183, 2.084, 4.539 and 3.626. It is worth mentioning here that out of 19 years under study, significant F value is found only for 2 years. This tends to suggest that only for 2 years the selected independent variables had good explanatory power.

d. With RUN 4:

Considering the TE/TA to be a dependent variable, and GFA/TGA, OPI/TGA, OPI/Sale and Average size as

independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.32. From the Table it can be observed that the values of R^2 are 0.2043, 0.1169, 0.1172, 0.1719, 0.3084, 0.4007, 0.3080, 0.1856, 0.1866, 0.2459, 0.1860, 0.0816, 0.1829, 0.1129, 0.0781, 0.0923, 0.2389, 0.3976 and 0.3140 respectively. The values of $\bar{R}^2$ are found to be 0.1247, 0.0286, 0.0289, 0.0891, 0.2392, 0.3408, 0.2388, 0.1042, 0.1053, 0.1705, 0.1047, -0.0103, 0.1011, 0.0241, -0.0141, 0.0015, 0.1065, 0.2928 and 0.1947 respectively. The highest $\bar{R}^2$ is found to be 0.3408 (1986) and the lowest $\bar{R}^2$ is -0.0141 (1995).

The coefficients of GFA/TGA are 0.3055, 0.2770, 0.1445, -0.0013, 0.3566, 0.5425, 0.5031, 0.3801, 0.1980, 0.1424, 0.1136, 0.2293, 0.2975, 0.1283, 0.0118, -0.2799, -0.5045, -0.5784 and -0.3068. The t value is found to be 1.870, 1.580, 0.771, -0.452, 2.975, 3.957, 3.980, 2.614, 1.796, 1.507, 1.106, 1.713, 2.544, 1.049, 0.072, -1.810, -2.349, -3.180 and -1.685 respectively. It is worth mentioning here that positive significant impact is found for 10 years. Also negative significant impact is found for 4 years. The latter is in line with trade-off theory. For all other years the impact of GFA/TGA on TE/TA ratio is found to be insignificant.

The coefficients of OPI/TGA are 0.0103, 0.0077, 0.0069, 0.0107, 0.0133, 0.0163, 0.0123, 0.0109, 0.0080, 0.0094, 0.0099, 0.0055, 0.0093, 0.0041, 0.0032, -0.0038, -0.0058, -0.0071 and -0.0015. The t

values are 2.242, 1.235, 1.191, 2.355, 3.866, 4.461, 2.921, 2.557, 2.461, 2.614, 2.763, 1.360, 2.600, 1.292, 0.671, -0.745, -0.987, -1.166 and -0.266 respectively. It is worth mentioning here that out of 19 years under study, positive significant impact is found for 11 years. This is in line with pecking order theory. For all other years the impact of OPI/TGA on TE/TA ratio is found to be insignificant.

The coefficients of OPI/Sale are -0.0030, -0.0038, 0.0003, -0.0026, -0.0113, -0.0147, -0.0086, -0.0077, -0.0026, -0.0027, -0.0030, -0.0032, -0.0073, 0.0006, 0.0037, 0.0071, 0.0122, 0.0149 and 0.0139. The t values are -0.851, -0.772, 0.060, -0.545, -2.863, -3.349, -2.237, -1.898, -0.736, -0.935, -0.911, -0.906, -2.201, 0.506, 0.771, 1.607, 2.102, 3.007 and 2.517. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 5 years. This is in line with trade-off theory. Also positive significant t value is found for 4 years. This is in line with pecking order theory. Thus contradictory results are found for same variables in different years.

Similarly the coefficients of Average size are 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000 and -0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are 0.878, 0.924, 1.034, 1.247, 0.239, 1.294, 0.815, 0.730, 0.948, 1.818, 1.008, -0.106, -0.044, -0.807, -1.013, -1.068, -0.899, -1.028 and -0.927 respectively. It is worth mentioning here that out of

19 years, positive significant impact is only for 1 year. For remaining 18 years the impact of Average size on TE/TA ratio is found to be insignificant.

The F values are 2.567, 1.324, 1.328, 2.075, 4.458, 6.686, 4.451, 2.280, 2.294, 3.260, 2.286, 0.888, 2.238, 1.272, 0.847, 1.017, 1.804, 3.794 and 2.632. It is worth mentioning here that out of 19 years under study, significant F value is found for only 6 years, indicating thereby the fitness of model for only six years out of 19 years.

e. With RUN 5:

Considering the TE/TA ratio to be a dependent variable, and NFA/TNA and PBT/TNA as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.32. From the Table it is observed that the values of R^2 are 0.1420, 0.0303, 0.1596, 0.3172, 0.3032, 0.3274, 0.1334, 0.2442, 0.3575, 0.4908, 0.4351, 0.2721, 0.2531, 0.3119, 0.3279, 0.5137, 0.2136, 0.2826 and 0.3810 respectively. $\bar{R}^2$ are found to be 0.1012, -0.0159, 0.1196, 0.2847, 0.2700, 0.2954, 0.0921, 0.2082, 0.3269, 0.4666, 0.4082, 0.2375, 0.2175, 0.2792, 0.2959, 0.4906, 0.1507, 0.2252 and 0.3315 respectively. The highest $\bar{R}^2$ is found to be 0.4906 (1996) and the lowest $\bar{R}^2$ is -0.0159 (1982).

The coefficients of NFA/TNA are 0.1527, 0.0907, 0.0523, 0.0643, 0.1198, 0.2107, 0.1924, 0.1498, 0.0918, 0.0982, 0.0925, 0.2031, 0.1786, 0.2683, 0.1989, 0.0834, -0.1614, -0.1870 and -0.0111

respectively. The t values are 1.370, 0.694, 0.414, 0.518, 1.051, 1.722, 1.455, 1.305, 1.074, 1.291, 1.272, 2.412, 2.220, 2.814, 2.056, 0.878, -0.887, -1.074 and -0.065 respectively. It is worth mentioning here that positive significant impact is found for 8 years. For all other years the impact of NFA/TNA on TE/TA ratio is found to be insignificant.

The coefficients of PBT/TNA are 0.0084, 0.0039, 0.0095, 0.0132, 0.0090, 0.0092, 0.0075, 0.0098, 0.0093, 0.0106, 0.0120, 0.0082, 0.0078, 0.0101, 0.0063, 0.0077, 0.0087, 0.0069 and 0.0126. The t values are 2.496, 0.100, 2.821, 4.417, 4.266, 4.379, 2.422, 3.671, 4.833, 6.345, 5.673, 3.747, 3.609, 4.264, 4.502, 6.441, 2.114, 2.324 and 3.582 respectively. It is worth mentioning here that out of 19 years under study, positive significant impact is found for 18 years. It is in line with pecking order theory for this year.

The F values are 3.477, 0.656, 3.988, 9.755, 9.137, 10.222, 3.232, 6.786, 11.686, 20.243, 16.174, 7.851, 7.116, 9.520, 10.247, 22.186, 3.395, 4.923 and 7.695. It is worth mentioning here that out of 19 years under study, significant F value is found for 18 years. Indicating thereby the fitness of the model for as many as 18 years.

f. With RUN 6:

Considering the TE/TA ratio to be a dependent variable, and NFA/TNA, PBT/TNA and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table

VI.32. From the Table it is observed that the values of R^2 are 0.1722, 0.0677, 0.1896, 0.3448, 0.3039, 0.3515, 0.1315, 0.2449, 0.3679, 0.5230, 0.4434, 0.2824, 0.2795, 0.3678, 0.3446, 0.5234, 0.2139, 0.2830 and 0.3919 respectively. Values of $\bar{R}^2$ are 0.1116, -0.0016, 0.1303, 0.2968, 0.2530, 0.3040, 0.0721, 0.1896, 0.3216, 0.4881, 0.4027, 0.2299, 0.2268, 0.3215, 0.2966, 0.4885, 0.1156, 0.1934 and 0.3159 respectively. The highest $\bar{R}^2$ is found to be 0.4885 for the year 1996 and the lowest $\bar{R}^2$ is found to be -0.0016 for the year 1982.

