CHAPTER-5

DETERMINANTS OF CAPITAL STRUCTURE AT FIRM LEVEL: AN EMPIRICAL ANALYSIS

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CHAPTER - 5

DETERMINANTS OF CAPITAL STRUCTURE AT FIRM LEVEL: AN EMPIRICAL ANALYSIS

In this chapter, empirical analysis at firm level is undertaken to identify the Determinants of Capital Structure of FDI Companies in India. This chapter is divided into two parts: In PART- I, Simple Linear Regressions of various measures of Capital Structure (Debt Ratios) on each individual indicator of an independent variable are conducted. In PART - II, Multiple Regression Analysis of each Debt measure is conducted on the selected Determinants of Capital Structure to study the impact of various Determinants on Capital Structure and to examine the impact of these Determinants on Capital Structure of selected sample of FDI Companies in India. An attempt is also made to relate the results with established Capital Structure theories applicable to the selected sample of companies.

PART - I

SIMPLE REGRESSIONS OF VARIOUS MEASURES OF CAPITAL STRUCTURE

5.1 Results of Simple Regression

In this first stage of empirical analysis at firm level, simple linear regressions of various measures of Capital Structure (Debt Ratios) on each indicator of an independent variable are conducted. The results will point out the indicators of independent variables which are having significant impact on Debt Ratios.

5.1.1 Results of Simple Regressions on STBB+CPLTD/TA Ratio

In Table 5.1, results of simple linear regression of STBB+CPLTD/TA (Debt Ratio) on each indicator of independent variable for 140 sample FDI Companies are presented. It is observed that Profitability indicators PBIT/TNA, PBITDA/TGA and PBT/TNA have significant negative impact on STBB+CPLTD/TA ratio with 't' statistic significant at 1% level of significance for all the three indicators.

Table 5.1							
Simple Linear Regression on Debt Ratio- STBB+CPLTD/TA							
Independent variables	Indicators	R square	Intercept	Slope	t-Statistic	p- value	F -Statistic
Size	Log of sales	0.004	0.127	-0.004	-0.756	0.451	0.571
	Log of GTFA	0.008	0.132	-0.006	-1.087	0.279	1.181
	Log of TNA	0.011	0.143	-0.007	-1.234	0.219	1.524
Profitability	PBIT/TNA	0.121	0.175	-0.490	**-4.369****	**0.000**	**19.084**
	PBITDA/TGA	0.136	0.190	-0.581	**-4.663****	**0.000**	**21.745**
	PBT/TNA	0.220	0.166	-0.555	**-6.233****	**0.000**	**38.852**
	PBIT/Sales	0.000	0.106	-0.001	-0.067	0.947	0.005
	PBIT/CE	0.012	0.122	-0.064	-1.305	0.194	1.702
Collateral	NFA/TNA	0.002	0.115	-0.028	-0.555	0.580	0.308
	GFA/TGA	0.001	0.113	-0.017	-0.349	0.727	0.122
	(Nfa+Inv+AR)/TNA	0.139	-0.113	0.274	**4.723****	**0.000**	**22.309**
	L&B/TGA	0.002	0.109	-0.043	-0.525	0.601	0.275
	P&E/TGA	0.007	0.109	-0.004	-0.980	0.329	0.961
	INV/TNA	0.076	0.051	0.278	**3.373****	**0.001**	**11.376**
Volatility	SD of PBIT	0.028	0.113	0.00E+00	**-2.002***	**0.047**	**4.008**
	SD of % change in PBIT	0.000	0.106	-3.60E-07	-0.046	0.963	0.002
	SD of PBITDA/TGA	0.046	0.079	0.413	**2.586****	**0.011**	**6.688**
	COV of PBIT	0.008	0.104	0.001	1.058	0.292	1.119
	COV of PBIT/ CE	0.000	0.106	0.000	-0.128	0.898	0.016
	COV of PBIT/TNA	0.131	0.086	0.027	**4.571****	**0.000**	**20.893**
Growth rate	CAGR of TNA	0.047	0.141	-0.250	**-2.603****	**0.010**	**6.775**
	CAGR of sales	0.015	0.123	-0.123	-1.430	0.155	2.045
NDTS	Depr/TGA	0.013	0.131	-0.944	-1.358	0.177	1.843
	Depr+ET/TGA	0.009	0.114	-0.065	-1.120	0.265	1.255
	Depr/PBITDA	0.002	0.105	0.003	0.477	0.634	0.228
Debt Service capacity	PBDIT/INT	0.025	0.110	-3.00E-05	-1.896	0.06	3.586
Age	Age as on 31/03/2008	0.006	0.122	0.000	-0.892	0.374	0.796
	Log of age of firm	0.003	0.151	-0.013	-0.677	0.499	0.459
Dividend payout	Equity Div/PAT	0.010	0.116	-0.033	-1.159	0.248	1.344
Liquidity	CA/CL	0.004	0.117	-0.004	-0.757	0.45	0.573
Net Exports	Net exp/Sales	0.001	0.105	-0.017	-0.442	0.659	0.195
Cost of Equity	DIV/SC	0.073	0.132	-0.435	**-3.308****	**0.001**	**10.942**
Uniqueness	R&D/Sales	0.001	0.107	-0.183	-0.315	0.753	0.099
Cost of Borrowing	INT/DEBT	0.007	0.122	-0.120	-0.982	0.328	0.965
* indicates significance at 5% level							
** indicates significance at 1% level							

The R^2 value of PBT/TNA indicates that profitability factor is able to explain 22% variations in the STBB+CPLTD/TA ratio. (Nfa+Inv+AR)/TNA has significant positive impact on STBB+CPLTD/TA ratio, and is able explain almost 14% variation

in the ratio. Even INV/TNA has significant positive impact on STBB+CPLTD/TA ratio. This indicates that along with Net Fixed Assets, Inventory and Accounts Receivables also determine the level of Short Term Bank Borrowings and ability to pay Long Term Debt. SD of PBITDA/TGA and COV of PBIT/TNA both have positive impact on STBB+CPLTD/TA ratio, the't' statistic significant at 1% level of significance indicating that Volatility has positive impact on Short Term Bank Borrowings.

Growth rate has negative impact on STBB+CPLTD/TA ratio, as CAGR of TNA has got negative coefficient, significant at 1% level of significance which shows consistency with results of Bevan & Danbolt (2000)[1]. They also had found that companies with high levels of growth opportunities appear to be increasingly moving away from Short Term Bank Debt. Although the ratio has negative impact on Growth Rate, it does not indicate that high growth companies might not be resorting to long term debt as STBB+CPLTD/TA includes a proportion of Long Term Debt to be paid in a year. Cost of Equity has negative impact on STBB+CPLTD/TA ratio indicating that with increase in Cost of Equity, preference for Short Term Bank Borrowings reduces. The't' statistic for indicators of Size, NDTS, Debt Service Capacity, Age, Dividend Payout, Liquidity, Net Exports, Uniqueness and Cost of Borrowings indicated insignificant impact on STBB+CPLTD/TA ratio.

5.1.2 Results of Simple Regressions on STD/TA Ratio

In Table 5.2, results of simple linear regression of STD/TA (Debt Ratio) on each indicator of independent variable for 140 sample FDI Companies are presented. Short Term Debt (STD) comprises of Short Term Bank Borrowings and Commercial Paper. From the results of simple regressions, it is observed that Log of sales and Log of GTFA have negative impact on STD/TA ratio which indicates that as the Size increases, company's dependence on Short Term Bank Borrowings decreases. This may also indicate that large Size companies may be in better position to obtain Long Term Debt finance and thus explaining the negative impact of Size on Short Term Debt. PBIT/TNA, PBITDA/TGA and PBT/TNA have negative impact on STD/TA ratio and are significant at 1% level of significance indicating that Profitable companies resort to lower levels of Short Term Bank

Borrowings. (Nfa+Inv+AR)/TNA and INV/TNA have positive impact on STD/TA ratio and are significant at 1% level of significance indicating that level of Inventories and Accounts Receivables act as Collaterals for receiving Short Term Bank Loans.

Table 5.2

Simple Linear Regression on Debt Ratio- STD/TA

Independent variables	Indicators	R square	Intercept	Slope	t-Statistic	p- value	F -Statistic
Size	Log of sales	0.013	0.115	-0.006	-1.368	0.173	1.872
	Log of GTFA	0.030	0.123	-0.008	**-2.061***	**0.041**	**4.249**
	Log of TNA	0.031	0.134	-0.009	**-2.091***	**0.038**	**4.374**
Profitability	PBIT/TNA	0.103	0.135	-0.344	**-3.974****	**0.000**	**15.790**
	PBITDA/TGA	0.118	0.146	-0.412	**-4.287****	**0.000**	**18.382**
	PBT/TNA	0.199	0.130	-0.404	**-5.850****	**0.000**	**34.228**
	PBIT/Sales	0.000	0.086	-4.80E-07	0.000	1.000	0.000
	PBIT/CE	0.006	0.095	-0.035	-0.921	0.359	0.849
Collateral	NFA/TNA	0.014	0.104	-0.054	-1.402	0.163	1.966
	GFA/TGA	0.010	0.106	-0.045	-1.194	0.234	1.426
	(Nfa+Inv+AR)/TNA	0.139	-0.081	0.209	**4.729****	**0.000**	**22.365**
	L&B/TGA	0.002	0.089	-0.032	-0.519	0.604	0.270
	P&E/TGA	0.009	0.089	-0.004	-1.088	0.278	1.184
	Inventories/TNA	0.098	0.038	0.240	**3.864****	**0.000**	**14.927**
Volatility	SD of PBIT	0.042	0.093	0.00E+00	**-2.473***	**0.015**	**6.115**
	SD of % change in PBIT	0.000	0.086	-9.40E-07	-0.159	0.874	0.025
	SD of PBITDA/TGA	0.015	0.074	0.182	1.465	0.145	2.146
	COV of PBIT	0.003	0.085	0.000	0.647	0.518	0.419
	COV of PBIT/CE	0.003	0.086	-0.001	-0.613	0.541	0.376
	COV of PBIT/ TNA	0.075	0.075	0.016	**3.344****	**0.001**	**11.182**
Growth rate	CAGR of TNA	0.031	0.108	-0.155	**-2.091***	**0.038**	**4.371**
	CAGR of sales	0.008	0.095	-0.068	-1.029	0.305	1.059
NDTS	Depr/TGA	0.026	0.114	-1.021	-1.935	0.055	3.746
	Depr+ET/TGA	0.012	0.093	-0.058	-1.314	0.191	1.727
	Depr/PBITDA	0.001	0.085	0.002	0.425	0.672	0.180
Debt Service capacity	PBDIT/INT	0.029	0.090	-2.50E-05	**-2.026***	**0.045**	**4.106**
Age	Age as on 31/03/2008	0.005	0.097	0.000	-0.807	0.421	0.652
	Log of age of firm	0.003	0.119	-0.009	-0.648	0.518	0.419
Dividend payout	Equity Div/PAT	0.022	0.098	-0.039	-1.770	0.079	3.312
Liquidity	CA/CL	0.001	0.090	-0.001	-0.370	0.712	0.137
Net Exports	Net exp/Sales	0.001	0.086	-0.008	-0.283	0.777	0.080
Cost of Equity	DIV/SC	0.078	0.107	-0.343	**-3.427****	**0.001**	**11.743**
Uniqueness	R&D/Sales	0.011	0.089	-0.550	-1.245	0.215	1.549
Cost of Borrowing	INT/DEBT	0.007	0.098	-0.092	-0.983	0.327	0.967

*** indicates significance at 5% level**

**** indicates significance at 1% level**

COV of PBIT/TNA has positive impact on STD/TA ratio indicating that Volatile earnings would mean more dependence on Short Term Bank Borrowings.

CAGR of TNA has negative impact on STD/TA and is significant at 5% level of significance which means that high growth companies resort to low level of Short Term Bank Borrowings. PBDIT/INT has negative impact on STD/TA indicating that the companies having high Debt Servicing Capacity resort to lower Short Term Bank Borrowings. A significant negative coefficient of indicator of Cost of Equity shows that as Cost of Equity increases, companies prefer lower levels of Short Term Bank Borrowings. It might be possible that profitable companies may be declaring high dividends as indicated by positive correlation coefficient between Profitability indicators and indicators of Cost of Equity (Table 5.24). These profitable companies might be having sufficient cash reserves and internally generated funds. These companies do not need external financing. Hence this might explain negative impact of Profitability and even Cost of Equity factor on STD/TA ratio. The't' statistic of indicators of NDTS, Age, Dividend payout, Net Exports, Uniqueness and Cost of Borrowings indicated insignificant impact on STD/TA ratio.

5.1.3 Results of Regression on STD1/TA Ratio

In Table 5.3, results of simple linear regression of STD1/TA (Debt Ratio) on each indicator of independent variable indicate that Log of GTFA has negative impact on the Short Term Debt Ratio (STD1/TA) indicating that greater the Size, lower will be the STD1/TA ratio and smaller the Size of a firm, greater would be reliance on Short Term Debt Funds. This result is consistent with Titman & Wessel's (1988)[2] who had found evidence that small firms tend to use significantly more short-term financing than large firms. PBITDA/TGA and PBT/TNA has significant negative impact on the debt ratio indicating that Pecking Order Theory is followed as profitable firms resort to low Short Term Debt levels in their Capital Structure. NFA/TNA and GFA / TGA have significant negative impact on STD1/TA ratio. The R^2 value of NFA / TNA indicates that 27% of the variations in STD1/TA ratio are explained by Collateral effect and R^2 value of GFA/TGA indicates that 24% of the variation in the Debt Ratio is explained. This means that firms having more fixed assets as collaterals will resort to lower Short Term Debt levels in their Capital Structure as they can resort to Long Term Debt funds if needed. It is also observed that INV/TNA has significant negative

Table 5.3							
Simple Linear Regression on Debt Ratio- STD1/TA							
Independent variables	**Indicators**	**R square**	**Intercept**	**Slope**	**t-Statistic**	**p- value**	**F -Statistic**
Size	Log of sales	0.007	0.350	0.008	0.962	0.338	0.925
	Log of GTFA	0.045	0.486	-0.021	**-2.549***	**0.012**	**6.496**
	Log of TNA	0.006	0.436	-0.009	-0.941	0.348	0.886
Profitability	PBIT/TNA	0.023	0.440	-0.339	-1.821	0.071	3.317
	PBITDA/TGA	0.037	0.461	-0.476	**-2.305***	**0.023**	**5.313**
	PBT/TNA	0.039	0.432	-0.366	**-2.360***	**0.020**	**5.568**
	PBIT/Sales	0.005	0.392	0.005	0.271	0.787	0.073
	PBIT/CE	0.025	0.355	0.144	1.871	0.063	3.500
Collateral	NFA/TNA	0.272	0.552	-0.489	**-7.181****	**0.000**	**51.562**
	GFA/TGA	0.241	0.593	-0.45	**-6.618****	**0.000**	**43.802**
	(Nfa+Inv+AR)/TNA	0.027	0.242	0.189	1.948	0.053	3.974
	L&B/TGA	0.023	0.412	-0.226	-1.785	0.076	3.188
	P&E/TGA	0.011	0.398	-0.009	-1.226	0.222	1.503
	Inventories/TNA	0.207	0.25	0.720	**6.009****	**0.000**	**36.113**
Volatility	SD of PBIT	0.004	0.396	-6.90E-05	-0.784	0.435	0.614
	SD of % change in PBIT	0.012	0.397	-1.60E-05	-1.287	0.200	1.656
	SD of PBITDA/TGA	0.049	0.349	0.670	**2.673****	**0.008**	**7.143**
	COV of PBIT	0.008	0.389	0.002	1.053	0.294	1.109
	COV of PBIT/CE	0.019	0.393	-0.005	-1.631	0.105	2.661
	COV of PBIT/ TNA	0.151	0.359	0.046	**4.954****	**0.000**	**24.544**
Growth rate	CAGR of TNA	0.063	0.457	-0.456	**-3.053****	**0.003**	**9.32**
	CAGR of sales	0.012	0.417	-0.179	-1.317	0.190	1.735
NDTS	Depr/TGA	0.119	0.513	-4.450	**-4.312****	**0.000**	**18.594**
	Depr+ET/TGA	0.044	0.420	-0.225	**-2.505***	**0.013**	**6.276**
	Depr/PBITDA	0.009	0.388	0.013	1.142	0.256	1.304
Debt Service capacity	PBDIT/INT	0.012	0.397	-3.30E-05	-1.315	0.191	1.731
Age	Age as on 31/03/2008	0.012	0.355	0.001	1.305	0.194	1.702
	Log of age of firm	0.01	0.264	0.035	1.205	0.230	1.452
Dividend payout	Equity Div/PAT	0.000	0.395	-0.011	-0.252	0.801	0.064
Liquidity	CA/CL	0.135	0.492	-0.033	**-4.637****	**0.000**	**21.504**
Net Exports	Net exp/Sales	0.045	0.387	-0.151	**-2.540***	**0.012**	**6.453**
Cost of Equity	DIV/SC	0.004	0.382	0.161	0.750	0.455	0.562
Uniqueness	R&D/Sales	0.033	0.402	-1.952	**-2.172***	**0.032**	**4.719**
Cost of Borrowing	INT/DEBT	0.050	0.325	0.505	**2.683****	**0.008**	**7.197**
* indicates significance at 5% level							
** indicates significance at 1% level							

impact on STD1/TA indicating that Inventories act as collaterals for obtaining Short Term Debt Funds. SD of PBITDA/TGA and COV of PBIT/TNA have positive impact on STD1/TA ratio indicating that companies having volatile incomes may resort to

higher Short Term Debt levels in their Capital Structure. Indicators of Growth Rate have negative impact on STD1/TA ratio, CAGR/TNA being significant at 1% level, indicating support for Trade-off Theory.