The coefficients of NFA/TNA are 0.1380, 0.0585, 0.0283, 0.0445, 0.1190, 0.1976, 0.1902, 0.1496, 0.0880, 0.0912, 0.0834, 0.2193, 0.2069, 0.3379, 0.2309, 0.1080, -0.1683, -0.1950 and 0.0265 respectively. The t values are 1.182, 0.443, 0.223, 0.359, 1.031, 1.619, 1.421, 1.288, 1.024, 1.221, 1.128, 2.514, 2.486, 3.398, 2.272, 1.091, -0.840, -1.025 and 0.145 respectively. It is worth mentioning here that positive significant impact is found for 6 years. For all other years the impact of NFA/TNA on TE/TA ratio is found to be insignificant.

The coefficients of PBT/TNA are 0.0084, 0.0036, 0.0096, 0.0135, 0.0090, 0.0092, 0.0075, 0.0098, 0.0093, 0.0106, 0.0119, 0.0083, 0.0078, 0.0105, 0.0065, 0.0078, 0.0087, 0.0069 and 0.0130. The t values are 2.495, 0.910, 2.870, 4.532, 4.219, 4.408, 2.397, 3.633, 4.814, 6.475, 5.632, 3.765, 3.649, 4.557, 4.572, 6.484, 2.048, 2.239 and 3.601 respectively. It is worth mentioning here that out of 19 years under study, positive significant impact is

found for 18 years. It is in line with pecking order theory.

Similarly the coefficient of Average size are 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, 0.0000, 0.0000 and -0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are 1.222, 1.265, 1.233, 1.314, 0.212, 1.233, 0.309, 0.188, 0.820, 1.662, 0.783, -0.767, -1.225, -1.904, -1.020, -0.911, 0.092, 0.118, -0.655 respectively. It is worth mentioning here that out of 19 years, positive significant impact is for 2 years. And negative significant impact is for 1 year. For all other years the impact of Average size on TE/TA ratio is found to be insignificant.

The F values are 2.843, 0.976, 3.198, 7.191, 5.968, 7.406, 2.140, 4.432, 7.954, 14.982, 10.887, 5.378, 5.301, 7.951, 7.184, 15.007, 2.176, 3.157 and 5.156. It is worth mentioning here that out of 19 years under study, significant F value is found for 14 years. Thus the model with NFA/TNA, PBT/TNA and Average size fits well for prediction of TE/TA.

g. With RUN 7:

Considering the TE/TA ratio to be a dependent variable, and NFA/TNA, OPI/Sale and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.32. From the Table it is observed that the values of R^2 are 0.0936, 0.0589, 0.1092, 0.0698, 0.0029,

0.0442, 0.0151, 0.0038, 0.0563, 0.1277, 0.0520, 0.0351, 0.0466, 0.0961, 0.0678, 0.0920, 0.1972, 0.3696 and 0.3278 respectively. Values of $\bar{R}^2$ are found to be 0.0273, -0.0099, 0.0441, 0.0018, -0.0701, -0.0257, -0.0570, -0.0691, -0.0128, 0.0639, -0.0174, -0.0355, -0.0232, 0.0299, -0.0005, 0.0256, 0.0968, 0.2908 and 0.2438 respectively. The highest $\bar{R}^2$ is found to be 0.2908 (1998) and the lowest $\bar{R}^2$ is -0.0701 (1985).

The coefficients of NFA/TNA are -0.0590, -0.0062, -0.1476, -0.1572, 0.0389, 0.1196, 0.0868, 0.0205, -0.0657, -0.0861, -0.0993, 0.1061, 0.1171, 0.1194, -0.0424, -0.2803, -0.4326, -0.5133 and -0.3310 respectively. The t values are -0.382, -0.042, -1.038, -0.919, 0.278, 0.748, 0.603, 0.151, -0.604, -0.867, -0.958, 1.019, 1.210, 1.135, -0.325, -1.840, -2.083, -3.005 and -1.881 respectively. It is worth mentioning here that negative significant impact is found for 4 years. This is in line with trade-off theory. For all other years the impact of NFA/TNA on TE/TA ratio is found to be insignificant.

The coefficients of OPI/Sale are 0.0042, 0.0023, 0.0063, 0.0067, -0.0008, 0.0002, 0.0006, 0.0009, 0.0041, 0.0038, 0.0037, 0.0004, -0.0004, 0.0015, 0.0058, 0.0055, 0.0078, 0.0114 and 0.0133. The t values are 1.459, 0.696, 1.948, 1.533, -0.219, 0.063, 0.189, 0.293, 1.409, 2.085, 1.300, 0.187, -0.210, 1.482, 1.590, 1.610, 1.889, 3.000 and 3.072 respectively. It is worth mentioning here that out of 19 years under study, positive significant impact is found for 11 years. It is in line with pecking order

theory. For all other years the impact of OPI/Sale on TE/TA ratio is found to be insignificant.

Similarly the coefficients of Average size are 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, 0.0000, 0.0000, -0.0000, 0.0000, 0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000 and -0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are 1.424, 1.423, 1.266, 1.079, -0.164, 1.012, 0.249, -0.029, 0.293, 1.135, 0.303, -0.492, -0.998, -1.302, -0.941, -0.982, -0.477, -0.636 and -0.760 respectively. It is worth mentioning here that out of 19 years, positive significant impact is for 2 years. Also negative significant impact is found for 1 year. For all other years the impact of Average size on TE/TA ratio is found to be insignificant.

The F values are 1.411, 0.856, 1.676, 1.026, 0.039, 0.633, 0.209, 0.052, 0.815, 2.001, 0.749, 0.497, 0.667, 1.452, 0.993, 1.385, 1.965, 4.691 and 3.901. It is worth mentioning here that out of 19 years under study, significant F value is found only for 2 years. This tends to suggest that only for 2 years the model fits well.

h. With RUN 8:

Considering the TE/TA ratio to be a dependent variable, and NFA/TNA, PBT/TNA, OPI/Sale and Average size as independent variables linear regressions are run yearwise from 1981 to 1999. The results for the years 1981 to 1999 of the regressions are presented in Table VI.32. From the Table it is observed that the values of R^2 are 0.1743, 0.0696, 0.1964, 0.3523,

0.4182, 0.4661, 0.1738, 0.3105, 0.3855, 0.5231, 0.4691, 0.3846, 0.4422, 0.3735, 0.3474, 0.5375, 0.2674, 0.4051 and 0.4522 respectively. The values of $\bar{R}^2$ are found to be 0.0918, -0.0234, 0.1160, 0.2875, 0.3600, 0.4127, 0.0912, 0.2416, 0.3241, 0.4754, 0.4160, 0.3230, 0.3864, 0.3108, 0.2821, 0.4912, 0.1400, 0.3016 and 0.3570 respectively. The highest $\bar{R}^2$ is found to be 0.4912 (1996) and the lowest $\bar{R}^2$ is 0.0234 (1982).

The coefficients of NFA/TNA are 0.0990, 0.0292, -0.0175, 0.1107, 0.2318, 0.3928, 0.2948, 0.2742, 0.1421, 0.0943, 0.1587, 0.3725, 0.3785, 0.3569, 0.2012, 0.0307, -0.2989, -0.3917 and -0.0940 respectively. The t values are 0.584, 0.186, -0.116, 0.700, 2.030, 3.012, 1.925, 2.122, 1.428, 1.169, 1.745, 3.684, 4.225, 3.397, 1.607, 0.254, -1.348, -1.970 and -0.488 respectively. It is worth mentioning here that positive significant impact is found for 10 years. Also negative significant impact is found for 2 years. The latter is in line with trade-off theory.