NDTS indicators Depr/TGA and Depr+ET/TGA both have negative impact on STD1/TA assets ratio indicating that companies must be resorting to more Long Term Debt if needed as they increase their investments in fixed assets. Uniqueness indicator R&D / Sales was negatively related to STD1/TA indicating that it might be difficult for unique firms to obtain short term debt. These results were consistent with results of Titman & Wessel's (1988)[2], but the results were contrasting with results of Kakani (1999)[3] who found that uniqueness of firm had positive impact on Short Term Debt levels of firm.

INT/DEBT an indicator for Cost of Borrowing have positive impact on STD1/TA, significant at 1% level indicating that as Cost of Borrowing rises, FDI Companies resort to Short Term Debt to meet their financing needs. Net Exports have negative impact on STD1/TA ratio. The indicators of Debt service capacity, Age, Dividend payout, Cost of equity have insignificant impact on STD1/TA ratio as indicated by low't' statistic with high 'p' values.

5.1.4 Results of Simple Regression on TC&E/TA Ratio

In Table 5.4, results of simple linear regression of TC&E/TA (Debt Ratio) on each indicator of independent variable for 140 sample FDI Companies are presented. Trade Credit and Equivalents make up a significant portion of Short Term Debt (Table 4.2, Chapter - 4) and dependence on Trade Credit as a major source of finance seems to be a trend even in all sample industries selected in this study.

A look at the Size factor reveals that the indicator Log of sales has a positive impact on TC&E/TA ratio and is significant at 5% level of significance. This indicates that large size companies having greater sales are more dependent on Trade Credits and Equivalents, as it is necessary to meet the increasing demand for short term working capital requirements. Collateral indicators NFA/TNA and GFA/TGA had significant negative impact on TC&E/TA ratio. INV/TNA has positive impact on TC&E/TA ratio which means that higher inventory levels are maintained with the help of reliance on Trade Credits. All indicators of Profitability have significant negative

Table 5.4							
Simple Linear Regression on Debt Ratio- TC&E/TA							
Independent variables	Indicators	R square	Intercept	Slope	t-Statistic	p- value	F -Statistic
Size	Log of sales	0.037	0.162	0.015	**2.311***	**0.022**	**5.399**
	Log of GTFA	0.012	0.278	-0.009	-1.319	0.189	1.740
	Log of TNA	0.001	0.224	0.003	0.417	0.677	0.174
Profitability	PBIT/TNA	0.040	0.288	-0.345	**-2.402***	**0.018**	**5.770**
	PBITDA/TGA	0.050	0.302	-0.432	**-2.702****	**0.008**	**7.299**
	PBT/TNA	0.042	0.272	-0.297	**-2.453***	**0.015**	**6.017**
	PBIT/Sales	0.001	0.239	-4.00E-03	-0.315	0.753	0.099
	PBIT/CE	0.009	0.222	0.068	1.123	0.263	1.262
Collateral	NFA/TNA	0.239	0.356	-0.358	**-6.584****	**0.000**	**43.351**
	GFA/TGA	0.228	0.392	-0.341	**-6.378****	**0.000**	**40.685**
	(Nfa+Inv+AR)/TNA	0.023	0.130	0.137	1.817	0.071	3.300
	L&B/TGA	0.047	0.262	-0.255	**-2.622****	**0.010**	**6.877**
	P&E/TGA	0.001	0.241	-0.002	-0.368	0.713	0.136
	Inventories/TNA	0.176	0.137	0.518	**5.431****	**0.000**	**29.491**
Volatility	SD of PBIT	0.003	0.236	4.29E-005	0.627	0.532	0.393
	SD of % change in PBIT	0.008	0.242	-1.00E-05	-1.085	0.280	1.177
	SD of PBITDA/TGA	0.057	0.203	0.564	**2.895****	**0.004**	**8.380**
	COV of PBIT	0.010	0.237	0.001	1.186	0.238	1.405
	COV of PBIT/CE	0.027	0.240	-0.005	**-1.949***	**0.053**	**3.799**
	COV of PBIT/TNA	0.153	0.213	0.036	**5.000****	**0.000**	**25.002**
Growth rate	CAGR of TNA	0.061	0.289	-0.351	**-3.002***	**0.003**	**9011**
	CAGR of sales	0.012	0.258	-0.140	-1.318	0.190	1.737
NDTS	Depr/TGA	0.123	0.335	-3.535	**-4.400****	**0.000**	**19.357**
	Depr+ET/TGA	0.044	0.262	-0.177	**-2.530***	**0.013**	**6.400**
	Depr/PBITDA	0.017	0.235	0.013	1.528	0.129	2.335
Debt Service capacity	PBDIT/INT	0.008	0.242	-2.10E-05	-1.079	0.282	1.165
Age	Age as on 31-03-2008	0.029	0.194	0.001	2.048*	0.042	4.194
	Log of age of firm	0.025	0.085	0.042	1.883	0.062	3.544
Dividend payout	Equity Div/PAT	0.000	0.241	-0.006	-0.165	0.869	0.027
Liquidity	CA/CL	0.269	0.349	-0.037	**-7.128****	**0.000**	**50.802**
Net Exports	Net exp/Sales	0.067	0.234	-0.145	**-3.159****	**0.002**	**9.979**
Cost of Equity	DIV/SC	0.003	0.232	0.114	0.685	0.494	0.469
Uniqueness	R&D/Sales	0.030	0.247	-1.460	**-2.079***	**0.039**	**4.323**
Cost of Borrowing	INT/DEBT	0.095	0.166	0.546	**3.809****	**0.000**	**14.505**
* indicates significance at 5% level							
** indicates significance at 1% level							

impact on TC&E/TA ratio indicating that if there are sufficient cash flows generated due to high profitability, FDI Companies in India may resort to lower levels of Trade Credit. Two indicators of Volatility SD of PBITDA/TGA and COV of PBIT/TNA are

significant at 1% level of significance and have positive impact on TC&E/TA ratio indicating that companies having volatile earnings do not lower their preference for Trade Credits as a mode of short term finance. Growth indicators CAGR of TNA is significant at 5% level of significance and has negative impact on TC&E/TA ratio indicating that firms with high growth rate in assets may be profitable firms as indicated by positive and significant correlation coefficient between CAGR of TNA and all indicators of profitability (Table 5.24). This might mean that firms having high growth rate are profitable firms having sufficient internally generated cash reserves to meet working capital requirements hence resort to lower levels of Trade Credit.

NDTS indicators have negative impact on TC&E/TA ratio indicating that increase in NDTS means increased investments in fixed assets which cannot be financed through short term funds, but can be financed only through long term debt funds or internally generated funds.

Age factor is significant at 5% level of significance and has positive impact on TC&E/TA ratio indicating mature firm's ability to avail easy short term credit facilities. But while interpreting the impact of Age factor on Debt Ratios, the sample data feature has to be kept in mind, since the sample data is for eighteen years (1991 to 2008) and the youngest age company in the sample is of 19 years and the oldest company is of 107 years with a median age of 39.5 years. Still we find positive impact of Age on TC&E/TA ratio which means that as the firm grows in age, its ability to avail Short Term Trade Credit increases.

Net Exports has negative impact on TC&E/TA ratio and is significant at 1% level of significance which indicated that net exporters do not resort to trade credit as they are already given lot of benefits such as EXIM credit facility and other export incentives and hence require less of trade credits. Unique firms might be facing difficulties in obtaining Trade Credit as indicated by significant negative coefficient of R&D/Sales. Cost of Borrowing indicator is significant at 1% level of significance and has positively impact on TC&E/TA ratio indicating that as cost of Long Term Debt Funds increase, FDI Companies resort to Short Term Trade Credit as a source of finance.

5.1.5 Results of Simple Regression on STD/NW Ratio

In Table 5.5, results of simple linear regression of STD/NW (Debt Ratio) on each

indicator of independent variable for 140 sample FDI Companies are presented. Size indicators - Log of GTFA and LOG of TNA have negative impact on STD/NW ratio which means that as the Size of a company increases, it's preference

Table 5.5

Simple Linear Regression on Debt Ratio- STD/NW

Independent variables	Indicators	R square	Intercept	Slope	t-Statistic	p- value	F -Statistic
Size	Log of sales	0.019	0.553	-0.042	-1.629	0.106	2.655
	Log of GTFA	0.038	0.605	-0.060	**-2.348***	**0.020**	**5.515**
	Log of TNA	0.043	0.693	-0.070	**-2.496***	**0.014**	**6.229**
Profitability	PBIT/TNA	0.117	0.665	-2.316	**-4.267****	**0.000**	**18.207**
	PBITDA/TGA	0.127	0.728	-2.700	**-4.472***	**0.000**	**19.996**
	PBT/TNA	0.185	0.605	-2.456	**-5.592***	**0.000**	**31.267**
	PBIT/Sales	0.000	0.337	-5.00E-03	-0.092	0.927	0.008
	PBIT/CE	0.074	0.534	-0.763	**-3.314****	**0.001**	**10.984**
Collateral	NFA/TNA	0.004	0.394	-0.176	-0.719	0.473	0.517
	GFA/TGA	0.004	0.414	-0.172	-0.721	0.472	0.520
	(Nfa+Inv+AR)/TNA	0.095	-0.532	1.090	**3.805****	**0.000**	**14.476**
	L&B/TGA	0.007	0.371	-0.377	-0.965	0.336	0.932
	P&E/TGA	0.009	0.354	-0.024	-1.146	0.254	1.313
	Inventories/TNA	0.049	0.124	1.077	**2.674****	**0.008**	**7.151**
Volatility	SD of PBIT	0.026	0.369	-1.00E-03	-1.913	0.058	3.660
	SD of % change in PBIT	0.001	0.340	-1.10E-05	-0.283	0.778	0.080
	SD of PBITDA/TGA	0.000	0.336	0.005	0.006	0.995	0.000
	COV of PBIT	0.006	0.329	0.004	0.942	0.348	0.887
	COV of PBIT/CE	0.015	0.34	-0.014	-1.459	0.147	2.129
	COV of PBIT/ TNA	0.045	0.282	0.076	**2.542***	**0.012**	**6.462**
Growth rate	CAGR of TNA	0.015	0.433	-0.679	-1.443	0.151	2.081
	CAGR of sales	0.000	0.352	-0.109	-0.261	0.795	0.068
NDTS	Depr/TGA	0.017	0.476	-5.122	-1.53	0.128	2.341
	Depr+ET/TGA	0.019	0.394	-0.453	-1.622	0.107	2.63
	Depr/PBITDA	0.004	0.33	0.024	0.699	0.485	0.489
Debt Service capacity	PBDIT/INT	0.018	0.355	0.00E+00	-1.583	0.116	2.505
Age	Age as on 31-03-2008	0.006	0.415	-0.002	-0.898	0.371	0.806
	Log of age of firm	0.006	0.626	-0.079	-0.89	0.375	0.792
Dividend payout	Equity Div/PAT	0.028	0.423	-0.272	**-1.979***	**0.050**	**3.918**
Liquidity	CA/CL	0.014	0.436	-0.033	-1.399	0.164	1.958
Net Exports	Net exp/Sales	0.006	0.331	-0.165	-0.887	0.376	0.787
Cost of Equity	DIV/SC	0.054	0.445	-1.797	**-2.805****	**0.006**	**7.867**
Uniqueness	R&D/Sales	0.013	0.356	-3.709	-1.330	0.186	1.770
Cost of Borrowing	INT/DEBT	0.001	0.364	-0.209	-0.352	0.726	0.124

*** indicates significance at 5% level**

**** indicates significance at 1% level**

for Short Term Bank Borrowings and Commercial Paper as a source of finance decreases. Profitability indicators have significant negative impact on STD/NW indicating that Profitable companies must be having sufficient internally generated cash reserves to meet short term working capital requirements and hence do not require to borrow from short term debt sources.

The Collateral indicator (NfA+Inv+AR)/TNA is significant at 1% level of significance and has positive impact on STD/NW ratio indicating that along with net fixed assets, for availing Short Term Bank Borrowings, companies Inventories and Accounts Receivables also act as Collaterals. Volatility indicator COV of PBIT/TNA has positive impact on STD/NW ratio which means that if earnings risk for a company increase, companies prefer Short Term Bank Borrowings during that period.

Dividend Payout has negative impact on STD/NW ratio indicating that as the Dividend Payout for a company increase, companies resort to lower levels of Short Term Bank Borrowings. This indicates that the company has sufficient internally generated funds because of higher profits and hence may have declared high dividends.

Cost of Equity represented by DIV/SC has negative impact on STD/NW indicating that companies either resort to long term debt or prefer internal financing as Cost of Equity rises. The't' statistic of indicators of Growth rate, NDTS, Age, Net Exports, Uniqueness and Cost of Borrowings indicated insignificant impact on STD/NW ratio.

5.1.6 Results of Simple Regression on STD1/NW Ratio

In Table 5.6, results of simple linear regression of STD1/NW (Debt Ratio) on each indicator of independent variable for 140 sample FDI Companies are presented. Increase in Size as reflected by indicator Log of GTFA means that companies' collaterals in the form of fixed assets have increased which support more Long Term Debt than Short Term Debt. This is indicated by significant negative coefficient of Log of GTFA with STD1/NW ratio. Profitability indicators have negative impact on STD1/NW ratio indicating that FDI Companies follow Pecking Order Theory even before resorting to short term borrowings to finance the business.

The Collateral indicators GFA/TGA and NFA/TNA are significant at 5% level of significance and have negative impact on STD1/ NW ratio, but at the same time collateral indicator (Nfa+Inv+AR)/TNA and INV/TNA are significant at 1% level of significance

Table 5.6							
Simple Linear Regression on Debt Ratio- STD1/NW							
Independent variables	**Indicators**	**R square**	**Intercept**	**Slope**	**t-Statistic**	**p- value**	**F -Statistic**
Size	Log of sales	0.003	1.545	-0.043	-0.615	0.539	0.378
	Log of GTFA	0.042	2.072	-0.168	**-2.445***	**0.016**	**5.977**
	Log of TNA	0.025	2.051	-0.142	-1.880	0.062	3.536
Profitability	PBIT/TNA	0.115	2.199	-6.161	**-4.231****	**0.000**	**17.898**
	PBITDA/TGA	0.125	2.368	-7.196	**-4.443****	**0.000**	**19.741**
	PBT/TNA	0.147	1.967	-5.881	**-4.886****	**0.000**	**23.875**
	PBIT/Sales	0.000	1.325	0.00E+00	-0.001	0.999	0.000
	PBIT/CE	0.018	1.586	-1.009	-1.589	0.114	2.526
Collateral	NFA/TNA	0.041	1.833	-1.554	**-2.416***	**0.017**	**5.837**
	GFA/TGA	0.043	2.027	-1.566	**-2.496***	**0.014**	**6.228**
	(Nfa+Inv+AR)/TNA	0.051	-0.377	2.135	**2.714****	**0.007**	**7.367**
	L&B/TGA	0.021	1.488	-1.780	-1.711	0.089	2.927
	P&E/TGA	0.006	1.363	-0.053	-0.931	0.354	0.866
	Inventories/TNA	0.066	0.664	3.340	**3.121****	**0.002**	**9.743**
Volatility	SD of PBIT	0.005	1.365	-1.00E-03	-0.866	0.388	0.750
	SD of % ch in PBIT	0.003	1.346	-7.00E-05	-0.693	0.490	0.480
	SD of PBITDA/TGA	0.001	1.269	0.859	0.406	0.685	0.165
	COV of PBIT	0.016	1.293	0.018	1.499	0.136	2.247
	COV of PBIT/CE	0.007	1.331	-0.024	-0.957	0.340	0.916
	COV of PBIT/ TNA	0.088	1.120	0.286	**3.648****	**0.000**	**13.307**
Growth rate	CAGR of TNA	0.030	1.688	-.2.565	**-2.049***	**0.042**	**4.197**
	CAGR of sales	0.002	1.406	-0.584	-0.520	0.604	0.270
NDTS	Depr/TGA	0.053	1.993	-24.56	**-2.790****	**0.006**	**7.787**
	Depr+ET/TGA	0.036	1.539	-1.688	**-2.276***	**0.024**	**5.179**
	Depr/PBITDA	0.005	1.303	0.078	0.840	0.403	0.705
Debt Service capacity	PBDIT/INT	0.016	1.371	0.00E+00	-1.495	0.137	2.235
Age	Age as on 31-03-2008	0.005	1.527	-0.005	-0.865	0.389	0.748
	Log of age of firm	0.008	2.226	-0.247	-1.034	0.303	1.069
Dividend payout	Equity Div/PAT	0.020	1.519	-0.616	-1.664	0.098	2.768
Liquidity	CA/CL	0.078	1.951	-0.207	**-3.414****	**0.001**	**11.658**
Net Exports	Net exp/Sales	0.043	1.283	-1.213	**-2.477***	**0.014**	**6.136**
Cost of Equity	DIV/SC	0.018	1.491	-2.751	-1.573	0.118	2.473
Uniqueness	R&D/Sales	0.023	1.394	-13.34	-1.795	0.075	3.221
Cost of Borrowing	INT/DEBT	0.009	1.087	1.787	1.129	0.261	1.274
* indicates significance at 5% level							
** indicates significance at 1% level							

and have positively impact on STD1/NW ratio indicating that increase in fixed assets increases the company's ability to avail Long Term Debt Funds and hence lower levels of Short Term Debt Funds. At the same time, higher levels of Inventory and Accounts

Receivables would mean increased preference for Short Term Debt as these act as Collaterals for Short Term Borrowings. It also indicates that companies having higher levels of Inventory are in greater need of working capital requirements as their funds are tied up in investment in inventories which are financed through Short Term Debt Funds.

Volatility has positive impact on STD1/NW ratio indicating increased preference for Short Term Debt Funds by companies in case of volatile profits. Growth rate indicator CAGR of TNA is significant and has negative impact on STD1/NW ratio which means high growth companies prefer to keep their Short Term Debt levels low.

NDTS indicators have negative impact on STD1/NW which means that the companies having high tax shields in form of depreciation and export turnovers must be preferring Long Term Debt over Short Term Debt to finance their funding requirements. Liquidity has significant negative impact on STD1/NW ratio indicating that FDI Companies will borrow lower short term debt if they have sufficient liquidity.

Net exports have significant negative impact on STD1/NW ratio which indicates that the companies which are net exporters are already given lot of tax concessions by the Indian government and hence these companies do not need to avail Short Term Debt Funds to finance their business.

5.1.7 Results of Simple Regression on LTBB/TA Ratio

In Table 5.7, results of simple linear regression of LTBB/TA (Debt Ratio) on each indicator of independent variable for 140 sample FDI Companies are presented. Size as indicated by Log of GTFA is significant at 1% level of significance and has positive impact on LTBB/TA ratio confirming predictions of Trade-Off Theory which states that large firms with tangible assets tend to borrow more than small firms. Highly significant positive coefficients of NFA/TNA, GFA/TGA and (Nfa+Inv+AR)/TNA confirm this belief. NDTS has significant and positively impact on LTBB/TA ratio which means that increase in NDTS signify increased investment in fixed assets which partly is financed through Long Term Bank Borrowings and hence the positive impact of NDTS on LTBB/TA ratio. Age factor has a significant negative impact on Long Term Bank Borrowings which confirms to predictions of Pecking Order Theory. According to Pecking Order Theory, mature firms may have

Table 5.7							
Simple Linear Regression on Debt Ratio- LTBB/TA							
Independent variables	Indicators	R square	Intercept	Slope	t-Statistic	p- value	F -Statistic
Size	Log of sales	0.001	0.035	-0.001	-0.446	0.656	0.199
	Log of GTFA	0.046	0.001	0.006	**2.576****	**0.011**	**6.635**
	Log of TNA	0.006	0.017	0.002	0.879	0.381	0.772
Profitability	PBIT/TNA	0.028	0.045	-0.111	**-1.989***	**0.049**	**3.956**
	PBITDA/TGA	0.023	0.046	-0.112	-1.789	0.076	3.199
	PBT/TNA	0.063	0.045	-0.141	**-3.041****	**0.003**	**9.250**
	PBIT/Sales	0.006	0.029	5.00E-03	0.888	0.376	0.789
	PBIT/CE	0.047	0.045	-0.060	**-2.601****	**0.010**	**6.767**
Collateral	NFA/TNA	0.342	-0.025	0.166	**8.471****	**0.000**	**71.759**
	GFA/TGA	0.275	-0.036	0.145	**7.237****	**0.000**	**52.37**
	(Nfa+Inv+AR)/TNA	0.056	-0.036	0.083	**2.875****	**0.005**	**8.264**
	L&B/TGA	0.101	0.016	0.144	**3.942****	**0.000**	**15.537**
	P&E/TGA	0.005	0.031	-0.002	-0.829	0.408	0.687
	Inventories/TNA	0.061	0.053	-0.118	**-2.991****	**0.003**	**8.945**
Volatility	SD of PBIT	0.001	0.030	-9.00E-06	-0.340	0.734	0.116
	SD of % change in PBIT	0.000	0.029	4.23E-07	0.115	0.909	0.013
	SD of PBITDA/TGA	0.012	0.036	-0.098	-1.273	0.205	1.621
	COV of PBIT	0.004	0.030	0.000	-0.712	0.477	0.508
	COV of PBIT/CE	0.013	0.030	-0.001	-1.338	0.183	1.790
	COV of PBIT/ TNA	0.001	0.030	-0.001	-0.396	0.693	0.157
Growth rate	CAGR of TNA	0.014	0.020	0.065	1.403	0.163	1.968
	CAGR of sales	0.011	0.022	0.051	1.232	0.220	1.517
NDTS	Depr/TGA	0.022	0.014	0.574	1.746	0.083	3.048
	Depr+ET/TGA	0.011	0.025	0.034	1.236	0.219	1.527
	Depr/PBITDA	0.028	0.028	0.007	**1.983***	**0.049**	**3.931**
Debt Service capacity	PBDIT/INT	0.010	0.031	-8.80E-06	-1.162	0.247	1.351
Age	Age as on 31-03-2008	0.030	0.047	0.000	**-2.051***	**0.042**	**4.208**
	Log of age of firm	0.029	0.094	-0.018	**-2.026***	**0.045**	**4.104**
Dividend payout	Equity Div/PAT	0.012	0.035	-0.018	-1.307	0.193	1.709
Liquidity	CA/CL	0.000	0.028	0.001	0.246	0.806	0.061
Net Exports	Net exp/Sales	0.108	0.032	0.071	**4.084****	**0.000**	**16.683**
Cost of Equity	DIV/SC	0.025	0.037	-0.121	-1.887	0.061	3.559
Uniqueness	R&D/Sales	0.000	0.029	0.006	0.023	0.981	0.001
Cost of Borrowing	INT/DEBT	0.057	0.051	-0.164	**-2.894****	**0.004**	**8.377**
* indicates significance at 5% level							
** indicates significance at 1% level							

shortage of growth opportunities and hence may not be in need of funds. This belief is confirmed by negative correlation coefficient between Age and Growth indicators (Table 5.24 for Correlation matrix). Net exports is a significant predictor of LTBB/TA

ratio and has positive impact on the ratio indicating that companies which are net exporters finance their assets through Long Term Bank Borrowings. Cost of Borrowing is significant at 1% level of significance and has negative impact on LTBB/TA ratio which means that as interest rates increase; companies reduce their dependence on Long Term Bank Borrowings and may prefer Short Term Borrowings as indicated by simple regression STD1/TA ratio (Table 5.1.3). The 't' statistic of indicators of Volatility, Growth rate, Debt service capacity, Dividend payout, Liquidity, Cost of Equity and Uniqueness specify insignificant impact on LTBB/TA ratio.

5.1.8 Results of Simple Regression on LTD/TA Ratio

In Table 5.8, results of simple linear regression of LTD/TA (Debt Ratio) on each indicator of independent variable for 140 sample FDI Companies are presented. It is observed that R^2 value of NFA/TNA is highest among all predictors and indicates that about 38% of variance in the Debt Ratio – LTD/TA is accounted for by NFA/TNA. It shows that the t-statistic for NFA/TNA is 10.974, and is statistically significant at 1% level of significance and its coefficient is positive indicating that companies having higher Collaterals resort to more Long Term Debt in their Capital Structures. In fact all other indicators for measuring Collateral effect (GFA/TGA with R^2 of 0.39 and (Nfa+Inv+AR)/TA with R^2 of 0.15) had significant positive effect on the LTD/TA ratio. These results are consistent with Bevan & Danbolt (2000)[1] and Song (2005)[4]. The effect of INV/TNA on LTD/TA ratio is not very significant as p-value just equal to .05 which is equal to level of significance of 5%, but the important aspect is that the coefficient is negative, which means Inventories must be supporting more of Short Term Debt rather than Long Term Debt. This fact is proved when regression results of INV/TNA with Short Term Debt Ratios are observed. These results are generally consistent with Trade-Off Theory and Pecking Order Theory as both theories suggest positive relationship between tangibility and leverage.

Profitability indicator PBT/TNA has negative impact on LTD/TA ratio. This is also a significant predictor at 1% level of significance and is able to explain about 27% variation in LTD/TA ratio. Other indicators of profitability – PBITDA/TGA and PBIT/TNA also have negative impact on LTD/TA and are significant predictors at 1% level of significance. This result is explained by Pecking Order Theory which states that highly profitable firms, having good cash flows may resort to lower levels of debt

Table 5.8							
Simple Linear Regression on Debt Ratio- LTD/TA							
Independent variables	**Indicators**	**R square**	**Intercept**	**Slope**	**t-Statistic**	**p- value**	**F -Statistic**
Size	Log of sales	0.000	0.160	0.001	0.114	0.909	0.013
	Log of GTFA	0.096	0.042	0.027	**3.833****	**0.000**	**14.693**
	Log of TNA	0.021	0.093	0.014	1.725	0.087	2.975
Profitability	PBIT/TNA	0.162	0.275	-0.782	**-5.159****	**0.000**	**26.614**
	PBITDA/TGA	0.150	0.286	-0.842	**-4.933****	**0.000**	**24.332**
	PBT/TNA	0.270	0.257	-0.851	**-7.153****	**0.000**	**51.158**
	PBIT/Sales	0.000	0.164	1.14E-05	0.001	0.0999	0.000
	PBIT/CE	0.067	0.218	-0.208	**-3.141****	**0.002**	**9.868**
Collateral	NFA/TNA	0.466	-0.020	0.563	**10.974****	**0.000**	**120.431**
	GFA/TGA	0.390	-0.061	0.503	**9.391****	**0.000**	**88.197**
	(Nfa+Inv+AR)/TNA	0.157	-0.157	0.402	**5.079****	**0.000**	**25.793**
	L&B/TGA	0.003	0.158	0.068	0.605	0.546	0.366
	P&E/TGA	0.000	0.164	0.001	0.088	0.930	0.008
	Inventories/TNA	0.028	0.210	-0.231	**-1.976***	**0.050**	**3.904**
Volatility	SD of PBIT	0.007	0.159	7.83E-05	1.018	0.310	1.037
	SD of % ch in PBIT	0.002	0.162	6.18E-06	0.575	0.566	0.331
	SD of PBITDA/TGA	0.004	0.174	-0.159	-0.705	0.482	0.497
	COV of PBIT	0.005	0.162	0.001	0.811	0.419	0.657
	COV of PBIT/CE	0.017	0.165	-0.004	-1.555	0.122	2.418
	COV of PBIT/ TNA	0.007	0.158	0.009	1.013	0.313	1.026
Growth rate	CAGR of TNA	0.001	0.156	0.056	0.413	0.680	0.170
	CAGR of sales	0.003	0.153	0.083	0.692	0.490	0.479
NDTS	Depr/TGA	0.036	0.105	2.162	**2.278***	**0.024**	**5.188**
	Depr+ET/TGA	0.004	0.171	-0.058	-0.716	0.475	0.513
	Depr/PBITDA	0.042	0.157	0.024	**2.469***	**0.015**	**6.096**
Debt Service capacity	PBDIT/INT	0.015	0.169	-3.10E-05	-1.427	0.156	2.026
Age	Age as on 31-03-2008	0.061	0.237	-0.002	**-2.985****	**0.003**	**8.908**
	Log of age of firm	0.055	0.422	-0.071	**-2.833****	**0.005**	**8.024**
Dividend payout	Equity Div/PAT	0.034	0.191	-0.087	**-2.213***	**0.029**	**4.896**
Liquidity	CA/CL	0.008	0.185	-0.007	-1.041	0.300	1.084
Net Exports	Net exp/Sales	0.000	0.164	0.003	0.049	0.961	0.002
Cost of Equity	DIV/SC	0.096	0.206	-0.686	**-3.825****	**0.000**	**14.628**
Uniqueness	R&D/Sales	0.012	0.159	1.048	1.312	0.192	1.722
Cost of Borrowing	INT/DEBT	0.095	0.246	-0.616	**-3.813****	**0.000**	**14.535**
*** indicates significance at 5% level**							
**** indicates significance at 1% level**							

as they have sufficient retained earnings to fall back upon to finance their investments. Size effect on LTD/TA as measured by Log of GTFA is positive and statistically significant at 1% level of significance. This confirms the predictions of both

Trade-Off and Pecking Order Theory which states that large firms with more tangible assets tend to borrow more. The results are consistent with Bhaduri (2002)[5] who had found that firms with large size depend more on long term borrowings. NDTS indicators have positive impact on LTD/TA ratio, indicating that investment in fixed assets is financed through long term debt, as investment in fixed assets increases; depreciation on fixed assets also increases, thus explaining positive impact of indicators of NDTS on LTD/TA ratio.

Age has negative impact on LTD/TA ratio, again supporting Pecking Order Theory. Dividend Payout and Cost of Equity has negative impact on LTD/TA ratio. This might be due to the fact that increased profitability results in higher dividend payouts and high dividend payouts along with increased profitability might indicate sufficient internally generated funds to fall back upon to finance companies investments. This explains negative impact of Dividend payout and Cost of equity on LTD/TA ratio. The 't' statistic of indicators of Volatility, Growth rate, Debt Service Capacity, Liquidity, Net exports and Uniqueness indicate insignificant impact on LTD/TA ratio.

5.1.9 Results of Regression on LTD/NW Ratio

In Table 5.9, results of simple linear regression of LTD/NW (Debt Ratio) on each indicator of independent variable for 140 sample FDI Companies are presented. The results are almost similar to simple linear regressions on LTD/TA ratio (Table 5.8) as indicated by significant and positive impact of Size as denoted by Log of GTFA and Collaterals as denoted by NFA/ NA, GFA/TGA and (Nfa +Inv+AR)/ TNA on the Debt ratio. Profitability indicators, Age and Cost of Equity are significant at 1% level of significance and have negative impact on LTD/NW ratio.