The coefficients of PBT/TNA are 0.0078, 0.0029, 0.0084, 0.0148, 0.0121, 0.0127, 0.0102, 0.0130, 0.0107, 0.0107, 0.0137, 0.0121, 0.0127, 0.0113, 0.0063, 0.0075, 0.0066, 0.0038 and 0.0095. The t values are 1.978, 0.678, 2.083, 4.177, 5.344, 5.622, 2.772, 4.219, 4.629, 5.759, 5.606, 4.766, 5.326, 4.208, 4.139, 6.207, 1.485, 1.171 and 2.286 respectively. It is worth mentioning here that out of 19 years under study, positive significant impact is found for 17 years. This is in line with pecking order

theory. For all other years the impact of PBT/TNA on TE/TA ratio is found to be insignificant.

The coefficients of OPI/Sale are 0.0010, 0.0013, 0.0021, -0.0030, -0.0087, -0.0103, -0.0047, -0.0060, -0.0031, -0.0002, -0.0035, -0.0058, -0.0067, -0.0006, 0.0013, 0.0028, 0.0056, 0.0092 and 0.0075. The t values are 0.322, 0.356, 0.581, -0.681, -2.803, -2.931, -1.363, -1.952, -1.071, -0.111, -1.390, -2.577, -3.415, -0.602, 0.414, 1.105, 1.297, 2.173 and 1.591 respectively. It is worth mentioning here that out of 19 years under study, negative significant impact is found for 7 years. This is in line with trade-off theory. Also positive significant impact is found for 2 years. It is in line with pecking order theory. For all other years the impact of OPI/Sale on TE/TA ratio is found to be insignificant.

Similarly the coefficients of Average size are 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000, -0.0000 and -0.0000 respectively. The highest and lowest coefficients are ±0.0000 for all years. The t values are 1.248, 1.297, 1.267, 1.196, 0.005, 1.044, 0.530, 0.689, 1.103, 1.645, 1.173, -0.782, -1.077, -1.890, -1.081, -1.331, -0.426, -0.604 and -0.943 respectively. It is worth mentioning here that out of 19 years, negative significant impact is for 2 years. Also positive significant impact is found for 1 year. For all other years the impact of Average size on TE/TA ratio is found to be insignificant.

TABLE VI.32
YEARWISE MULTIPLE REGRESSIONS OF TOTAL EQUITY TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1981								
Intercept	0.1705	0.1627	0.2673	0.1268	0.2346	0.2207	0.3132	0.2261
GFA/TGA	0.2394	0.2093	0.1176	0.3055				
	(2.089)**	(1.781)**	(0.800)	(1.870)**				
OPI/TGA	0.0073	0.0076		0.0103				
	(2.189)**	(2.280)**		(2.242)**				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(1.111)	(1.058)	(0.878)		(1.222)	(1.424)***	(1.248)
OPI/Sale			0.0024	-0.0030			0.0042	0.0010
			(0.886)	(-0.851)			(1.459)***	(0.322)
NFA/TNA					0.1527	0.1380	-0.0590	0.0990
					(1.307)***	(1.182)	(-0.382)	(0.584)
PBT/TNA					0.0084	0.0084		0.0078
					(2.496)*	(2.495)*		(1.978)**
R-square	0.1655	0.1899	0.1043	0.2043	0.1420	0.1722	0.0936	0.1743
F-value	(4.165)**	(3.204)**	(1.592)	(2.567)	(3.477)**	(2.843)**	(1.411)	(2.111)
R-bar sqr	0.1258	0.1306	0.0388	0.1247	0.1012	0.1116	0.0273	0.0918
Year 1982								
Intercept	0.2054	0.2018	0.2562	0.1625	0.2888	0.2825	0.3067	0.2818
GFA/TGA	0.2246	0.1882	0.1478	0.2770				
	(1.757)**	(1.429)***	(1.044)	(1.580)***				
OPI/TGA	0.0037	0.0039		0.0077				
	(0.963)	(1.021)		(1.235)				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(1.111)	(1.087)	(0.924)		(1.265)	(1.423)***	(1.297)
OPI/Sale			0.0010	-0.0038			0.0023	0.0013
			(0.318)	(-0.772)			(0.696)	(0.356)
NFA/TNA					0.0907	0.0585	-0.0062	0.0292
					(0.694)	(0.443)	(-0.042)	(0.186)
PBT/TNA					0.0039	0.0036		0.0029
					(0.100)	(0.910)		(0.678)
R-square	0.0768	0.1038	0.0833	0.1169	0.0303	0.0667	0.0589	0.0696
F-value	(1.747)	(1.582)	(1.241)	(1.324)	(0.656)	(0.976)	(0.856)	(0.748)
R-bar sqr	0.0328	0.0382	0.0162	0.0286	-0.0159	-0.0016	-0.0099	-0.0234

cont.

TABLE VI.32 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1983								
Intercept	0.1907	0.1854	0.2866	0.1887	0.2500	0.2389	0.3233	0.2423
GFA/TGA	0.1833	0.1518	0.0084	0.1445				
	(1.332)***	(1.078)	(0.056)	(0.771)				
OPI/TGA	0.0068	0.0071		0.0069				
	(1.884)**	(1.965)**		(1.191)				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(1.045)	(1.030)	(1.034)		(1.233)	(1.266)	(1.267)
OPI/Sale			0.0049	0.0003			0.0063	0.0021
			(1.527)***	(0.060)			(1.948)**	(0.581)
NFA/TNA					0.0523	0.0283	-0.1476	-0.0175
					(0.414)	(0.223)	(-1.038)	(-0.116)
PBT/TNA					0.0095	0.0096		0.0084
					(2.821)*	(2.870)*		(2.083)**
R-square	0.0936	0.1171	0.0859	0.1172	0.1596	0.1896	0.1092	0.1964
F-value	(2.169)	(1.813)	(1.285)	(1.328)	(3.988)**	(3.918)**	(1.676)	(2.444)
R-bar sqr	0.0505	0.0525	0.0190	0.0289	0.1196	0.1303	0.0441	0.1160
Year 1984								
Intercept	0.2709	0.2438	0.3044	0.2527	0.2252	0.2116	0.3322	0.2114
GFA/TGA	-0.0017	-0.0015	-0.0016	-0.0013				
	(-0.618)	(-0.516)	(-0.528)	(-0.452)				
OPI/TGA	0.0085	0.0091		0.0107				
	(2.509)**	(2.679)*		(2.355)**				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(1.231)	(0.868)	(1.247)		(1.314)***	(1.079)	(1.196)
OPI/Sale			0.0048	-0.0026			0.0067	-0.0030
			(1.274)	(-0.545)			(1.533)***	(-0.681)
NFA/TNA					0.0643	0.0445	-0.1572	0.1107
					(0.518)	(0.359)	(-0.919)	(0.700)
PBT/TNA					0.0132	0.0135		0.0148
					(4.417)*	(4.532)*		(4.177)*
R-square	0.1349	0.1657	0.0571	0.1719	0.3172	0.3448	0.0698	0.3523
F-value	(3.274)**	(2.714)	(0.827)	(2.075)	(9.755)*	(7.191)*	(1.026)	(5.439)*
R-bar sqr	0.0937	0.1047	-0.0119	0.0891	0.2847	0.2968	0.0018	0.2875

cont.