The only difference in results of LTD/NW and LTD/TA ratios is with regards to indicators INV/TNA, NDTS, Dividend Payout, and Cost of Borrowings as they become insignificant predictors of LTD/NW ratio. This indicates that Long Term Debt when scaled down to Owner's Funds reflect some kind of policy decisions of FDI Companies in India. The level of inventories or the amount of dividends generally do not affect the Debt-Equity mix which means that company resort to target Capital Structure ratios and try to maintain these levels by shifting to short term debt whenever needed. This is very much confirming the predictions of Trade-off Theory, especially the dynamic version of Trade-off Theory.

Table 5.9							
Simple Linear Regression on Debt Ratio- LTD/NW							
Independent variables	**Indicators**	**R square**	**Intercept**	**Slope**	**t-Statistic**	**p- value**	**F -Statistic**
Size	Log of sales	0.001	0.762	-0.017	-0.369	0.713	0.136
	Log of GTFA	0.031	0.244	0.097	**2.096***	**0.038**	**4.393**
	Log of TNA	0.003	0.512	0.032	0.619	0.537	0.384
Profitability	PBIT/TNA	0.144	1.327	-4.604	**-4.812****	**0.000**	**23.155**
	PBITDA/TGA	0.133	1.392	-4.954	**-4.599****	**0.000**	**21.152**
	PBT/TNA	0.222	1.201	-4.823	**-6.280****	**0.000**	**39.436**
	PBIT/Sales	0.000	0.676	-2.20E-02	-0.237	0.813	0.056
	PBIT/CE	0.022	0.866	-0.744	-1.759	0.081	3.093
Collateral	NFA/TNA	0.240	-0.152	2.525	**6.602****	**0.000**	**43.593**
	GFA/TGA	0.199	-0.333	2.247	**5.860****	**0.000**	**34.343**
	(Nfa+Inv+AR)/TNA	0.108	-0.982	2.078	**4.080****	**0.000**	**16.645**
	L&B/TGA	0.000	0.673	0.014	0.020	0.984	0.000
	P&E/TGA	0.000	0.672	0.003	0.078	0.938	0.006
	Inventories/TNA	0.004	0.778	-0.525	-0.712	0.478	0.507
Volatility	SD of PBIT	0.001	0.663	0.00E+00	0.363	0.717	0.132
	SD of % ch in PBIT	0.000	0.670	1.41E-05	0.210	0.834	0.044
	SD of PBITDA/TGA	0.002	0.723	-0.767	-0.544	0.588	0.296
	COV of PBIT	0.011	0.657	0.010	1.251	0.213	1.565
	COV of PBIT/CE	0.002	0.676	-0.009	-0.508	0.612	0.258
	COV of PBIT/ TNA	0.012	0.624	0.071	1.296	0.197	1.679
Growth rate	CAGR of TNA	0.001	0.716	-0.297	-0.351	0.726	0.123
	CAGR of sales	0.000	0.659	0.111	0.147	0.883	0.022
NDTS	Depr/TGA	0.008	0.504	6.258	1.040	0.300	1.081
	Depr+ET/TGA	0.011	0.754	-0.626	-1.247	0.215	1.555
	Depr/PBITDA	0.022	0.644	0.108	1.747	0.083	3.053
Debt Service capacity	PBDIT/INT	0.015	0.704	0.00E+00	-1.427	0.156	2.037
Age	Age as on 31-03-2008	0.085	1.212	-0.013	**-3.583****	**0.000**	**12.84**
	Log of age of firm	0.093	2.772	-0.575	**-3.768****	**0.000**	**14.197**
Dividend payout	Equity Div/PAT	0.025	0.819	-0.461	-1.869	0.064	3.492
Liquidity	CA/CL	0.022	0.895	-0.073	-1.750	0.082	3.061
Net Exports	Net exp/Sales	0.009	0.661	-0.378	-1.137	0.257	1.293
Cost of Equity	DIV/SC	0.069	0.893	-3.627	**-3.188****	**0.002**	**10.162**
Uniqueness	R&D/Sales	0.003	0.657	3.308	0.660	0.511	9.052
Cost of Borrowing	INT/DEBT	0.026	0.944	-2.027	-1.935	0.055	3.743
* indicates significance at 5% level							
** indicates significance at 1% level							

5.1.10 Results of Regression on LTD/ (NW + LTD) Ratio

In Table 5.10 results of simple linear regression of LTD/(NW+LTD) (Debt Ratio) on each indicator of independent variable of 140 sample FDI Companies are presented.

Table 5.10							
Simple Linear Regression on Debt Ratio- LTD/(NW+LTD)							
Independent variables	Indicators	R square	Intercept	Slope	t-Statistic	p- value	F -Statistic
Size	Log of sales	0.008	0.477	-0.032	-1.068	0.287	1.141
	Log of GTFA	0.000	0.292	0.005	0.151	0.88	0.023
	Log of TNA	0.003	0.415	-0.020	-0.608	0.544	0.370
Profitability	PBIT/TNA	0.053	0.569	-1.806	**-2.774****	**0.006**	**7.698**
	PBITDA/TGA	0.060	0.624	-2.148	**-2.961****	**0.004**	**8.770**
	PBT/TNA	0.105	0.547	-2.148	**-4.033****	**0.000**	**16.269**
	PBIT/Sales	0.000	0.312	6.00E-03	0.095	0.924	0.009
	PBIT/CE	0.058	0.986	3.737	0.000	0.000	13.964
Collateral	NFA/TNA	0.038	0.099	0.651	**2.341***	**0.021**	**5.480**
	GFA/TGA	0.042	0.012	0.670	**2.471***	**0.015**	**6.108**
	(Nfa+Inv+AR)/TNA	0.049	-0.407	0.903	**2.654****	**0.009**	**7.042**
	L&B/TGA	0.000	0.305	0.082	0.180	0.857	0.033
	P&E/TGA	0.000	0.317	-0.006	-0.252	0.801	0.064
	Inventories/TNA	0.008	0.211	0.515	1.080	0.282	1.167
Volatility	SD of PBIT	0.000	0.317	-7.20E-05	-0.230	0.818	0.053
	SD of % change in PBIT	0.000	0.310	8.20E-006	0.189	0.850	0.036
	SD of PBITDA/TGA	0.006	0.260	0.816	0.895	0.372	0.802
	COV of PBIT	0.003	0.306	0.004	0.673	0.502	0.453
	COV of PBIT/CE	0.003	0.315	-0.007	-0.684	0.495	0.468
	COV of PBIT/ TNA	0.032	0.259	0.075	**2.150***	**0.033**	**4.622**
Growth rate	CAGR of TNA	0.020	0.443	-0.92	-1.694	0.093	2.869
	CAGR of sales	0.025	0.438	-0.908	-1.895	0.060	3.591
NDTS	Depr/TGA	0.001	0.345	-1.199	-0.307	0.759	0.094
	Depr+ET/TGA	0.003	0.339	-0.205	-0.63	0.530	0.396
	Depr/PBITDA	0.025	0.292	0.075	1.867	0.064	3.486
Debt Service capacity	PBDIT/INT	0.007	0.326	-8.90E-05	-0.996	0.321	0.993
Age	Age as on 31-03-2008	0.021	0.483	-0.004	-1.702	0.091	2.896
	Log of age of firm	0.018	0.912	-0.164	-1.600	0.112	2.561
Dividend payout	Equity Div/PAT	0.022	0.401	-0.279	-1.747	0.083	3.052
Liquidity	CA/CL	0.011	0.413	-0.033	-1.222	0.224	1.492
Net Exports	Net exp/Sales	0.008	0.305	-0.228	-1.060	0.291	1.123
Cost of Equity	DIV/SC	0.039	0.419	-1.760	**-2.354****	**0.020**	**5.543**
Uniqueness	R&D/Sales	0.000	0.315	-0.440	-0.136	0.892	0.018
Cost of Borrowing	INT/DEBT	0.004	0.383	-0.528	-0.770	0.443	0.593
* indicates significance at 5% level							
** indicates significance at 1% level							

This ratio represents the contribution of Long Term Debt towards capital employed in the business. Profitability indicators PBIT/TNA, PBITDA/TGA and PBT/TNA have highly significant negative impact on LTD/ (NW + LTD) ratio indicating that Pecking

Order Theory is applicable to FDI Companies in India. Collaterals, as indicated by NFA/TNA, GFA/TGA and (NFA+Inv+AR)/TNA are significant and have positive impact on LTD/(NW+LTD) Ratio again confirming predictions of Trade-Off Theory and Pecking Order Theory.

Volatility indicator COV of PBIT/TNA is positively related to LTD/(NW+LTD) Ratio indicating again that volatile earnings do not deter companies from resorting to long term borrowings and thus companies tend to maintain their target debt-equity mix in spite of high business risk faced by them.

Increase in Cost of Equity has negative effect on – LTD/(NW+LTD) ratio, which means that when Cost of Equity increases, neither does the company resort to Short Term Debt Funds as revealed by earlier ratios, nor does company resort to Long Term Debt to meet its financing requirements. This means that the sample companies are highly profitable companies who declare high dividends and also are capable of meeting its financing requirements through internally generated funds, which explains the negative impact of Cost of Equity on LTD/(NW + LTD) ratio.

5.1.11 Results of Regression on TD/TA Ratio

In Table 5.11, results of simple linear regression of TD/TA (Debt Ratio) on each indicator of independent variable for 140 sample FDI Companies are presented. Total debt includes Short Term Bank Borrowings and Commercial Paper but does not include Current Liabilities and Provisions. The indicators of Size - Log of GTFA and Collateral effect NFA/TNA, GFA/TGA and (NFA+Inv+AR)/TNA has significant positive impact on TD/TA Ratio which mean that large firms with tangible assets tend to borrow more.

Profitability has negative impact on TD/TA ratio. It seems that first companies follow pecking order, profitable companies having sufficient internally generated funds first prefer to use these funds for financing purposes, then resort to Long Term Debt Funds although trying to maintain certain target debt levels and heavily rely on Short Term Debt Funds to meet most of their working capital requirements. The maintenance of target debt levels is also confirmed by the fact that Debt service capacity as indicated by PBDIT/INT ratio, which has negative impact on TD/TA ratio. This reveals that inspite of having sufficient Debt Servicing Capacity, companies do not resort to high

Table 5.11							
Simple Linear Regression on Debt Ratio- TD/TA							
Independent variables	**Indicators**	**R square**	**Intercept**	**Slope**	**t-Statistic**	**p- value**	**F -Statistic**
Size	Log of sales	0.002	0.276	-0.005	-0.545	0.586	0.297
	Log of GTFA	0.030	0.167	0.019	**2.080***	**0.039**	**4.326**
	Log of TNA	0.001	0.228	0.004	0.435	0.665	0.189
Profitability	PBIT/TNA	0.224	0.410	-1.124	**-6.320****	**0.000**	**39.941**
	PBITDA/TGA	0.222	0.432	-1.251	**-6.280****	**0.000**	**39.436**
	PBT/TNA	0.394	0.387	-1.254	**-9.473****	**0.000**	**89.736**
	PBIT/Sales	0.000	0.25	5.21E-05	0.003	0.998	0.000
	PBIT/CE	0.061	0.313	-0.243	**-3.003***	**0.003**	**9.017**
Collateral	NFA/TNA	0.256	0.084	0.509	**6.894****	**0.000**	**47.532**
	GFA/TGA	0.219	0.044	0.460	**6.212****	**0.000**	**38.593**
	(Nfa+Inv+AR)/TNA	0.245	-0.238	0.612	**6.692****	**0.000**	**44.78**
	L&B/TGA	0.001	0.246	0.042	0.305	0.761	0.093
	P&E/TGA	0.001	0.253	-0.003	-0.433	0.666	0.187
	Inventories/TNA	0.000	0.249	0.009	0.062	0.951	0.004
Volatility	SD of PBIT	0.001	0.252	-3.00E-05	-0.318	0.751	0.101
	SD of % change in PBIT	0.001	0.249	5.36E-06	0.409	0.683	0.167
	SD of PBITDA/TGA	0.000	0.248	0.029	0.104	0.918	0.011
	COV of PBIT	0.007	0.248	0.002	0.956	0.341	0.915
	COV of PBIT/CE	0.017	0.252	-0.005	-1.552	0.123	2.407
	COV of PBIT/ TNA	0.038	0.233	0.024	**2.331***	**0.021**	**5.433**
Growth rate	CAGR of TNA	0.003	0.265	-0.100	-0.607	0.545	0.368
	CAGR of sales	0.000	0.249	0.011	0.074	0.941	0.005
NDTS	Depr/TGA	0.007	0.218	1.193	1.015	0.312	1.03
	Depr+ET/TGA	0.010	0.265	-0.115	-1.176	0.242	1.382
	Depr/PBITDA	0.034	0.243	0.026	**2.201***	**0.029**	**4.846**
Debt Service capacity	PBDIT/INT	0.030	0.259	-5.60E-05	**-2.082***	**0.039**	**4.335**
Age	Age as on 31-03-2008	0.054	0.334	-0.002	**-2.798****	**0.006**	**7.83**
	Log of age of firm	0.046	0.539	-0.079	**-2.590***	**0.011**	**6.708**
Dividend payout	Equity Div/PAT	0.049	0.290	-0.126	**-2.653****	**0.009**	**7.041**
Liquidity	CA/CL	0.007	0.276	-0.008	-1.017	0.311	1.034
Net Exports	Net exp/Sales	0.000	0.250	-0.005	-0.084	0.933	0.007
Cost of Equity	DIV/SC	0.146	0.313	-1.034	**-4.858****	**0.000**	**23.604**
Uniqueness	R&D/Sales	0.002	0.248	0.486	0.496	0.621	0.246
Cost of Borrowing	INT/DEBT	0.086	0.345	-0.714	**-3.599****	**0.000**	**12.952**
* indicates significance at 5% level							
** indicates significance at 1% level							

debt levels for financing purposes. Age has negative impact on TD/TA ratio as mature firms have less growth opportunities and hence are not in need of Long Term Funds.

Dividend Payout, Cost of Equity and Cost of Borrowing have negative effect on TD/TA ratio. The negative impact of Dividend Payout and Cost of equity on TD/TA ratio indicates that companies do not resort to debt even when Cost of Equity increases or when there are high Dividend Payouts. The companies must be having sufficient internally generated reserves to fall back upon in case of need. At the same time, if Cost of Borrowings increase, companies must be temporarily meeting their requirements by availing lot of Trade Credit as indicated by positive coefficient between TC&E/TA and Cost of Borrowings (Table 5.4). NDTS positively affects TD/TA ratio which once again proves that higher tax shields in the form of depreciation are the results of employment of fixed assets which are financed through debt.

5.1.12 Results of Regression on TL/TA Ratio

In Table 5.12, results of simple linear regression of TL/TA (Debt Ratio) on each indicator of independent variable for 140 sample FDI Companies are presented. Total Liabilities include Current Liabilities and Provisions and TL/TA ratio is the broadest measure of leverage. As expected, when Current Liabilities are included with Total Debt, the effect of Collaterals on Debt Ratios denotes a change. Collaterals as represented by NFA/TNA and GFA/TGA no longer remain significant in determining the Debt ratio. At the same time the indicator (NFA+Inv+AR)/TNA and INV/TNA becoming significant predictors in deciding leverage levels. This means that Trade Credit is an important source of finance for FDI Companies in India as it contributes a significant proportion in TL/TA ratio.

Profitability has negative impact on TL/TA ratio indicating that Pecking Order Theory is applicable to FDI Companies in India as profitability factors has consistently negative coefficients with all the variants of debt.

Volatility indicator - COV of PBIT/TNA has positive impact on TL/TA ratio but has insignificant impact on LTBB/TA, LTD/TA and LTD/NW ratios which means that companies facing high earnings risk either resort to Short Term Debt sources for financing needs or use their internally generated funds but do not resort to Long Term Debt as that may increase their risk profile further.

NDTS indicators are projecting conflicting results as indicator Depr+ET/TGA has significant negative impact on TL/TA ratio whereas indicator Depr/PBITDA has

Table 5.12							
Simple Linear Regression on Debt Ratio- TL/TA							
Independent variables	Indicators	R square	Intercept	Slope	t-Statistic	p- value	F -Statistic
Size	Log of sales	0.006	0.511	0.009	0.898	0.371	0.806
	Log of GTFA	0.003	0.529	0.006	0.602	0.548	0.363
	Log of TNA	0.002	0.530	0.005	0.465	0.642	0.216
Profitability	PBIT/TNA	0.197	0.715	-1.124	**-5.823****	**0.000**	**33.913**
	PBITDA/TGA	0.218	0.747	-1.323	**-6.206****	**0.000**	**38.512**
	PBT/TNA	0.329	0.689	-1.224	**-8.232****	**0.000**	**67.77**
	PBIT/Sales	0.000	0.555	5.00E-03	0.232	0.817	0.054
	PBIT/CE	0.004	0.573	-0.067	-0.748	0.456	0.560
Collateral	NFA/TNA	0.005	0.53	0.076	0.838	0.403	0.702
	GFA/TGA	0.003	0.531	0.055	0.618	0.538	0.382
	(Nfa+Inv+AR)/TNA	0.202	0.082	0.593	**5.910****	**0.000**	**34.926**
	L&B/TGA	0.008	0.570	-0.157	-1.077	0.283	1.161
	P&E/TGA	0.007	0.561	-0.008	-0.998	0.320	0.997
	Inventories/TNA	0.071	0.460	0.484	**3.256****	**0.001**	**10.601**
Volatility	SD of PBIT	0.000	0.555	7.02E-06	0.070	0.944	0.005
	SD of % change in PBIT	0.003	0.558	-9.20E-06	-0.660	0.511	0.435
	SD of PBITDA/TGA	0.023	0.521	0.527	1.810	0.073	3.275
	COV of PBIT	0.017	0.551	0.003	1.558	0.122	2.426
	COV of PBIT to CE	0.049	0.558	-0.009	**-2.670****	**0.009**	**7.128**
	COV of PBIT to TNA	0.167	0.516	0.055	**5.260****	**0.000**	**27.666**
Growth rate	CAGR of TNA	0.037	0.612	-0.398	**-2.291***	**0.023**	**5.248**
	CAGR of sales	0.003	0.568	-0.093	-0.594	0.554	0.353
NDTS	Depr/TGA	0.023	0.617	-2.266	-1.821	0.071	3.315
	Depr+ET/TGA	0.053	0.591	-0.284	**-2.774****	**0.006**	**7.697**
	Depr/PBITDA	0.059	0.545	0.037	**2.939****	**0.004**	**8.635**
Debt Service capacity	PBDIT/INT	0.036	0.565	-6.40E-05	**-2.255***	**0.026**	**5.085**
Age	Age as on 31-03-2008	0.009	0.593	-0.001	-1.147	0.253	1.315
	Log of age of firm	0.009	0.691	-0.037	-1.119	0.265	1.251
Dividend payout	Equity Div/PAT	0.026	0.587	-0.099	-1.922	0.057	3.695
Liquidity	CA/CL	0.151	0.677	-0.040	**-4.960****	**0.000**	**24.602**
Net Exports	Net exp/Sales	0.033	0.550	-0.149	**-2.176***	**0.031**	**4.733**
Cost of Equity	DIV/SC	0.034	0.587	-0.531	**-2.198***	**0.030**	**4.833**
Uniqueness	R&D/Sales	0.005	0.560	-0.903	-0.865	0.389	0.747
Cost of Borrowing	INT/DEBT	0.002	0.570	-0.112	-0.506	0.614	0.256
* indicates significance at 5% level							
** indicates significance at 1% level							

significant positive impact on TL/TA ratio indicating that investment in assets is financed through debt funds. Depreciation along with Export Turnover scaled down to

Total Gross Assets act like tax shields indicating the reduced advantage of debt funds and hence the negative impact on TL/TA ratio. Liquidity as denoted by CA/CL negatively affects TL/TA ratio. This reveals that as proportion of Current Assets increase, reliance on debt goes down. This might be due to the fact that Current Assets might be having sufficient proportions of highly liquid assets and these in turn might be used to finance investments explaining the negative relationship between Liquidity and TL/TA ratio.

Net Exports have significant negative impact on TL/TA ratio indicating that companies which are net exporters are already benefitted by lot of tax incentives given by government and do not need to rely on debt funds to meet their financing requirements. Cost of Equity negatively affects TL/TA ratio indicating that cost of equity increases only for those companies which are highly profitable and do not need external funds for financing purposes.

5.1.13 Results of Regression on TD/NW Ratio

In Table 5.13, results of simple linear regression of TD/NW (Debt Ratio) on each indicator of independent variable for 140 sample FDI Companies are presented. Profitability indicators PBIT/TNA, PBITDA/TGA, PBT/TNA and PBIT/CE have negative impact on TD/NW ratio and are significant at 1% level of significance. These results support the Pecking Order Theory.

The Collateral indicators are NFA/TGA, GFA/TGA and (Nfa+Inv+AR)/TNA are significant at 1% level of significance and positively affects TD/NW ratio confirming the predictions of Trade-Off Theory. Volatility indicator COV of PBIT/TNA positively affects TD/NW ratio indicating that increase in business risk does not deter the companies from borrowings and companies continue to resort to borrowings in spite of facing high business risk.

Age factor negatively affects TD/NW ratio, which means that mature firms opt for less debt. Dividend Payout factor negatively affects TD/NW ratio indicating that higher dividend payouts indicate greater profitability and these companies resort to lower levels of debt. Even Cost of Equity indicator DIV/SC has negative impact on TD/NW ratio confirming that even if Cost of Equity rises, company do not increase the proportion of debt in their Capital Structure. Either these companies have sufficient built up reserves

for funding their assets or want to maintain their current proportion of Debt- Equity mix by resorting to Short Term Debt whenever need arises.

Table 5.13

Simple Linear Regression on Debt Ratio- TD/NW

Independent variables	Indicators	R square	Intercept	Slope	t-Statistic	p- value	F -Statistic
Size	Log of sales	0.007	1.319	-0.060	-0.989	0.324	0.979
	Log of GTFA	0.002	0.852	0.036	0.584	0.560	0.341
	Log of TA	0.002	1.209	-0.039	-0.583	0.561	0.340
Profitability	PBIT/TNA	0.191	1.993	-6.925	**-5.705****	**0.000**	**32.547**
	PBITDA/TGA	0.187	2.121	-7.66	**-5.625****	**0.000**	**31.645**
	PBT/TNA	0.297	1.806	-7.282	**-7.644****	**0.000**	**58.431**
	PBIT/Sales	0.000	0.1012	-2.70E-02	-0.221	0.825	0.049
	PBIT/CE	0.053	1.401	-1.511	**-2.779****	**0.006**	**7.722**
Collateral	NFA/TNA	0.122	0.324	2.348	**4.376****	**0.000**	**19.146**
	GFA/TGA	0.100	0.081	2.074	**3.907****	**0.000**	**15.267**
	(Nfa+Inv+AR)/TNA	0.147	-1.514	3.167	**4.871****	**0.000**	**23.728**
	L&B/TGA	0.001	1.043	-0.360	-0.393	0.695	0.154
	P&E/TGA	0.001	1.026	-0.021	-0.427	0.670	0.183
	Inventories/TNA	0.002	0.901	0.551	0.572	0.569	0.327
Volatility	SD of PBIT	0.002	1.032	0.00E+00	-0.542	0.589	0.293
	SD of % ch in PBIT	0.000	1.009	3.59E-06	0.041	0.967	0.002
	SD of PBITDA/TGA	0.001	1.059	-0.758	-0.411	0.682	0.169
	COV of PBIT	0.013	0.986	0.014	1.354	0.178	1.835
	COV of PBIT/CE	0.007	1.017	-0.022	-1.015	0.312	1.030
	COV of PBIT/ TNA	0.030	0.906	0.147	**2.081***	**0.039**	**4.329**
Growth rate	CAGR of TNA	0.006	1.149	-0.980	-0.887	0.377	0.787
	CAGR of sales	0.000	1.011	-0.003	-0.003	0.998	0.000
NDTS	Depr/TGA	0.000	0.980	1.121	0.142	0.887	0.02
	Depr+ET/TGA	0.020	1.148	-1.083	-1.661	0.099	2.759
	Depr/PBITDA	0.019	0.973	0.132	1.635	0.104	2.673
Debt Service capacity	PBDIT/INT	0.022	1.059	0.00E+00	-1.780	0.077	3.170
Age	Age as on 31-03-2008	0.066	1.628	-0.015	**-3.122****	**0.002**	**9.744**
	Log of age of firm	0.071	3.404	-0.656	**-3.255****	**0.001**	**10.595**
Dividend payout	Equity Div/PAT	0.037	1.242	-0.733	**-2.291***	**0.023**	**5.249**
Liquidity	CA/CL	0.027	1.330	-0.106	-1.943	0.054	3.774
Net Exports	Net exp/Sales	0.011	0.992	-0.545	-1.257	0.211	1.580
Cost of Equity	DIV/SC	0.090	1.339	-5.435	**-3.703****	**0.000**	**13.711**
Uniqueness	R&D/Sales	0.000	1.012	-0.406	-0.062	0.951	0.004
Cost of Borrowing	INT/DEBT	0.019	1.308	-2.230	-1.624	0.107	2.638

*** indicates significance at 5% level**

**** indicates significance at 1% level**

5.1.14 Results of Simple Regression on TD/(TD+NW) Ratio

In Table 5.14, results of simple linear regression of TD/(TD+NW) (Debt Ratio) on each indicator of independent variable for 140 sample FDI Companies are presented.

Table 5.14

Simple Linear Regression on Debt Ratio- TD/(TD+NW)

Independent variables	Indicators	R square	Intercept	Slope	t-Statistic	p- value	F -Statistic
Size	Log of sales	0.013	0.523	-0.029	-1.369	0.173	1.875
	Log of GTFA	0.007	0.467	-0.021	-0.975	0.331	0.951
	Log of TA	0.017	0.558	-0.036	-1.553	0.123	2.411
Profitability	PBIT/TNA	0.145	0.673	-2.100	**-4.843****	**0.000**	**23.451**
	PBITDA/TGA	0.159	0.732	-2.460	**-5.111****	**0.000**	**26.123**
	PBT/TNA	0.229	0.618	-2.220	**-6.398****	**0.000**	**40.937**
	PBIT/Sales	0.000	0.375	2.00E-03	0.042	0.967	0.002
	PBIT/CE	0.022	0.463	-0.341	-1.774	0.078	3.147
Collateral	NFA/TNA	0.018	0.271	0.317	1.606	0.111	2.579
	GFA/TGA	0.013	0.258	0.262	1.356	0.177	1.839
	(Nfa+Inv+AR)/TNA	0.091	-0.314	0.865	**3.707****	**0.000**	**13.745**
	L&B/TGA	0.003	0.392	-0.189	0.593	0.554	0.352
	P&E/TGA	0.003	0.383	-0.011	-0.647	0.519	0.419
	Inventories/TNA	0.013	0.288	0.443	1.328	0.186	1.763
Volatility	SD of PBIT	0.002	0.383	0.00E+00	-0.560	0.576	0.314
	SD of % change in PBIT	0.000	0.375	-1.20E-06	-0.038	0.970	0.001
	SD of PBITDA/TGA	0.002	0.355	0.317	0.496	0.621	0.246
	COV of PBIT	0.006	0.369	0.003	0.950	0.344	0.950
	COV of PBIT/CE	0.003	0.376	-0.005	-0.628	0.531	0.395
	COV of PBI/ TNA	0.053	0.327	0.067	**2.780****	**0.006**	**7.728**
Growth rate	CAGR of TNA	0.018	0.461	-0.604	-1.583	0.116	2.506
	CAGR of sales	0.006	0.418	-0.308	-0.906	0.366	0.822
NDTS	Depr/TGA	0.009	0.459	-3.073	-1.126	0.262	1.268
	Depr+ET/TGA	0.017	0.420	-0.352	-1.550	0.123	2.402
	Depr/PBITDA	0.000	0.374	0.003	0.123	0.902	0.015
Debt Service capacity	PBDIT/INT	0.018	0.390	-9.90E-05	-1.581	0.116	2.501
Age	Age as on 31-03-2008	0.008	0.449	-0.002	-1.047	0.297	1.097
	Log of age of firm	0.006	0.618	-0.066	-0.917	0.361	0.841
Dividend payout	Equity Div/PAT	0.036	0.455	-0.252	**-2.262***	**0.025**	**5.119**
Liquidity	CA/CL	0.025	0.482	-0.035	-1.864	0.064	3.476
Net Exports	Net exp/Sales	0.007	0.370	-0.153	-1.014	0.312	1.028
Cost of Equity	DIV/SC	0.073	0.478	-1.696	**-3.293****	**0.001**	**10.844**
Uniqueness	R&D/Sales	0.001	0.380	-0.985	-0.432	0.666	0.187
Cost of Borrowing	INT/DEBT	0.011	0.452	-0.581	-1.212	0.228	1.469

*** indicates significance at 5% level**

**** indicates significance at 1% level**

The results of simple linear regression on TD/(TD+NW) ratio are almost similar to the results of regressions on TD/NW Ratio except the fact that here, Age no longer remains a significant factor. Only (NFA+Inv+AR)/TNA is significant at 1% level of significance and positively affects TD/(TD+NW) ratio indicating that due to a significant proportion of Short Term Debt in Total Debt, along with Net Fixed Assets, Inventories and Accounts Receivables also act as Collaterals for availing debt. Profitability has significant negative impact on TD/(TD+NW) ratio indicating confirmation of Pecking Order Theory, Volatility positively affects TD/(TD+NW) ratio and Dividend Payout and Cost of Equity negatively affects TD/(TD + NW) ratio.

5.1.15 Results of Simple Regression on TL/NW Ratio

In Table 5.15, results of simple linear regression of TL/NW (Debt Ratio) on each indicator of independent variable for 140 sample FDI Companies are presented. Profitability indicators PBIT/TNA, PBITDA/TGA and PBT/TNA have negative impact on TL / NW ratio. Collateral effect indicator (Nfa+Inv+AR)/ TNA is significant at 1% level of significance and positively affects TL/NW ratio. In calculation of Total liabilities, along with Short Term Bank Borrowings, Current Liabilities and Provisions are also added hence along with Net Fixed Assets, level of Inventories and Accounts Receivable also become important Collaterals for availing debt. Volatility indicator is significant and positively affects TL/NW ratio. This may be due to the fact that in risky conditions, companies may be resorting to more Short Term Debt and Total Liabilities includes a significant proportion of Short Term Debt (Table 4.2.4).

NDTS indicator has negative impact on this ratio. This may be due to the fact that total liabilities include a significant proportion of current liabilities and provisions which are used to finance working capital requirements. In earlier long term debt measures, (Table 5.7 and 5.8) where NDTS had positive effect on Debt Ratios. This indicates that whenever only long term debt is involved, NDTS have positive impact indicating that fixed assets in these companies are financed through long term debt and working capital requirements are financed through short term debt.