TABLE VI.32 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1985								
Intercept	0.1666	0.1634	0.2935	0.1579	0.2397	0.2374	0.3666	0.2729
GFA/TGA	0.2474	0.2473	0.1876	0.3566				
	(2.032)**	(2.007)**	(1.452)***	(2.975)*				
OPI/TGA	0.0066	0.0067		0.0133				
	(2.449)*	(2.420)*		(3.866)*				
AVG Size		0.0000	-0.0000	0.0000		0.0000	-0.0000	0.0000
		(0.192)	(-0.223)	(0.239)		(0.212)	(-0.164)	(0.005)
OPI/Sale			-0.0011	-0.0113			-0.0008	-0.0087
			(-0.315)	(-2.863)*			(-0.219)	(-2.803)*
NFA/TNA					0.1198	0.1190	0.0389	0.2318
					(1.051)	(1.031)	(0.278)	(2.030)**
PBT/TNA					0.0090	0.0090		0.0121
					(4.266)*	(4.219)*		(5.344)*
R-square	0.1658	0.1666	0.0499	0.3084	0.3032	0.3039	0.0029	0.4182
F-value	(4.174)**	(2.731)	(0.717)	(4.458)**	(9.137)*	(5.968)*	(0.039)	(7.188)*
R-bar sqr	0.1261	0.1056	-0.0197	0.2392	0.2700	0.2530	-0.0701	0.3600
Year 1986								
Intercept	0.1327	0.1235	0.2458	0.0672	0.2254	0.2136	0.3207	0.2318
GFA/TGA	0.3412	0.3136	0.2672	0.5425				
	(2.602)*	(2.360)**	(1.805)**	(3.957)*				
OPI/TGA	0.0069	0.0074		0.0163				
	(2.491)*	(2.640)*		(4.461)*				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(1.148)	(0.701)	(1.294)		(1.233)	(1.012)	(1.044)
OPI/Sale			-0.0004	-0.0147			0.0002	-0.0103
			(-0.114)	(-3.349)*			(0.063)	(-2.931)*
NFA/TNA					0.2107	0.1976	0.1196	0.3928
					(1.722)**	(1.619)***	(0.748)	(3.012)*
PBT/TNA					0.0092	0.0092		0.0127
					(4.379)*	(4.408)*		(5.622)*
R-square	0.2080	0.2327	0.1025	0.4007	0.3274	0.3515	0.0424	0.4661
F-value	(5.514)*	(4.144)**	(1.561)	(6.686)*	(10.222)*	(7.406)*	(0.633)	(8.730)*
R-bar sqr	0.1703	0.1765	0.0369	0.3408	0.2954	0.3040	-0.0257	0.4127

cont.

TABLE VI.32 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1987								
Intercept	0.1408	0.1389	0.2227	0.0821	0.2581	0.2546	0.3451	0.2444
GFA/TGA	0.3797	0.3776	0.3368	0.5031				
	(3.253)*	(3.182)*	(2.743)*	(3.980)*				
OPI/TGA	0.0052	0.0052		0.0123				
	(1.807)**	(1.795)**		(2.921)*				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(0.178)	(0.014)	(0.815)		(0.309)	(0.249)	(0.530)
OPI/Sale			-0.0002	-0.0086			0.0006	-0.0047
			(-0.065)	(-2.237)**			(0.189)	(-1.363)***
NFA/TNA					0.1924	0.1902	0.0868	0.2948
					(1.455)***	(1.421)***	(0.603)	(1.925)**
PBT/TNA					0.0075	0.0075		0.0102
					(2.422)*	(2.397)**		(2.772)*
R-square	0.2209	0.2215	0.1604	0.3080	0.1334	0.1354	0.0151	0.1738
F-value	(5.953)*	(3.888)**	(2.611)	(4.451)*	(3.232)**	(2.140)	(0.209)	(2.103)**
R-bar sqr	0.1838	0.1645	0.0990	0.2388	0.0921	0.0721	-0.0570	0.0912
Year 1988								
Intercept	0.2058	0.2049	0.2860	0.1436	0.2448	0.2426	0.3584	0.2356
GFA/TGA	0.2334	0.2272	0.1969	0.3801				
	(1.867)**	(1.836)**	(1.461)***	(2.614)*				
OPI/TGA	0.0051	0.0051		0.0109				
	(1.685)**	(1.663)***		(2.557)*				
AVG Size		0.0000	-0.0000	0.0000		0.0000	-0.0000	0.0000
		(0.077)	(-0.082)	(0.730)		(0.188)	(-0.029)	(0.689)
OPI/Sale			-0.0002	-0.0077			0.0009	-0.0060
			(-0.079)	(-1.898)**			(0.293)	(-1.952)**
NFA/TNA					0.1498	0.1496	0.0205	0.2742
					(1.305)***	(1.288)	(0.151)	(2.122)**
PBT/TNA					0.0098	0.0098		0.0130
					(3.671)*	(3.633)*		(4.219)*
R-square	0.1122	0.1123	0.0525	0.1856	0.2442	0.2449	0.0038	0.3105
F-value	(2.653)	(1.729)	(0.758)	(2.280)	(6.786)*	(4.432)*	(0.052)	(4.504)*
R-bar sqr	0.0699	0.0474	-0.0168	0.1042	0.2082	0.1896	-0.0691	0.2416

cont.

TABLE VI.32 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1989								
Intercept	0.2033	0.1974	0.2810	0.1880	0.2427	0.2369	0.3285	0.2377
GFA/TGA	0.1689	0.1629	0.0881	0.1980				
	(1.725)**	(1.649)***	(0.825)	(1.796)**				
OPI/TGA	0.0064	0.0065		0.0080				
	(2.586)*	(2.609)*		(2.461)*				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(0.743)	(0.294)	(0.948)		(0.820)	(0.293)	(1.103)
OPI/Sale			0.0029	-0.0026			0.0041	-0.0031
			(1.040)	(-0.736)			(1.409)***	(-1.071)
NFA/TNA					0.0918	0.0880	-0.0657	0.1421
					(1.074)	(1.024)	(-0.604)	(1.428)***
PBT/TNA					0.0093	0.0093		0.0107
					(4.833)*	(4.814)*		(4.629)*
R-square	0.1645	0.1756	0.0634	0.1866	0.3575	0.3679	0.0563	0.3855
F-value	(4.135)**	(2.911)**	(0.925)	(2.294)	(11.686)*	(7.954)*	(0.815)	(6.274)*
R-bar sqr	0.1247	0.1153	-0.0051	0.1053	0.3269	0.3216	-0.0128	0.3241
Year 1990								
Intercept	0.2239	0.2074	0.2750	0.1891	0.2233	0.2133	0.3162	0.2133
GFA/TGA	0.1170	0.1075	0.0464	0.1424				
	(1.327)***	(1.241)	(0.499)	(1.507)***				
OPI/TGA	0.0062	0.0067		0.0094				
	(2.880)*	(3.137)*		(2.614)*				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(1.636)***	(1.046)	(1.818)**		(1.662)***	(1.135)	(1.645)***
OPI/Sale			0.0034	-0.0027			0.0038	-0.0002
			(1.837)**	(-0.935)			(2.085)**	(-0.111)***
NFA/TNA					0.0982	0.0912	-0.0861	0.0943
					(1.291)	(1.221)	(-0.867)	(1.169)
PBT/TNA					0.0106	0.0106		0.0107
					(6.345)*	(6.475)*		(5.759)*
R-square	0.1791	0.2294	0.1171	0.2459	0.4908	0.5230	0.1277	0.5231
F-value	(4.581)**	(4.068)**	(1.812)	(3.260)**	(20.243)*	(14.982)*	(2.001)	(10.969)*
R-bar sqr	0.1400	0.1730	0.0525	0.1705	0.4666	0.4881	0.0639	0.4754

cont.