Age negatively affects TL / NW ratio indicating that mature firms generate sufficient cash reserves to meet their working capital needs as well as they might be profitable firms who have sufficient internally generated funds to meet financing requirements of fixed assets too. Cost of Equity and Dividend Payout have negative impact on

Table 5.15							
Simple Linear Regression on Debt Ratio- TL/NW							
Independent variables	**Indicators**	**R square**	**Intercept**	**Slope**	**t-Statistic**	**p- value**	**F -Statistic**
Size	Log of sales	0.003	2.311	-0.061	-0.616	0.539	0.380
	Log of GTFA	0.004	2.319	-0.072	-0.727	0.469	0.528
	Log of TA	0.008	2.567	-0.111	-1.032	0.304	1.065
Profitability	PBIT/TNA	0.176	3.526	-10.769	**-5.421****	**0.000**	**29.385**
	PBITDA/TGA	0.179	3.760	-12.157	**-5.480****	**0.000**	**30.033**
	PBT/TNA	0.245	3.168	-10.706	**-6.684****	**0.000**	**44.672**
	PBIT/Sales	0.000	2.000	-2.20E-02	-0.113	0.910	0.013
	PBIT/CE	0.027	2.452	-1.754	-1.963	0.052	3.852
Collateral	NFA/TNA	0.008	1.682	0.966	1.045	0.298	1.092
	GFA/TGA	0.004	1.695	0.678	0.749	0.455	0.561
	(Nfa+Inv+AR)/TNA	0.099	-1.359	4.213	**3.889****	**0.000**	**15.121**
	L&B/TGA	0.010	2.160	-1.766	-1.194	0.234	1.427
	P&E/TGA	0.003	2.035	-0.050	-0.619	0.537	0.383
	Inventories/TNA	0.023	1.441	2.818	1.822	0.071	3.320
Volatility	SD of PBIT	0.001	2.027	0.00E+00	-0.445	0.657	0.198
	SD of % ch in PBIT	0.001	2.015	-5.50E-05	-0.390	0.697	0.152
	SD of PBITDA/TGA	0.000	1.993	0.088	0.029	0.977	0.001
	COV of PBIT	0.019	1.950	0.028	1.650	0.101	2.722
	COV of PBIT/CE	0.006	2.007	-0.033	-0.918	0.360	0.843
	COV of PBIT/ TNA	0.068	1.744	0.357	**3.182****	**0.002**	**10.124**
Growth rate	CAGR of TNA	0.018	2.405	-2.869	-1.612	0.109	2.599
	CAGR of sales	0.001	2.065	-0.479	-0.302	0.763	0.091
NDTS	Depr/TGA	0.015	2.497	-18.322	-1.444	0.151	2.084
	Depr+ET/TGA	0.034	2.293	-2.316	**-2.206***	**0.029**	**4.869**
	Depr/PBITDA	0.014	1.946	0.187	1.419	0.158	2.014
Debt Service capacity	PBDIT/INT	0.021	2.075	-1.00E-03	-1.738	0.084	3.022
Age	Age as on 31-03-2008	0.036	2.740	-0.018	**-2.274***	**0.025**	**5.169**
	Log of age of firm	0.043	5.000	-0.822	**-2.479***	**0.014**	**6.148**
Dividend payout	Equity Div/PAT	0.030	2.338	-1.077	**-2.068***	**0.04**	**4.277**
Liquidity	CA/CL	0.071	2.845	-0.280	**-3.251****	**0.001**	**10.569**
Net Exports	Net exp/Sales	0.037	1.944	-1.591	**-2.293***	**0.023**	**5.256**
Cost of Equity	DIV/SC	0.047	2.385	-6.386	**-2.622****	**0.010**	**6.877**
Uniqueness	R&D/Sales	0.006	2.051	-10.016	-0.945	0.346	0.894
Cost of Borrowing	INT/DEBT	0.000	2.029	-0.232	-0.103	0.918	0.011
*** indicates significance at 5% level**							
**** indicates significance at 1% level**							

TL/NW ratio which also proves that only profitable companies must be declaring high dividends and they also have sufficient internally generated funds and do not require

further debt. Net Exports has negative impact on TL / NW ratio indicating that generally companies which are net exporters avail lot of tax concessions and other benefits from the government and hence do not need to finance from debt sources.

5.2 Conclusions – Simple Regressions

The summarized simple regression results have been presented in Table 5.16. The main conclusions derived from the results of simple linear regressions conducted on each indicator of an independent variable, one at a time, with each Debt Ratio (dependent variable) are as follows:

1. The results of simple linear regressions between each indicator of an independent variable with each Debt Ratio reject the null hypotheses that there is no significant impact of Size of a company, Profitability of a company, Collateral Value of Assets, Volatility of companies' earnings, Growth Rate of a company, existence of NDTS, Debt Service Capacity, Age of a company, Dividend Payout, Liquidity, Net Exports, Cost of Borrowings, Cost of Equity and Uniqueness of a company on a company's Debt Ratios and accepts the alternative hypotheses that all the above mentioned Determinants have significant impact on Debt Ratios (Capital Structure) of FDI Companies in India.

2. Size as measured by Log of GTFA has significant negative impact on Short Term Debt Ratios, but has significant positive impact on Long Term Debt Ratios. Size as measured by Log of Sales has significant positive impact on TC&E/TA Ratio. Size generally has insignificant impact on Total Debt Ratios except in case of TD/TA Ratio where Size as measured by Log of GTFA has positive impact on the ratio. This indicates that large size companies having large fixed assets tend to borrow more of Long Term Debt rather than Short Term Debt.

3. Profitability has significant negative impact on all the Debt Ratios. This result confirms the prediction of the Pecking Order Theory according to which profitable companies having large cash flows tend to have low Debt Ratios.

4. Collateral indicators NFA / TNA and GFA / TGA have significant negative impact on Short Term Debt Ratios but have significant positive impact on Long Term and Total Debt Ratios. Collateral indicators (Nfa+Inv+AR)/TNA and INV/TNA have significant positive impact on Short Term Debt Ratios. Collateral indicators – INV/TNA has significant negative impact on Long Term Debt Ratios. This indicates that Collaterals in the form of tangible fixed assets are used to borrow Long Term Debt Funds, at the same time, Collaterals in the form of Inventories and Accounts Receivables support Short Term Debt.

5. Volatility indicator COV of PBIT/TNA has significant positive impact on all the Short Term and Total Debt Ratios. Another indicator of Volatility - SD of PBIT has negative impact on Short Term Debt Ratios STBB+CPLTD/TA and STD/TA but has insignificant impact on all the other Debt Ratios. The other indicator of Volatility - COV of PBIT/CE also has negative impact on TC&E/TA Ratio and on TL/TA ratio, but has insignificant impact on all the other Debt Ratios. The results of the indicator COV of PBIT/TNA are more consistent as they indicate significant positive impact on all the Short Term and Total Debt Ratios and indicate that firms having volatile earnings tend to borrow more Short Term Debt Funds.

6. Growth Rate as measured by CAGR of TNA has significant negative impact on Short Term Debt Ratios and Total Debt Ratio – TL/TA, but has insignificant impact on Long Term Debt Ratios. This indicates that high growth firms in terms of Total assets tend to borrow less from Short Term Debt Funds.

7. Non Debt Tax shield indicators have negative impact on Short Term Debt Ratios, positive impact on Long Term Debt Ratios and Total Debt Ratios.

8. Debt Service Capacity has negative impact on STD/TA ratio and Total Debt Ratios but has insignificant impact on Long Term Debt Ratios. This reveals that in spite of having sufficient Debt Servicing Capacity, companies do not resort to high debt levels for financing purposes.

9. Age has positive impact on TC&E/TA ratio and significant negative impact on Long Term and Total Debt Ratios. This indicates that mature age firms prefer to borrow more from Short Term Debt Funds rather than borrowing from Long Term Debt Sources.

10. Dividend Payout has negative impact on STD/NW Ratio, LTD/TA Ratio, and on Total Debt Ratios indicating that generally companies having higher Dividend Payouts will borrow less.

11. Liquidity has significant negative impact on Short Term Debt Ratios- STD1/TA ratio and TC&E/TA Ratio, and Total Debt Ratios – TL/TA Ratio and TL/NW Ratio. Liquidity has insignificant impact on Long Term Debt Ratios. This means that companies having liquid assets will borrow less.

12. Net Exports have significant positive impact on Short Term Debt Ratios- STD1/TA Ratio and TC&E/TA Ratio and on Total Debt Ratios – TL/TA Ratio and TL/NW Ratio. Net Exports have insignificant impact on Long Term Debt Ratios. The results indicate that companies which are Net Exporters might borrow more from Short Term Debt sources.

13. Cost of Equity has significant negative impact on Short Term, Long Term and Total Debt Ratios. This means that as the Cost of Equity increases companies tend to borrow less.

14. Cost of Borrowings has significant positive impact on Short Term Debt Ratios- STD1/TA Ratio and TC&E/TA Ratio, significant negative impact on Long Term Debt Ratios – LTBB/TA Ratio and LTD/TA Ratio and on Total Debt Ratio – TD/TA Ratio. The results indicate that as Cost of Borrowings increase, companies prefer to borrow from Short Term Debt sources.

Table 5.16

Conclusions-Simple Regressions (140 FDI companies)

		Short Term Debt Ratios						Long Term Debt Ratios				Total Debt Ratios				
Dependent variables- Debt Ratios		STBB+CPLTD/TA	STD/TA	STD1/TA	TC&E/TA	STD/NW	STD1/NW	LTBB/TA	LTD/TA	LTD/NW	LTD/(NW+LTD)	TD/TA	TL/TA	TD/NW	TD/(TD+NW)	TL/NW
Independent Variables	Indicators															
Size	Log of sales	N.S	N.S	N.S	+VE*	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S
	Log of GTFA	N.S	-VE*	-VE *	N.S	-VE*	-VE*	+VE**	+VE**	+VE*	N.S	+VE*	N.S	N.S	N.S	N.S
	Log of TNA	N.S	-VE*	N.S	N.S	-VE*	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S
Profitability	PBIT/TNA	-VE**	-VE**	N.S	-VE*	-VE**	-VE**	-VE*	-VE**	-VE**	-VE**	-VE**	-VE**	-VE**	-VE**	-VE**
	PBITDA/TGA	-VE**	-VE**	-VE*	-VE**	-VE*	-VE**	N.S	-VE**	-VE**	-VE**	-VE**	-VE**	-VE**	-VE**	-VE**
	PBT/TNA	-VE**	-VE**	-VE*	-VE*	-VE*	-VE**	-VE**	-VE**	-VE**	-VE**	-VE**	-VE**	-VE**	-VE**	-VE**
	PBIT/Sales	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S
	PBIT/CE	N.S	N.S	N.S	N.S	-VE**	N.S	-VE**	-VE**	N.S	N.S	-VE*	N.S	-VE**	N.S	N.S
Collateral	NFA/TNA	N.S	N.S	-VE**	-VE**	N.S	-VE*	+VE**	-VE**	+VE**	+VE*	+VE**	N.S	+VE**	N.S	N.S
	GFA/TGA	N.S	N.S	-VE**	-VE**	N.S	-VE*	+VE**	-VE**	+VE**	+VE*	+VE**	N.S	+VE**	N.S	N.S
	(Nfa+Inv+AR)/TNA	+VE**	+VE**	N.S	N.S	+VE**	+VE**	+VE**	-VE**	+VE**	+VE**	+VE**	+VE**	+VE**	+VE**	+VE**
	L&B/TGA	N.S	N.S	N.S	-VE**	N.S	N.S	+VE**	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S
	P&E/TGA	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S
	INV/TNA	+VE**	+VE**	+VE**	+VE**	+VE**	+VE**	-VE**	-VE*	N.S	N.S	N.S	+VE**	N.S	N.S	N.S
Volatility	SD of PBIT	-VE*	-VE*	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S
	SD of % change in PBIT	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S
	SD of PBITDA/TGA	+VE**	N.S	+VE**	+VE**	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S
	COV of PBIT	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S
	COV of PBIT/CE	N.S	N.S	N.S	-VE*	N.S	N.S	N.S	N.S	N.S	N.S	N.S	-VE**	N.S	N.S	N.S
	COV of PBIT/ TNA	+VE**	+VE**	+VE**	+VE**	+VE*	+VE**	N.S	N.S	N.S	+VE*	+VE*	+VE**	+VE*	+VE**	+VE**
Growth rate	CAGR of TNA	-VE **	-VE*	-VE**	-VE*	N.S	-VE*	N.S	N.S	N.S	N.S	N.S	-VE*	N.S	N.S	N.S
	CAGR of sales	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S
NDTS	Depr/TGA	N.S	N.S	-VE**	-VE**	N.S	-VE**	N.S	+VE*	N.S	N.S	N.S	N.S	N.S	N.S	N.S
	Depr+ET/TGA	N.S	N.S	-VE*	-VE*	N.S	-VE*	N.S	N.S	N.S	N.S	N.S	-VE**	N.S	N.S	-VE*
	Depr/PBITDA	N.S	N.S	N.S	N.S	N.S	N.S	+VE*	+VE*	N.S	N.S	+VE*	+VE**	N.S	N.S	N.S
Debt Service capacity	PBDIT/INT	N.S	-VE*	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	-VE*	-VE*	N.S	N.S	N.S
Age	Age as on 31-03-2008	N.S	N.S	N.S	+VE*	N.S	N.S	-VE*	-VE**	-VE**	N.S	-VE**	N.S	-VE**	N.S	-VE*
	Log of age of firm	N.S	N.S	N.S	N.S	N.S	N.S	-VE*	-VE**	-VE**	N.S	-VE**	N.S	-VE**	N.S	-VE*
Dividend payout	Equity Div/PAT	N.S	N.S	N.S	N.S	-VE*	N.S	N.S	-VE*	N.S	N.S	-VE**	N.S	-VE*	-VE**	-VE*
Liquidity	CA/CL	N.S	N.S	-VE**	-VE**	N.S	N.S	N.S	N.S	N.S	N.S	N.S	-VE**	N.S	N.S	-VE**
Net Exports	Net exp/Sales	N.S	N.S	-VE*	-VE**	N.S	-VE*	+VE**	N.S	N.S	N.S	N.S	-VE*	N.S	N.S	-VE*
Cost of Equity	DIV/SC+Res	-VE**	-VE**	N.S	N.S	-VE**	N.S	N.S	-VE**	-VE**	-VE**	-VE**	-VE*	-VE**	-VE**	-VE**
Uniqueness	R&D/Sales	N.S	N.S	-VE*	-VE*	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S	N.S
Cost of Borrowing	Int/TD	N.S	N.S	+VE**	+VE**	N.S	N.S	-VE**	-VE **	N.S	N.S	-VE**	N.S	N.S	N.S	N.S

* indicates significance at 5% level

** indicates significance at 1% level

Not Significant=(NS), Positive= (+VE), Negative =(-VE)

PART- II

MULTIPLE REGRESSIONS ON VARIOUS MEASURES OF CAPITAL STRUCTURE

5.3 Results of Multiple Regressions on Debt Ratios

In this study, fourteen independent variables (Determinants of Capital Structure) explained by thirty-four indicators have been selected to study the impact of these Determinants on Capital Structure policies of 140 sample firms of FDI Companies in India. Fifteen measures of Capital Structure have been selected for the study. The simple regressions conducted in Section 5.1.1 to 5.1.15 reveal that some indicators representing the selected factors have significant impact on most of the measures of Capital Structure, while some indicators have insignificant impact on the Debt Ratios.

Table 5.17

List of Determinants of Capital Structure Selected For Multiple Regression Analysis.

Sr. No	Determinants	Indicators	Abbreviation
1	Size	Natural Logarithm of Sales	Log of sales
		Natural Logarithm of Gross Total Fixed Assets	Log of GTFA
		Natural Logarithm of Total Net Assets	Log of TNA
2	Profitability	Profit Before Interest,Tax, Depreciation & Amortization /Total Gross Assets	PBITDA/TGA
		Profit Before Tax /Total Net Assets	PBT/TNA
3	Collateral	Net Fixed Assets/Total Net Assets	NFA/TNA
		Gross Fixed Assets /Total Gross Assets	GFA/TGA
		(Net Fixed Assets +Inventory +Accounts Receivable)/ Total Net Assets	(Nfa+Inv+AR)/TNA
		Inventories/Total Net Assets	INV/TNA
4	Volatility	Standard Deviation of Profit Before Interest, Tax, Depreciation & Amortization / Total Gross Assets	SD of PBITDA/TGA
		Coefficient of Variation of Profit Before Interest & Tax/Total Net Assets	COV of PBIT to TNA
5	Growth Rate	Compount Annual Growth Rate of Total Assets	CAGR of TNA
		Compount Annual Growth Rate of Sales	CAGR of Sales
6	Non-Debt Tax Shields	Depreciation /Total Gross Assets	Depr/TGA
7	Debt Service Capacity	Profit Before Interest, Tax& Depreciation/Interest payments	PBDIT/INT
8	Age	Natural Logarithm of Age of firm	Log of age of firm
9	Dividend Payout	Equity Dividend /Profit After Tax	Equity Div/PAT
10	Liquidity	Current Assets /Current Liabilities	CA/CL
11	Net Exports	Net Exports /Sales	Net exp/Sales
12	Cost of Equity	Dividend Payment/ Share Capital+Reserves	DIV/SC
13	Uniqueness	Research & Development Expenditure / Sales .	R&D /Sales
14	Cost of Borrowing	Interest Payment/Total Debt	INT /DEBT

Twenty-Two indicators which had significant impact on Debt Ratios have been selected for conducting multiple regressions, although the number of independent factors still remains the same. The Table-5.17 lists the Determinants of Capital Structure and their indicators used for multiple regression analysis.