TABLE VI.32 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1991								
Intercept	0.2089	0.2057	0.2990	0.1921	0.2022	0.1996	0.3108	0.1977
GFA/TGA	0.0745	0.0643	-0.0011	0.1136				
	(0.871)	(0.737)	(-0.011)	(1.106)				
OPI/TGA	0.0078	0.0079		0.0099				
	(2.766)*	(2.784)*		(2.763)*				
AVG Size		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(0.731)	(0.288)	(1.008)		(0.783)	(0.303)	(1.173)
OPI/Sale			0.0025	-0.0030			0.0037	-0.0035
			(0.890)	(-0.911)			(1.300)	(-1.390)***
NFA/TNA					0.0925	0.0834	-0.0993	0.1587
					(1.272)	(1.128)	(-0.958)	(1.745)**
PBT/TNA					0.0120	0.0119		0.0137
					(5.673)*	(5.632)*		(5.606)*
R-square	0.1583	0.1692	0.0307	0.1860	0.4351	0.4434	0.0520	0.4691
F-value	(3.950)**	(2.782)	(0.433)	(2.286)	(16.174)*	(10.887)*	(0.749)	(8.835)*
R-bar sqr	0.1183	0.1084	-0.0402	0.1047	0.4082	0.4027	-0.0174	0.4160
Year 1992								
Intercept	0.2322	0.2338	0.2740	0.1999	0.1899	0.1905	0.2937	0.1721
GFA/TGA	0.1450	0.1526	0.1178	0.2293				
	(1.446)***	(1.475)***	(1.102)	(1.713)**				
OPI/TGA	0.0027	0.0026		0.0055				
	(1.128)	(1.054)		(1.360)***				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.362)	(-0.525)	(-0.103)		(-0.767)	(-0.492)	(-0.782)
OPI/Sale			0.0006	-0.0032			0.0004	-0.0058
			(0.275)	(-0.906)			(0.187)	(-2.577)*
NFA/TNA					0.2031	0.2193	0.1061	0.3725
					(2.412)*	(2.514)*	(1.019)	(3.684)*
PBT/TNA					0.0082	0.0083		0.0121
					(3.747)*	(3.765)*		(4.766)*
R-square	0.0597	0.0627	0.0391	0.0816	0.2721	0.2824	0.0351	0.3846
F-value	(1.334)	(0.915)	(0.556)	(0.888)	(7.851)*	(5.378)*	(0.497)	(6.249)*
R-bar sqr	0.0150	-0.0059	-0.0312	-0.0103	0.2375	0.2299	-0.0355	0.3230

cont.

TABLE VI.32 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1993								
Intercept	0.2516	0.2532	0.2984	0.1817	0.2151	0.2159	0.3162	0.1878
GFA/TGA	0.1236	0.1439	0.1190	0.2975				
	(1.302)	(1.466)***	(1.176)	(2.544)*				
OPI/TGA	0.0030	0.0028		0.0093				
	(1.448)***	(1.325)***		(2.600)*				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.849)	(-0.989)	(-0.044)		(-1.225)	(-0.998)	(-1.077)
OPI/Sale			-0.0001	-0.0073			-0.0004	-0.0067
			(-0.068)	(-2.201)**			(-0.210)	(-3.415)*
NFA/TNA					0.1786	0.2069	0.1171	0.3785
					(2.220)**	(2.486)*	(1.210)	(4.225)*
PBT/TNA					0.0078	0.0078		0.0127
					(3.609)*	(3.649)*		(5.326)*
R-square	0.0678	0.0839	0.0448	0.1829	0.2531	0.2795	0.0466	0.4422
F-value	(1.526)	(1.251)	(0.640)	(2.238)	(7.116)*	(5.301)*	(0.667)	(7.926)*
R-bar sqr	0.0234	0.0169	-0.0252	0.1011	0.2175	0.2268	-0.0232	0.3864
Year 1994								
Intercept	0.2734	0.2746	0.3504	0.2846	0.1961	0.1859	0.3441	0.1791
GFA/TGA	0.1208	0.1431	0.0688	0.1283				
	(1.066)	(1.215)	(0.602)	(1.049)				
OPI/TGA	0.0053	0.0050		0.0041				
	(2.070)**	(1.934)**		(1.292)				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.744)	(-1.084)	(-0.807)		(-1.904)**	(-1.302)	(-1.890)**
OPI/Sale			0.0015	0.0006			0.0015	-0.0006
			(1.491)***	(0.506)			(1.482)***	(-0.602)
NFA/TNA					0.2683	0.3379	0.1194	0.3569
					(2.814)*	(3.398)*	(1.135)	(3.397)*
PBT/TNA					0.0101	0.0105		0.0113
					(4.264)*	(4.557)*		(4.208)*
R-square	0.0951	0.1072	0.0758	0.1129	0.3119	0.3678	0.0961	0.3735
F-value	(2.208)	(1.641)	(1.121)	(1.272)	(9.520)*	(7.951)*	(1.452)	(5.961)*
R-bar sqr	0.0521	0.0419	0.0082	0.0241	0.2792	0.3215	0.0299	0.3108

cont.

TABLE VI.32 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1995								
Intercept	0.3279	0.3170	0.3747	0.3394	0.2639	0.2620	0.3685	0.2605
GFA/TGA	0.0646	0.0938	-0.0448	0.0118				
	(0.542)	(0.756)	(-0.322)	(0.072)				
OPI/TGA	0.0047	0.0055		0.0032				
	(1.368)***	(1.551)***		(0.671)				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.891)	(-0.971)	(-1.013)		(-1.020)	(-0.941)	(-1.081)
OPI/Sale			0.0057	0.0037			0.0058	0.0013
			(1.600)***	(0.771)			(1.590)***	(0.414)
NFA/TNA					0.1989	0.2309	-0.0424	0.2012
					(2.056)**	(2.272)**	(-0.325)	(1.607)***
PBT/TNA					0.0063	0.0065		0.0063
					(4.502)*	(4.572)*		(4.139)*
R-square	0.0463	0.0644	0.0677	0.0781	0.3279	0.3446	0.0678	0.3474
F-value	(1.019)	(0.941)	(0.993)	(0.847)	(10.247)*	(7.184)*	(0.993)	(5.322)*
R-bar sqr	0.0008	-0.0041	-0.0005	-0.0141	0.2959	0.2966	-0.0005	0.2821
Year 1996								
Intercept	0.4753	0.4733	0.4921	0.5225	0.3073	0.3072	0.4770	0.3126
GFA/TGA	-0.1414	-0.1331	-0.2443	-0.2799				
	(-1.141)	(-1.047)	(-1.671)***	(-1.810)**				
OPI/TGA	0.0010	0.0015		-0.0038				
	(0.270)	(0.367)		(-0.745)				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.386)	(-1.011)	(-1.068)		(-0.911)	(-0.982)	(-1.331)***
OPI/Sale			0.0050	0.0071			0.0055	0.0028
			(1.479)***	(1.607)**			(1.610)***	(1.105)
NFA/TNA					0.0834	0.1080	-0.2803	0.0307
					(0.878)	(1.091)	(-1.840)**	(0.254)
PBT/TNA					0.0077	0.0078		0.0075
					(6.441)*	(6.484)*		(6.207)*
R-square	0.0302	0.0337	0.0797	0.0923	0.5137	0.5234	0.0920	0.5375
F-value	(0.654)	(0.477)	(0.183)	(1.017)	(22.186)*	(15.007)*	(1.385)	(11.621)*
R-bar sqr	-0.0160	-0.0370	0.0123	0.0015	0.4906	0.4885	0.0256	0.4912

cont.

TABLE VI.32 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1997								
Intercept	0.5231	0.5244	0.5403	0.5897	0.3976	0.3985	0.4989	0.4094
GFA/TGA	-0.2891	-0.2978	-0.4469	-0.5045				
	(-1.508)***	(-1.459)***	(-2.163)**	(-2.349)**				
OPI/TGA	0.0029	0.0029		-0.0058				
	(0.665)	(0.633)		(-0.987)				
AVG Size		0.0000	-0.0000	-0.0000		0.0000	-0.0000	-0.0000
		(0.148)	(-0.648)	(-0.899)		(0.092)	(-0.477)	(-0.426)
OPI/Sale			0.0082	0.0122			0.0078	0.0056
			(1.977)**	(2.102)**			(1.899)**	(1.297)
NFA/TNA					-0.1614	-0.1683	-0.4326	-0.2989
					(-0.887)	(-0.840)	(-2.083)**	(-1.348)***
PBT/TNA					0.0087	0.0087		0.0066
					(2.114)**	(2.048)**		(1.485)***
R-square	0.0918	0.0926	0.2066	0.2389	0.2136	0.2139	0.1972	0.2674
F-value	(1.263)	(0.816)	(2.084)	(1.804)	(3.395)**	(2.176)	(1.965)	(2.099)
R-bar sqr	0.0191	-0.0208	0.1075	0.1065	0.1507	0.1156	0.0968	0.1400
Year 1998								
Intercept	0.5350	0.5365	0.5488	0.6260	0.4358	0.4368	0.5059	0.4468
GFA/TGA	-0.3287	-0.3368	-0.4965	-0.5784				
	(-1.853)**	(-1.786)**	(-2.938)*	(-3.180)*				
OPI/TGA	0.0048	0.0047		-0.0071				
	(0.926)	(0.881)		(-1.166)				
AVG Size		0.0000	-0.0000	-0.0000		0.0000	-0.0000	-0.0000
		(0.153)	(-0.842)	(-1.028)		(0.118)	(-0.636)	(-0.604)
OPI/Sale			0.0112	0.0149			0.0114	0.0092
			(2.932)*	(3.007)*			(3.000)*	(2.173)**
NFA/TNA					-0.1870	-0.1950	-0.5133	-0.3917
					(-1.074)	(-1.025)	(-3.005)***	(-1.970)**
PBT/TNA					0.0069	0.0069		0.0038
					(2.324)**	(2.239)**		(1.171)
R-square	0.1598	0.1606	0.3620	0.3976	0.2826	0.2830	0.3696	0.4051
F-value	(2.378)	(1.531)	(4.539)*	(3.794)**	(4.923)**	(3.157)**	(4.691)*	(3.916)**
R-bar sqr	0.0926	0.0557	0.2822	0.2928	0.2252	0.1934	0.2908	0.3016