For conducting multiple regressions, four measures of Capital Structure are selected, which includes two Short Term Debt measures, one Long Term Debt measure and one Total Debt measure. The Capital Structure measures selected for conducting multiple regressions are:

Table 5.18

Debt Ratios Selected for Multiple Regression Analysis

Sr. No	Dependent Variable (Debt Ratios)	Abbreviation	Category
1	Short Term Debt1/ Total Assets	STD1/TA	Short Term Debt Ratio
2	Total Trade Credit & Equivalent / Total Assets	TC&E/TA	Short Term Debt Ratio
3	Long Term Debt/ Total Assets	LTD/TA	Long Term Debt Ratio
4	Total Liabilities / Total Assets	TL/TA	Total Debt Ratio

Using various combinations of selected Determinants represented by twenty-two indicators, several regression runs were conducted for each Debt measure. 'Thirty-Three' multiple regression runs for each Short Term Debt measure (Table 5.29 and Table 5.30) and 'Thirty' multiple regression runs for Long Term Debt and Total Debt Measure each (Table 5.31 and Table 5.32) were conducted. Out of these regression runs, only those regression runs which were able to explain around 50% of variation in the Debt Ratio are reported. Several combinations resulted in same predictions; hence only one of the regression run results each for such combinations is reported. For all the reported regression runs, results of both standard regression model and stepwise regression results are reported.

From the correlation matrix (Table 5.24), it was noticed that Depr/TGA was highly correlated with GFA/TGA (.644) and DIV/SC was highly correlated with PBITDA/TGA (.666) and PBT/TNA (.676) respectively. There would be problem of multicollinearity if these indicators are taken together in a regression run. However, multicollinearity tests (Variance Inflationary Factors) indicate that multicollinearity is not a problem as 'VIF' for all indicators ranges from a high of 2.34 to a low of 1.00 respectively, which shows that , there is little evidence of multicollinearity among the indicators as 'VIF' is well within limits.

From the correlation matrix (Table No. 5.24), it is also observed that high correlation exists between various indicators of a same independent variable and care is taken that no two indicators of the same independent variable are taken together while performing multiple regressions, with the exception- in case of Short Term Debt Ratios where (NFA/TNA or GFA/TGA) and (INV/TNA) both representing Collateral effect are taken together. This was done, as it is found out from simple regressions (Table 5.16), that Inventories had positive impact on Short Term Debt measures while (NFA/TNA or GFA/TGA) has negative impact on Short Term Debt measures.

Care is also taken to see that if one indicator uses gross assets as its base, then it is not combined with an indicator having net assets as its base. Hence PBT/TNA is not combined with GFA/TGA, Log of GTFA is not combined with INV/TNA, PBITDA/TGA not combined with NFA/TNA and INV/TNA, PBT/TNA is not combined with SD of PBITDA/TGA and with Depr/TGA, NFA/TNA not combined with SD of PBITDA/TGA, GFA/TGA not combined with CAGR of TNA, CAGR of TNA not combined with Depr/TGA.

5.3.1 Results of Multiple Regressions of STD1/TA Ratio

Table 5.19 presents the results of multiple regression runs conducted on short term debt measure STD1/TA ratio. Out of *thirty-three* multiple regression runs (Table 5.29) conducted on STD1/TA ratio, six significant regression runs conducted on STD1/TA ratio are reported (Refer VIF Table 5.25). The value of R^2 ranges from 0.478 in Run 1^b to 0.589 in Run 6^b which indicates that a maximum of 58.9% variations in STD1/TA ratio are explained by significant indicators selected in Regression Run 6^b.

Collateral/Tangibility: In all the regression runs, it is found out that NFA/TNA has significant negative impact on STD1/TA ratio, the 't' statistic being significant at 1% level of significance. In Run 3, Run 5 and Run 6, along with NFA / TNA to denote collateral effect, INV/TNA is also included in the regression run, which yields interesting results. While the collateral or tangibility effect on STD1/TA as measured by NFA/TNA results in significant negative impact on STD1/TA ratio, collateral effect as measured by INV/TNA results in significant positive impact on STD1/TA ratio, the 't' statistic being significant at 1% level of significance. This indicates that collaterals in the form of fixed assets which are long term assets are not used to obtain

short term finance. At the same time, higher level of Inventories are supported by Short Term Debt and Inventories in turn act as Collaterals to avail Short Term Debt and hence the positive impact of INV/TNA on STD1/TA ratio. These results are consistent with the findings of Bevan & Danbolt (2000)[1], Pandey I.M (2001)[6], Song (2005)[4] who had found that tangibility when measured in terms of NFA/TA ratio had negative impact on Short Term Debt.

Profitability: The impact of profitability factor as measured by PBT/TNA is significant at 1% level of significance in all the regression runs and its coefficient is negative indicating that profitability has negative impact on Short Term Debt Ratios, which is in line with the Pecking-Order Theory.

Volatility: Volatility indicator COV of PBIT/TNA has significant positive impact on STD1/TA ratio in all the regression runs, the 't' statistic being significant at 1% level of significance. This indicates that firms with volatile earnings prefer to borrow short term funds. This finding is consistent with the results of Pandey I.M (2001)[6].

Liquidity: Liquidity as indicated by CA/CL is a significant factor at 1% level of significance and has negative impact on STD1/TA ratio in all the regression runs reported. This indicates that higher the proportion of liquid assets, the company may resort to low levels of short term debt in their Capital Structure.

Cost of Equity: DIV/SC, which is an indicator of cost of equity, has a significant positive impact on STD1/TA ratio in three runs, the 't' statistic being significant at 1% level of significance. This indicates that as the Cost of Equity in the form of dividend payments increase, FDI Companies prefer Short Term Debt Funds for financing purposes.

Growth Rate: Growth rate as measured in terms of CAGR of sales is significant at 5% level of significance in Run6 and has positive impact on STD1/TA ratio indicating that growth in sales would mean greater need of Short Term Debt Funds needed to fuel the growth in sales and hence the positive relationship. These results are consistent with findings of Pandey I.M (2001)[6] who had found that Malaysian firms employ short term debt to finance their growth.

The impact of indicators for **Size, Age, Dividend Payout, Net Exports/Sales,** and **Uniqueness and Cost of Borrowing of** a firm is found insignificant on STD1/TA ratio.

Table 5.19

Results of Multiple Regression of 140 FDI Companies in India on Dependent variable - STD1/TA

	Run 1[a]	Run 1[b]		Run 2[a]	Run 2[b]		Run3[a]	Run 3[b]
Intercept	0.704	0.603	Intercept	0.695	0.656	Intercept	0.640	0.491
Log of sales	0.013 (1.659) [0.100]	Excluded	Log of sales	0.017 (2.209)* [0.029]	Excluded	Log of sales	0.003 (0.325) [0.746]	Excluded
PBT/TNA	—	—	PBT/TNA	-0.357 (-2.619)** [0.010]	-0.359 (-3.029)** [0.003]	PBT/TNA	—	—
NFA/TNA	-0.449 (-6.468)** [.000]	-0.451 (-7.814)** [.000]	NFA/TNA	-0.498 (-7.145)** [.000]	-0.491 (-8.524)** [.000]	NFA/TNA	-0.386 (-5.641)** [.000]	-0.351 (-5.833)** [.000]
INV/TNA	—	—	INV/TNA	—	—	INV/TNA	0.465 (4.037)** [.000]	0.407 (4.006)** [.000]
COV of PBIT to TNA	0.033 (4.287)** [.000]	0.036 (4.925)** [.000]	COV of PBIT to TNA	0.028 (3.689)** [.000]	0.656 (3.965)** [.000]	COV of PBIT to TNA	0.031 (4.109)** [.000]	0.034 (4.853)** [.000]
CAGR of TNA	0.704 (-2.513)* [0.013]	Excluded	CAGR of TNA	-0.217 (-1.636) [0.104]	Excluded	CAGR of sales	-0.007 (-0.060) [0.952]	Excluded
Log of age of firm	-0.034 (-1.406) [0.162]	Excluded	Log of age of firm	-0.029 (-1.192) [0.236]	Excluded	Log of age of firm	-0.039 (-1.545) [0.125]	Excluded
Equity Div/PAT	-0.022 (-0.602) [0.548]	Excluded	Equity Div/PAT	-0.001 (-0.017) [0.986]	Excluded	Equity Div/PAT	(-0.014) (-0.401) [0.689]	Excluded
CA/CL	-0.027 (-4.279)** [.000]	-0.029 (-5.306)** [.000]	CA/CL	-0.025 (-4.049)** [.000]	0.656 (-5.167)** [.000]	CA/CL	-0.032 (-5.260)** [.000]	-0.029 (-5.586)** [.000]
Net exp/Sales	0.02 (0.400) [0.690]	Excluded	Net exp/Sales	0.037 (0.773) [0.441]	Excluded	Net exp/Sales	0.051 (1.042) [0.300]	Excluded
R&D/Sales	-0.852 (-1.247) [0.215]	Excluded	R&D/Sales	-0.750 (-1.127) [0.262]	Excluded	R&D/Sales	-0.446 (-0.668) [0.506]	Excluded
INT/DEBT	0.023 (0.152) [0.880]	Excluded	INT/DEBT	0.046 (0.303) [0.762]	Excluded	INT/DEBT	-0.041 (-0.266) [0.791]	Excluded
DIV/SC	0.070 (0.389) [0.698]	Excluded	DIV/SC	—	—	DIV/SC	0.052 (0.300) [0.765]	Excluded
R^2	**0.525**	**0.49**	R^2	**0.549**	**0.522**	R^2	**0.560**	**0.544**
Adjusted R^2	**0.484**	**0.478**	Adjusted R^2	**0.510**	**0.508**	Adjusted R^2	**0.518**	**0.530**
F statistic	**12.874** **[.000]**	**43.479** **[.000]**	F statistic	**14.156** **[.000]**	**36.864** **[.000]**	F statistic	**13.446** **[.000]**	**40.228** **[.000]**

[a] Multiple Regression, [b] Stepwise Regression,

* indicates significance at 5% level, ** indicates significance at 1% level,

(t-statistics), [p-value]

Table No. 5.19 Continued.....								
Results of Multiple Regression of 140 FDI Companies In India on Dependent variable - STD1/TA								
	Run4[a]	Run4[b]		Run5[a]	Run5[b]		Run6[a]	Run6[b]
Intercept	0.700	0.639	Intercept	0.675	0.545	Intercept	0.611	0.528
Log of sales	0.013 (1.746) [0.083]	Excluded	Log of TNA	-0.003 (-0.347) [0.729]	Excluded	Log of TNA	-0.008 (-1.007) [0.316]	Excluded
PBT/TNA	-0.685 (-3.912)** [.000]	-0.723 (-4.639)** [.000]	PBT/TNA	-0.627 (-3.674)** [.000]	-0.623 (-4.064)** [.000]	PBT/TNA	-0.754 (-4.445)** [.000]	-0.754 (-4.661)** [.000]
NFA/TNA	-0.517 (-7.586)** [.000]	-0.497 (-8.961)** [.000]	NFA/TNA	-0.442 (-6.477)** [.000]	-0.411 (-6.911)** [.000]	NFA/TNA	-0.457 (-6.790)** [.000]	-0.447 (-7.364)** [.000]
INV/TNA	—	—	INV/TNA	0.402 (3.636)** [.000]	0.328 (3.325)** [0.001]	INV/TNA	0.401 (3.737)** [.000]	0.353 (3.615)** [.000]
COV of PBIT to TNA	0.027 (3.702)** [.000]	0.029 (4.152)** [.000]	COV of PBIT to TNA	0.025 (3.472)** [.001]	0.028 (4.149)** [.000]	COV of PBIT to TNA	0.024 (3.320)** [0.001]	0.027 (3.902)** [.000]
CAGR of TNA	-0.132 (-0.995) [0.322]	Excluded	CAGR of TNA	0.036 (0.265) [0.791]	Excluded	CAGR of sales	0.247 (2.138)* [0.034]	0.224 (2.257)* [0.026]
Log of age of firm	-0.027 (-1.175) [0.242]	Excluded	Log of age of firm	-0.027 (-1.174) [0.243]	Excluded	Log of age of firm	-0.01 (-0.410) [0.683]	Excluded
Equity Div/PAT	-0.027 (-0.783) [0.435]	Excluded	Equity Div/PAT	-0.015 (-0.464) [0.644]	Excluded	Equity Div/PAT	-0.014 (-0.417) [0.678]	Excluded
CA/CL	-0.022 (-3.569)** [.001]	-0.023 (-4.160)** [.000]	CA/CL	-0.028 (-4.728)** [.000]	-0.024 (-4.494)** [.000]	CA/CL	-0.026 (-4.563)** [.000]	-0.022 (-4.237)** [.000]
Net exp/Sales	0.036 (0.777) [0.439]	Excluded	Net exp/Sales	0.062 (1.344) [0.181]	Excluded	Net exp/Sales	0.062 (1.378) [0.171]	Excluded
R&D/Sales	-0.448 (-0.682) [0.497]	Excluded	R&D/Sales	-0.157 (-0.245) [0.807]	Excluded	R&D/Sales	-0.058 (-0.092) [0.927]	Excluded
INT/DEBT	0.038 (0.257) [0.797]	Excluded	INT/DEBT	-0.054 (-0.379) [0.706]	Excluded	INT/DEBT	-0.004 (-0.028) [0.977]	Excluded
DIV/SC	0.644 (2.868)** [0.005]	0.701 (3.428)** [.001]	DIV/SC	0.636 (2.913)** [0.004]	0.592 (2.958)** 0.004	DIV/SC	0.708 (3.320)** [0.001]	0.652 (3.280)** 0.001
R^2	**0.576**	**0.561**	R^2	**0.607**	**0.594**	R^2	**0.621**	**0.609**
Adjusted R^2	**0.536**	**0.544**	Adjusted R^2	**0.567**	**0.576**	Adjusted R^2	**0.582**	**0.589**
F statistic	14.395** [.000]	34.190** [.000]	F statistic	14.991** [.000]	32.473** [.000]	F statistic	15.872** [.000]	29.419** [.000]

[a] Multiple Regression, [b] Stepwise Regression,

* indicates significance at 5% level, ** indicates significance at 1% level,

(t-statistics), [p-value]

5.3.2 Results of Multiple Regressions on TC&E /TA Ratio

Table 5.20 presents the results of multiple regression runs conducted on Short Term Debt measure TC&E/TA ratio. Out of *thirty-three* multiple regression runs (Table 5.30) conducted on TC&E/TA ratio, nine significant regression runs conducted on TC&E/TA ratio are reported (Refer VIF Table 5.26). The value of R^2 ranges from a minimum of 0.494 in Run 2^b to 0.655 in Run 9^b which indicates that a maximum of 65.5% variations in TC&E/TA ratio are explained by significant indicators selected in Regression Run 9^b.

Profitability: Out of eight regression runs in which profitability is selected as one of the independent variables, in six regression runs, profitability factor is significant at 1% level of significance and its coefficient is negative indicating that Profitability has negative impact even on TC&E/TA ratio. This indicates that there are sufficient internally generated cash reserves and FDI Companies in India do not prefer to borrow even from short term sources like Trade Credit.

Collateral/Tangibility: The Collateral effect as measured by NFA/TNA or GFA/TGA indicates a negative relationship between tangible fixed assets and Trade Credits & Equivalents and the relationship is significant at 1% level of significance. At the same time in regression Run 9, along with NFA/TNA or GFA/TGA to denote collateral effect, INV/TNA is also included in the regression run and it is found out that while tangible fixed assets have negative impact on TC&E/TA ratio, INV/TNA have positive impact on TC&E/TA ratio. Thus, confirming that higher Inventory levels support the availability of Trade Credits whereas high Collaterals as represented by tangible fixed assets support the availability of Long Term Debt Funds. In Run 2, where (Nfa+Inv+AR)/TNA indicator is used to measure Collateral effect, it denotes a positive impact on STD1/TA ratio which means that for availing Trade Credit, companies Inventories and Account Receivables also act as Collaterals.

Volatility: Volatility indicator COV of PBIT/TNA has significant positive impact on TC&E/TA ratio in almost all the regression runs, the 't' statistic being significant at 1% level of significance. This indicates that firms with volatile earnings prefer to heavily rely on Short Term Trade Credit as a source of finance.