cont.

TABLE VI.32 cont.

Particulars	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Run 8
Year 1999								
Intercept	0.4696	0.4703	0.4613	0.4754	0.3523	0.3482	0.4415	0.3400
GFA/TGA	-0.1965	-0.1920	-0.2948	-0.3068				
	(-1.050)	(-0.985)	(-1.704)**	(-1.685)**				
OPI/TGA	0.0071	0.0071		-0.0015				
	(1.417)***	(1.388)***		(-0.266)				
AVG Size		-0.0000	-0.0000	-0.0000		-0.0000	-0.0000	-0.0000
		(-0.117)	(-0.910)	(-0.927)		(-0.655)	(-0.760)	(-0.943)
OPI/Sale			0.0131	0.0139			0.0133	0.0075
			(2.994)*	(2.517)*			(3.072)*	(1.591)***
NFA/TNA					-0.0111	0.0265	-0.3310	-0.0940
					(-0.065)	(0.145)	(-1.881)**	(-0.488)
PBT/TNA					0.0126	0.0130		0.0095
					(3.582)*	(3.601)*		(2.286)**
R-square	0.1245	0.1250	0.3119	0.3140	0.3810	0.3919	0.3278	0.4522
F-value	(1.778)	(1.143)	(3.626)**	(2.632)	(7.695)*	(5.156)*	(3.901)**	(4.747)*
R-bar sqr	0.0545	0.0157	0.2259	0.1947	0.3315	0.3159	0.2438	0.3570

*, **, *** indicates significance at 1%, 5% and 10% level respectively.

The F values are 2.111, 0.748, 2.444, 5.439, 7.188, 8.730, 2.103, 4.504, 6.274, 10.969, 8.835, 6.249, 7.926, 5.961, 5.322, 11.621, 2.099, 3.916 and 4.747. It is worth mentioning here that out of 19 years under study, significant F value is found for 14 years. Indicating thereby the fitness of model with selected variables for 14 years out of 19 years.

SECTION - III

6.6 REGRESSIONS USING DUMMY VARIABLE:

Section I has tried to examine the impact of various independent variables on variables indicating capital structure ratio, taking Average of 16 years or 19 years. Section II has tried to examine this on year to year base for all 19 years. In both the sections, simple as well as multiple regressions are run. While running the regressions in Section II, it was observed sometimes that out of 19 years, the selected independent variables has affected positively to D/E ratio, etc. during some years whereas the same variable has negative impact in some other years. In the light of this an attempt is made to examine the change in effect and the extent and degree of relationship on account of policy changes. For this purpose the regression technique using dummy variables is adopted. Here D is equal to zero for the pre reform era and is equal to 1 for post reform era. The period covered in pre-reform era is 1981 to 1991, viz 11 years and in the post-reform era 1992 to 1999, viz 8

years. While running this regression only one independent variable is taken at a time. The equation for regression run using the dummy variable will therefore be

$$Y = \beta_0 + \beta_1 D + \beta_2 X + \beta_3 DX + U.$$

Thus, six regressions are run for each of the four dependent variables indicating the capital structure. Table Nos. 33 to 36 present the results of the regressions run.

I. DEBT-EQUITY RATIO:

First of all D/E ratio is taken as a dependent variable and six independent variables, viz, GFA/TGA, NFA/TNA, OPI/TGA, OPI/Sale, PBT/TNA and Average size are taken as in our preceding analysis.

While running the regression of D/E on GFA/TGA ratio using dummy variable it is found that the t value of coefficient of D is significant and the value of coefficient of GFA/TGA*D is also significant. This tends to suggest that in the pre reform era GFA/TGA had no significant effect on D/E ratio. However, in the post reform era there comes a significant shift in the value of intercept as well as the extent of impact of GFA/TGA on D/E ratio and it is found to have significant negative impact on D/E ratio in the post reform era.

While running the regression of D/E on NFA/TNA ratio using dummy variable it is found that the t value of coefficient of D is significant and the value of coefficient of NFA/TNA*D is also significant. This

tends to suggest that in the pre reform era NFA/TNA had no significant effect on D/E ratio. However, in the post reform era there comes a significant shift in the value of intercept as well as the extent of impact. In the post reform era NFA/TNA is found to have significant negative impact on D/E.

While running the regression of D/E on OPI/TGA ratio using dummy variable none of the coefficients are found to be significant. This indicates no significant impact in pre and post reform era of the said variable.

While running the regression of D/E on OPI/Sale ratio using dummy variable it is found that the t value of coefficient of D is significant and the value of coefficient of OPI/Sale*D is also significant. The significant value of coefficient of D indicates a shift in intercept in post-reform era. The impact is found to be significant and negative in the post-reform era and this is in line with pecking order theory.

While running the regression of D/E on PBT/TNA ratio using dummy variable it is found that the t value of coefficient of D is insignificant and the value of coefficient of PBT/TNA*D is also insignificant. This tends to suggest that PBT/TNA had no significant effect on D/E ratio in pre-reform as well as in the post-reform era.

While running the regression of D/E on Average size ratio using dummy variable it is found that the t value of coefficient of D is significant and the value of coefficient of Average size*D is also significant.

This tends to suggest that in the pre reform era Average size had no significant effect on D/E ratio. However in the post reform era there comes a significant shift in the value of intercept as well as the extent of impact and Average size is found to have negative significant effect on D/E ratio in the post reform era.

From above it follows that the reform process has significant effect on the extent of impact of majority of variables selected on D/E ratio. The variables having significant impact in post reform era are GFA/TGA, NFA/TNA, OPI/Sale and Average size. Moreover, the value of F is also found to be significant for all variables indicating that the selected variable is a good predictor of D/E ratio.

II. LONG-TERM DEBT TO TOTAL ASSETS RATIO:

In the next step the LTD/TA ratio is taken as a dependent variable and six independent variables, viz, GFA/TGA,NFA/TNA, OPI/TGA, OPI/Sale, PBT/TNA and Average size are taken as in our preceding analysis.

While running the regression of LTD/TA on GFA/TGA using dummy variable it is found that the t value of coefficient of D is significant and the value of coefficient of GFA/TGA*D is also significant. The t value of coefficient of GFA/TGA is also significant. This tends to suggest that in the pre and post reform era GFA/TGA had significant effect on LTD/TA ratio. However, the impact in the post reform era on LTD/TA ratio has increased substantially. This means that one unit change in GFA/TGA has resulted into 0.2837 units change in LTD/TA in the pre-reform era, whereas in the

post reform era change was (0.9038+0.2837) 1.1875. There is also a significant shift in the intercept. The positive significant supports trade-off theory.

While running the regression of LTD/TA on NFA/TNA using dummy variable it is found that the t value of coefficient of D is significant and the value of coefficient of NFA/TNA*D is also significant. The t value of coefficient of NFA/TNA is also significant. This tends to suggest that in the pre and post reform era NFA/TNA had significant effect on LTD/TA ratio. This also shows that in post-reform era the extent of impact has gone-up substantially. The effect is found to be positive and significant. This supports trade-off theory.

While running the regression of LTD/TA on OPI/TGA using dummy variable it is found that the t value of coefficient of D is insignificant and the value of coefficient of OPI/TGA*D is also insignificant. The t value of coefficient of OPI/TGA is also insignificant. This tends to suggest that in the pre and post reform era OPI/TGA had no significant effect on LTD/TA ratio.

While running the regression of LTD/TA on OPI/Sale using dummy variable it is found that the t value of coefficient of D is insignificant and the value of coefficient of OPI/Sale*D is also insignificant. The t value of coefficient of OPI/Sale is significant. This tends to suggest that in the pre-reform era OPI/Sale had no significant effect on LTD/TA ratio.

While running the regression of LTD/TA on PBT/TNA using dummy variable it is found that the t value of

coefficient of D is insignificant and the value of coefficient of PBT/TNA*D is also insignificant. The t value of coefficient of PBT/TNA is also insignificant. This tends to suggest that in the pre and post reform era PBT/TNA had no significant effect on LTD/TA ratio.

While running the regression of LTD/TA on Average size using dummy variable it is found that the t value of coefficient of D is insignificant, however, the value of coefficient of Average size*D is significant. The t value of coefficient of Average size is also significant. This tends to suggest that in the pre reform era and post reform era Average size had significant effect on LTD/TA ratio, but the impact was negative in the pre-reform era and positive in post-reform era. This shows a change in the direction of impact on LTD/TA.

From above it follows that when an attempt is made to examine the effect of reform on the degree of impact of various independent variables on LTD/TA there is significant difference in the degree of impact of three independent variables, viz, GFA/TGA and NFA/TNA and Average size.

III. TOTAL DEBT TO TOTAL ASSETS RATIO:

Now TD/TA ratio is taken as a dependent variable and six independent variables, viz., GFA/TGA, NFA/TNA, OPI/TGA, OPI/Sale, PBT/TNA and Average size are taken as in our preceding analysis.

While running the regression of TD/TA on GFA/TGA using dummy variable it is found that the t value of coefficient of D is significant and the value of

coefficient of GFA/TGA*D is also significant. This tends to suggest that in the pre reform era GFA/TGA had no significant effect on TD/TA ratio. However in the post reform era there comes a significant shift in the value of intercept as well as the extent of impact. Coefficient of GFA/TGA is found to have negative significant effect on TD/TA ratio in the post reform era.

While running the regression of TD/TA on NFA/TNA using dummy variable it is found that the t value of coefficient of D is significant and the value of coefficient of NFA/TNA*D is also significant. This tends to suggest that in the pre reform era NFA/TNA had no significant effect on TD/TA ratio. However, in the post reform era there comes a significant shift in the value of intercept as well as the extent of impact and NFA/TNA is found to have significant negative effect on TD/TA ratio in the post reform era.

While running the regression of TD/TA on OPI/TGA using dummy variable it is found that the t value of coefficient of D is insignificant and the value of coefficient of OPI/TGA*D is also insignificant. This tends to suggest that in the pre and post reform era OPI/TGA had no significant effect on TD/TA ratio.

While running the regression of TD/TA on OPI/Sale using dummy variable it is found that the t value of coefficient of D is significant and the value of coefficient of OPI/Sale*D is also significant. In the pre reform era OPI/Sale had a significant positive effect on TD/TA ratio. However, in post-reform era there is a significant shift in the value of intercept

and OPI/Sale is found to have negative significant impact on TD/TA. The direction of impact has undergone a change.

While running the regression of TD/TA on PBT/TNA using dummy variable it is found that the t value of coefficient of D is insignificant. However, the value of coefficient of PBT/TNA*D is significant, and this found to have negative significant impact on TD/TA. Thus in the post- reform era PBT/TNA has negative significant impact on TD/TA. The relationship in the post-reform era supports pecking order theory.

While running the regression of TD/TA on Average size using dummy variable it is found that the t value of coefficient of D is significant and the value of coefficient of Average size*D is insignificant. The t value of coefficient of Average size is also insignificant. This tends to suggest that in the pre reform era and post reform era Average size had no significant effect on TD/TA ratio. But there is a significant shift in the intercept.

IV. TOTAL EQUITY TO TOTAL ASSETS RATIO:

Now TE/TA ratio is taken as a dependent variable and six independent variables, viz, GFA/TGA, NFA/TNA, OPI/TGA, OPI/Sale, PBT/TNA and Average size are taken as our preceding analysis.

While running the regression of TE/TA on GFA/TGA using dummy variable it is found that the t value of coefficient of D is significant and the value of coefficient of GFA/TGA*D is also significant. This tends to suggest that in the post reform era GFA/TGA

had significant positive effect on TE/TA ratio. Also in the pre reform era GFA/TGA had significant positive effect on TE/TA ratio. Thus in the pre and post reform era there is a significant shift in the value of intercept as well as the extent of impact of GFA/TGA on TE/TA. The impact in the post-reform era has increased substantially.

While running the regression of TE/TA on NFA/TNA using dummy variable it is found that the t value of coefficient of D is significant and the value of coefficient of NFA/TNA*D is also significant. This tends to suggest that in the post reform era NFA/TNA had significant positive effect on TE/TA ratio. Also in the pre reform era NFA/TNA had significant positive effect on TE/TA ratio. Thus in the post reform era there is a significant shift in the value of intercept as well as the extent of impact of NFA/TNA on TE/TA. Thus, the impact in the post-reform era has increased substantially.

While running the regression of TE/TA on OPI/TGA using dummy variable it is found that the t value of coefficient of D is insignificant and the value of coefficient of OPI/TGA*D is also insignificant. In the pre reform era OPI/TGA had insignificant effect on TE/TA ratio. Thus in the post-reform era also OPI/TGA is found to have negative significant effect on TE/TA.

While running the regression of TE/TA on OPI/Sale using dummy variable it is found that the t value of coefficient of D is significant and the value of coefficient of OPI/Sale*D is also significant. This tend to suggest that in the post reform era there is a

significant shift in the value of intercept as well as the extent of impact of OPI/Sale on TE/TA. This positive impact supports pecking order theory.

While running the regression of TE/TA on PBT/TNA using dummy variable it is found that the t value of coefficient of D is insignificant and the value of coefficient of PBT/TNA*D is also insignificant. Also in the pre reform era PBT/TNA had no significant effect on TE/TA ratio. Thus there is no significant shift in the value of intercept as well as the extent of impact on PBT/TNA on TE/TA ratio in the post reform era.

While running the regression of TE/TA on Average size using dummy variable it is found that the t value of coefficient of D is significant and the value of coefficient of Average size*D is also significant. Also in the pre reform era Average size had significant effect on TE/TA ratio. Thus in the post reform era there is a significant shift in the value of intercept as well as the extent of impact of Average size on TE/TA ratio in the post reform era. Not only the degree of impact changes, even the direction also changes. In the pre-reform era there is found to be the negative impact of Average size on TE/TA, whereas in post reform era there is found to be positive impact of size on TE/TA.

The analysis in this section tends to suggest that the reforms have their impact on capital structure in majority of the cases.

Table - VI.33

REGRESSION OF DEBT-EQUITY RATIO ON VARIOUS EXPLANATORY VARIABLES USING DUMMY VARIABLES

Particulars	GFA/TGA(X)	NFA/TNA(X)	OPI/TGA(X)	OPI/Sale(X)	PBT/TNA(X)	AVG Size(X)
Intercept	3.0398	2.5101	2.5042	1.9289	2.2602	2.1183
D	7.3217	3.7172	-0.3219	4.1748	0.7937	0.5304
	(2.218)**	(3.716)*	(-0.177)	(4.164)*	(0.692)	(3.495)*
X	-2.0551	-1.1836	-0.0283	0.0226	-0.0104	0.0000
	(-0.632)	(-0.486)	(-0.340)	(0.333)	(-0.108)	(0.617)
DxX	-18.6324	-12.8354	-0.0072	-0.4166	-0.1099	-0.0000
	(-2.236)**	(-3.910)*	(-0.046)	(-4.444)*	(-0.936)	(-2.789)*
R-square	0.5993	0.8374	0.4018	0.8262	0.5015	0.8679
F-value	(7.478)*	(25.745)*	(3.359)**	(23.761)*	(5.030)*	(32.839)*
R-bar sqr	0.5194	0.8048	0.2822	0.7914	0.4018	0.8413

* ,**,*** indicates significance at 1%, 5% and 10% levels respectively.

Table - VI.34

REGRESSION OF LONG-TERM DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES USING DUMMY VARIABLES

Particulars	GFA/TGA(X)	NFA/TNA(X)	OPI/TGA(X)	OPI/Sale(X)	PBT/TNA(X)	AVG Size(X)
Intercept	-0.0518	-0.0334	0.0245	-0.0016	0.0420	0.0771
D	-0.3347	-0.0793	0.1172	-0.0551	0.0360	-0.0089
	(-2.029)**	(-1.498)***	(1.227)	(-0.718)	(0.543)	(-0.778)
X	0.2837	0.3503	0.0037	0.0068	0.0029	-0.0000
	(1.838)**	(2.715)*	(0.848)	(1.309)	(0.525)	(-1.444)***
DxX	0.9038	0.3396	-0.0068	0.0080	-0.0003	0.0000
	(2.285)**	(1.954)**	(-0.829)	(1.117)	(-0.039)	(2.652)*
R-square	0.8320	0.9152	0.6938	0.8103	0.6904	0.8608
F-value	(24.757)*	(53.942)*	(11.329)	(21.356)*	(11.152)*	(30.912)*
R-bar sqr	0.7984	0.8982	0.6326	0.7723	0.6285	0.8329

* ,**,*** indicates significance at 1%, 5% and 10% levels respectively.

Table - VI.35

REGRESSION OF TOTAL DEBT TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES USING DUMMY VARIABLES

Particulars	GFA/TGA(X)	NFA/TNA(X)	OPI/TGA(X)	OPI/Sale(X)	PBT/TNA(X)	AVG Size(X)
Intercept	0.5574	0.5085	0.5285	0.4634	0.5052	0.6317
D	1.1513	0.5694	0.1485	0.6032	0.1639	0.0367
	(3.083)*	(5.063)*	(0.726)	(5.900)*	(1.216)	(2.152)**
X	0.1510	0.3870	0.0077	0.0153	0.0126	-0.0000
	(0.432)	(1.012)	(0.828)	(2.205)**	(1.114)	(-1.194)
DxX	-2.9010	-1.9946	-0.0174	-0.0607	-0.0222	-0.0000
	(-3.239)*	(-5.404)*	(-0.985)	(-6.350)*	(-1.607)***	(-1.125)
R-square	0.7082	0.8705	0.5233	0.8861	0.5667	0.8947
F-value	(12.140)*	(33.609)*	(5.490)*	(38.895)*	(6.540)*	(42.501)*
R-bar sqr	0.6499	0.8446	0.4280	0.8633	0.4801	0.8737

* ,**,*** indicates significance at 1%, 5% and 10% levels respectively.

Table - VI.36

REGRESSION OF TOTAL EQUITY TO TOTAL ASSETS RATIO ON VARIOUS EXPLANATORY VARIABLES USING DUMMY VARIABLES

Particulars	GFA/TGA(X)	NFA/TNA(X)	OPI/TGA(X)	OPI/Sale(X)	PBT/TNA(X)	AVG Size(X)
Intercept	0.0871	0.1522	0.2422	0.2642	0.2454	0.3727
D	-1.1446	-0.4404	0.1407	-0.4940	0.0058	-0.1105
	(-2.678)*	(-4.781)*	(0.543)	(-3.505)*	(0.034)	(-10.042)*
X	0.6122	0.6695	0.0088	0.0081	0.0111	-0.0000
	(1.530)***	(2.984)*	(0.742)	(0.847)	(0.784)	(-4.588)*
DxX	2.8877	1.4824	-0.0077	0.0488	0.0024	0.0000
	(2.817)*	(4.905)*	(-0.348)	(3.702)*	(0.141)	(8.996)*
R-square	0.6691	0.9248	0.3386	0.8126	0.4119	0.9621
F-value	(10.109)*	(61.492)*	(2.560)	(21.674)*	(3.503)**	(126.892)*
R-bar sqr	0.6029	0.9098	0.2063	0.7751	0.2943	0.9545

* ,**,*** indicates significance at 1%, 5% and 10% levels respectively.

Concluding Remarks:

The chapter has been divided broadly into three sections. Section I discussed regression of Average ratio, indicating capital structure on Average of determining factor. On running simple regression of D/E on GFA/TGA, NFA/TNA, OPI/Sale and PBT/TNA, the findings for variables contradict Trade-off theory but findings for last two variables are supporting Pecking order theory. While running multiple regressions for 45 companies NFA/TNA and PBT/TNA are found to have negative significant effect and when 28 companies are taken even, GFA/TGA, OPI/TGA are also found to have negative significant effect on D/E ratio.

Similarly when LTD/TA is taken as dependent variable GFA/TGA, NFA/TNA and OPI/Sale are found to have positive significant effect on LTD/TA ratio supporting trade-off theory. The findings for PBT/TNA supports pecking order theory. On running multiple regression on the whole it is observed that GFA/TGA, NFA/TNA and OPI/Sale support trade-off theory and OPI/TGA and PBT/TNA is found to support pecking order theory.

On running regression of TD/TA on various independent variables OPI/Sale and PBT/TNA is found to support pecking order theory. On running the multiple regressions on the whole it is observed that the impact of NFA/TNA is in the line with finding of Ferri and Jones. The impact of PBT/TNA supports pecking order theory.

The fourth dependent variable selected for capital structure is TE/TA. On running simple

regression only PBT/TNA is found to support pecking order theory. On running multiple regressions NFA/TNA is found to have positive significant effect. PBT/TNA is found to support pecking order and OPI/Sale is found to support trade-off theory.

In Section II same analysis is carried out yearwise.

When simple regressions are run of D/E ratio on six independent variables, out of 19 years for some years they are found to have negative significant impact supporting pecking order theory. On running multiple regressions also, OPI/TGA and PBT/TNA are found to support pecking order theory for many years.

On running the regressions of LTD/TA on GFA/TGA, NFA/TNA and OPI/Sale for majority of the years it is found to support trade-off theory for many years, whereas PBT/TNA is found to support pecking order theory. On running the yearwise multiple regressions also similar results are observed.

While running the simple yearwise regressions of TD/TA on various selected variables on PBT/TNA is found to be significant for majority of years supporting pecking order theory. On running multiple regressions run 5, 6 and 8 fits well where again the common variables are NFA/TNA and PBT/TNA, where first finding supports findings of Ferri and Jones and the second supports pecking order theory.

On running yearwise simple regressions of TE/TA on various selected variables, again findings for PBT/TNA supports pecking order theory for most of the

years. On running the yearwise multiple regressions, again NFA/TNA and PBT/TNA found to have significant impact for most of the years, where in the findings for the first supports trade-off theory and for the second it supports pecking order theory.

In Section III, analysis is carried out to examine the difference in the degree and direction of impact of selected independent variable on selected capital structure ratios out of 24 such regressions in 16 cases it is found that in the post-reform era there is a significant shift in the intercept and/or slope and the impact of variable is found to be significant on selected capital structure ratio. GFA/TGA and NFA/TNA are found to have effect of reform for all 4 selected capital structure ratios.

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