Table 5.20

Results of Multiple Regression of 140 FDI Companies on Dependent variable - TC&E/TA

	Run 1[a]	Run 1[b]		Run2[a]	Run 2[b]		Run3[a]	Run3[b]
Intercept	0.387	0.348	Intercept	0.083	0.044	Intercept	0.159	0.201
Log of sales	0.018 (3.368)** [0.001]	0.014 (3.218)** [0.002]	Log of sales	0.009 (1.503) [0.135]	Excluded	Log of sales	0.007 (1.205) [0.230]	Excluded
PBT/TNA	-0.290 (-3.154)** [0.002]	-0.343 (-4.060)** [.000]	PBT/TNA	-0.080 (-0.718) [0.474]	Excluded	PBT/TNA	-0.126 (-1.257) [0.211]	Excluded
NFA/TNA	-0.327 (-6.956)** [.000]	-0.336 (-8.070)** [.000]	(Nfa+Inv+AR)/TNA	0.072 (1.191) [0.236]	0.111 (2.027)* [0.045]	NFA/TNA	—	—
INV/TNA	—	—	INV/TNA	—	—	INV/TNA	0.306 (3.480)** [0.001]	0.398 (5.234)** [.000]
COV of PBIT to TNA	0.023 (4.480)** [.000]	0.024 (4.796)** [.000]	COV of PBIT to TNA	0.032 (5.455)** [.000]	0.032 (5.736)** [.000]	COV of PBIT to TNA	0.028 (4.990)** [.000]	0.029 (5.327)** [.000]
CAGR of TNA	-0.143 (-1.595) [0.113]	Excluded	CAGR of TNA	-0.162 (-1.545) [0.125]	Excluded	CAGR of TNA	-0.081 (-0.788) [0.432]	Excluded
Log of age of firm	-0.009 (-0.566) [0.572]	Excluded	Log of age of firm	0.025 (1.361) [0.176]	0.035 (2.191)* [0.030]	Log of age of firm	0.010 (0.566) [0.572]	Excluded
Equity Div/PAT	-0.005 (-0.213) [0.831]	Excluded	Equity Div/PAT	0.012 (0.464) [0.643]	Excluded	Equity Div/PAT	0.011 (0.431) [0.667]	Excluded
CA/CL	-0.027 (-6.679)** [.000]	-0.027 (-6.934)** [.000]	CA/CL	-0.026 (-5.460)** [.000]	-0.031 (-7.199)** [.000]	CA/CL	-0.029 (-6.157)** [.000]	-0.033 (-7.914)** [.000]
Net exp/Sales	0.018 (0.566) [0.572]	Excluded	Net exp/Sales	-0.044 (-1.210) [0.228]	Excluded	Net exp/Sales	-0.015 (-0.409) [0.683]	Excluded
R&D/Sales	-0.668 (-1.487) [0.140]	Excluded	R&D/Sales	-1.415 (-2.771)** [0.006]	-1.49 (-2.934)** [0.004]	R&D/Sales	-1.044 (-2.085)* 0.039	Excluded
INT/DEBT	0.203 (2.004)* [0.047]	0.221 (2.253)* [0.026]	INT/DEBT	0.404 (3.558)** [0.001]	0.436 (3.951)** [.000]	INT/DEBT	0.306 (2.713)** [0.008]	0.283 (2.592)* [0.011]
PBDIT/INT	—	—	PBDIT/INT	—	—	PBDIT/INT	—	—
DIV/SC	—	—	DIV/SC	—	—	DIV/SC	—	—
Depr/TGA	—	—	Depr/TGA	—	—	Depr/TGA	—	—
R^2	0.663	0.650	R^2	0.540	0.516	R^2	0.576	0.548
Adjusted R^2	0.634	0.634	Adjusted R^2	0.501	0.494	Adjusted R^2	0.539	0.535
F statistic	22.876** [.000]	41.168** [.000]	F statistic	13.686** [.000]	23.610** [.000]	F statistic	15.778** [.000]	40.921** [.000]

[a] Multiple Regressiona , [b] Stepwise Regression,

* indicates significance at 5% level, ** indicates significance at 1% level,

(t-statistics) , [p-value]

Table 5.20 Continued....

Results of Multiple Regression of 140 FDI Companies on Dependent variable - TC&E/TA

	Run4[a]	Run4[b]		Run5[a]	Run5[b]		Run6[a]	Run6[b]
Intercept	0.375	0.424	Intercept	0.341	0.566	Intercept	0.392	0.386
Log of TNA	0.010 (1.616) (0.109)	Excluded	Log of GTFA	0.002 (0.277) [0.782]	Excluded	Log of Sales	0.016 (2.868)** [0.005]	Excluded
PBT/TNA	-0.252 (-2.678)** [0.008]	-0.254 (-3.080)** 0.003	PBITDA/TGA	-0.528 (-3.907)** [.000]	-0.492 (-4.296)** [.000]	PBT/TNA	—	—
NFA/TNA	-0.316 (-6.416)** [.000]	-0.324 (-7.551)** [.000]	GFA/TGA	-0.283 (-5.1240** [.000]	-0.346 (-8.157)** [.000]	NFA/TNA	-0.292 (-6.160)** [.000]	-0.295 (-6.834)** [.000]
INV/TNA	—	—	INV/TNA	—	—	INV/TNA	—	—
COV of PBIT to TNA	0.024 (4.480)** [.000]	0.023 (4.544)** [.000]	SD of PBITDA	0.437 (2.621)** [0.010]	Excluded	COV of PBIT to TNA	0.026 (5.023)** [.000]	0.028 (5.525)** [.000]
CAGR of TNA	-0.108 (-1.109) [0.270]	Excluded	CAGR of sales	0.200 (1.990) [0.049]	Excluded	CAGR of TNA	-0.229 (-2.586)* [0.011]	Excluded
Log of age of firm	0.003 (0.192) [0.848]	Excluded	Log of age	0.028 (1.513) [0.133]	Excluded	Log of age of firm	-0.013 (-0.791) [0.430]	Excluded
Equity Div/PAT	0.002 (0.080) [0.937]	Excluded	Eq Div/PAT	-0.011 (-0.441) [0.660]	Excluded	Equity Div/PAT	-0.015 (-0.585) [0.560]	Excluded
CA/CL	-0.03 (-7.083)** [.000]	-0.032 (-8.364)** [.000]	CA/CL	-0.029 (-6.401)** [.000]	-0.033 (-8.012)** [.000]	CA/CL	-0.029 (-6.902)** [.000]	-0.033 (-8.405)** [.000]
Net exp/Sales	0.006 (0.171) [0.865]	Excluded	Net exp/Sales	-0.025 (-0.664) [0.508]	Excluded	Net exp/Sales	0.007 (0.208) [0.835]	Excluded
R&D/Sales	-0.789 (-1.705) [0.091]	Excluded	R&D/Sales	-0.697 (-1.397) [0.165]	Excluded	R&D/Sales	-0.786 (-1.685) [0.094]	Excluded
INT/DEBT	0.199 (1.897) [0.060]	0.209 (2.057)* [0.042]	INT/DEBT	0.239 (2.093)* [0.038]	Excluded	INT/DEBT	0.190 (1.806) [0.073]	0.215 (2.060)* [0.041]
PBDIT/INT	—	—	PBDIT/INT	-1.71E-05 (-1.173) [0.243]	Excluded	PBDIT/INT	—	—
DIV/SC	—	—	DIV/SC	—	—	DIV/SC	-0.062 (-0.508) [0.612]	Excluded
Depr/TGA	—	—	Depr/TGA	—	—	Depr/TGA	—	—
R^2	0.640	0.623	R^2	0.584	0.533	R^2	0.637	0.596
Adjusted R^2	0.609	0.609	Adjusted R^2	0.544	0.522	Adjusted R^2	0.606	0.584
F statistic	20.713** [.000]	44.241** [.000]	F statistic	14.843** [.000]	51.687** [.000]	F statistic	20.452** [.000]	49.798** [.000]

[a] Multiple Regression, [b] Stepwise Regression,

* indicates significance at 5% level, ** indicates significance at 1% level,

(t-statistics), [p-value]

Table 5.20 Continued.....

Results of Multiple Regression of 140 FDI Companies on Dependent variable - TC&E/TA

	Run7[a]	Run7[b]		Run 8[a]	Run 8[b]		Run9[a]	Run 9[b]
Intercept	0.350	0.569	Intercept	0.389	0.35	Intercept	0.336	0.350
Log of GTFA	.000 (0.063) [0.950]	Excluded	Log of sales	0.016 (3.008)** [.000]	0.013 (2.865)** [0.005]	Log of sales	0.009 (1.783) [0.077]	0.010 (2.153)* [0.033]
PBITDA/TGA	-0.854 (-4.740)** [.000]	-0.723 (-4.711)** [.000]	PBT/TNA	-0.451 (-3.760)** [.000]	-0.51 (-4.711)** [.000]	PBT/TNA	-0.51 (-4.267)** [.000]	-0.447 (-4.070) [.000]
GFA/TGA	-0.338 (-5.080)** [.000]	-0.34 (-8.116)** [.000]	NFA/TNA	-0.336 (-7.209)** [.000]	-0.339 (-8.280)** [.000]	NFA/TNA	-0.318 (-6.737)** [.000]	-0.315 (-7.383)** [.000]
INV/TNA	—	—	INV/TNA	—	—	INV/TNA	0.198 (2.582)** [0.011]	0.202 (2.847)** [0.005]
SD of PBITDA	0.422 (2.574)** [0.011]	Excluded	COV of PBIT to TNA	0.023 (4.471)** [.000]	0.024 (4.884)** [.000]	COV of PBIT to TNA	0.021 (4.174)** [.000]	0.022 (4.611)** [.000]
CAGR of sales	0.227 (2.290)* [0.024]	Excluded	CAGR of TNA	-0.101 (-1.113) [0.268]	Excluded	CAGR of sales	0.112 (1.357) [0.177]	Excluded
Log of age	0.029 (1.591) [0.114]	Excluded	Log of age of firm	-0.009 (-0.538) [0.592]	Excluded	Log of age of firm	-0.003 (-0.172) [0.864]	Excluded
Equity Div/PAT	-0.028 (-1.092) [0.277]	Excluded	Equity Div/PAT	-0.009 (-0.757) [0.451]	Excluded	Equity Div/PAT	-0.014 (-0.583) [0.561]	Excluded
CA/CL	-0.027 (-6.049)** [.000]	-0.031 (-7.343)** [.000]	CA/CL	-0.026 (-6.274)** [.000]	-0.025 (-6.372)** [.000]	CA/CL	-0.028 (-6.679)** [.000]	-0.028 (-7.040)** [.000]
Net exp/Sales	-0.011 (-0.301) [0.764]	Excluded	Net exp/Sales	0.018 (0.560) [0.576]	Excluded	Net exp/Sales	0.031 (0.977) [0.330]	Excluded
R&D/Sales	-0.652 (-1.313) [0.192]	Excluded	R&D/Sales	-0.519 (-1.155) [0.250]	Excluded	R&D/Sales	-0.316 (-0.713) [0.477]	Excluded
INT/DEBT	0.262 (2.329)* [0.021]	Excluded	INT/DEBT	0.199 (1.990)* [0.049]	0.211 (2.187)* [0.030]	INT/DEBT	0.19 (1.899) [0.060]	Excluded
PBDIT/INT	-1.23E-05 (-0.853) [0.395]	Excluded	PBDIT/INT	—	—	PBDIT/INT	—	—
DIV/SC	0.398 (2.383)* [0.019]	0.350 (2.224)* [0.028]	DIV/SC	0.316 (2.055)* [0.042]	0.342 (2.405)* [0.018]	DIV/SC	0.347 (2.304)* [0.023]	0.301 (2.123)* [0.036]
Depr/TGA	1.307 (1.566) [0.120]	Excluded	Depr/TGA	—	—	Depr/TGA	—	—
R^2	0.607	0.549	R^2	0.674	0.665	R^2	0.69	0.673
Adjusted R^2	0.562	0.536	Adjusted R^2	0.643	0.647	Adjusted R^2	0.658	0.655
F statistic	13.765** [.000]	41.126** [.000]	F statistic	21.849** [.000]	37.382** [.000]	F statistic	21.611** [.000]	38.748** [.000]

[a] Multiple Regression, [b] Stepwise Regression,

* indicates significance at 5% level, ** indicates significance at 1% level,

(t-statistics), [p-value]

Liquidity: Liquidity as indicated by CA/CL is a significant factor at 1% level of significance in all the regression runs reported and has negative impact on TC&E/TA ratio. This indicates that higher the proportion of liquid assets, the company may resort to low levels of Trade Credit as Short Term Fund.

Cost of Borrowing: Cost of Borrowing as measured by INT/DEBT is significant at 1% level of significance in Run 2 and significant at 5% level of significance in Run 1, Run3, Run 4, Run 6 and Run 8. Cost of Borrowing has positive impact on TC&E/TA ratio indicating that as the Cost of Long Term Debt rises, companies resort to Short Term Trade Credit to meet their financing requirements.

Cost of Equity: DIV/SC, which is an indicator of Cost of Equity, has a significant positive impact on TC&E/TA ratio in three runs, the 't' statistic being significant at 1% level of significance. This indicates that as the Cost of Equity in the form of dividend payments increase, FDI Companies prefer Short Term Debt Funds for financing purposes.

Size: Log of Sales, an indicator of size has positive impact on TC&E/TA ratio in regression Run 1 and Run 8, the 't' statistic being significant at 1% level of significance and in Run 9, Log of sales has significant positive impact on TC&E/TA ratio at 5% level of significance. This indicates that as the Size of company in terms of sales increases, its requirement for short term funds to meet the financing requirements of working capital also increase which are met through availing trade credits facilities.

Age: Log of Age of firm enters the model with a positive coefficient in regression Run 2 and is significant at 5% level of significance indicating that mature firms are well established firms who have easier access to short term trade credit. However, while interpreting the results of Age as a Determinant of Debt Ratios, the sample data feature has to be kept in mind which is already pointed out in section 5.4 that youngest age firm in the sample is of 19 years and the oldest firm is of 107 years with a median age of 39.5 years. Inspite of this characteristic of our sample data, Age enters the model with a positive coefficient and this means that Age is an important Determinant of TC&E/TA ratio.

Uniqueness: Uniqueness of a firm as measured by R&D/Sales has negative impact on TC&E/TA ratio and is significant at 1% level of significance in Run 2^b. This indicates

that unique firms might be facing difficulties in obtaining trade credits as a source of short term finance.

The indicators of **NDTS, Debt service capacity, Dividend payout, Net Exports,** have insignificant impact on TC&E/TA ratio as indicated by low 't' statistic with high 'p' values. **Growth indicators** also did not enter the model with a significant coefficient although a point to be noted was that Growth when measured in terms of sales had positive impact on TC&E/TA ratio. Whereas, Growth measured as Growth in Total Assets had negative impact on TC&E/TA ratio indicating that Growth in Sales was supported by availing Short Term Credit and Growth in Total Assets denoted increase in Collateral value which supported Long Term Debt.

5.3.3 Results of Multiple Regressions on LTD/TA Ratio

Table No. 5.21 presents the results of multiple regression runs conducted on Long Term Debt measure LTD/TA ratio. Out of *thirty* multiple regressions runs (Table 5.31) conducted on LTD/TA ratio, six significant regression runs are reported (Refer VIF Table 5.27). The value of R^2 ranges from a minimum of 0.488 in Run 2^b to 0.648 in Run 3^b which indicates that a maximum of 64.8% variations in LTD/TA ratio are explained by significant indicators selected in Regression Run 3^b.

Size: Size as measured by Log of TNA has positive impact on LTD/TA ratio and 't' statistic is significant at 1% level of significance in Run 2 and Run 3 and at 5% level of significance in Run 5. Size as measured by Log of GTFA is also significant at 1% level of significance in Run4 and Run6 and has positive impact on the long term debt ratio. This finding is consistent with the results of Rajan & Zingales (1995)[7], Bevan & Danbolt (2000)[1], Booth *et.al* (2001)[8], Bhaduri (2002)[5], Baral (2004)[9] and Jong *et.al* (2005)[10]. This finding is also consistent with the predictions of Trade-Off Theory which says that large firms with tangible assets tend to borrow more.

Collateral/Tangibility: All the indicators of Collateral effect have positive impact on LTD/TA ratio and are highly statistically significant at 1% level of significance. This finding is consistent with the results of Bevan & Danbolt (2000)[1], Drobetz & Fix (2003)[11] and Jong *et.al* (2005)[10]. Both Trade-Off Theory and Pecking Order Theory predict positive effect of Collaterals on Long Term Debt Ratios. This indicates that companies having high Collaterals will tend to borrow more from Long Term Debt sources.

Table 5.21								
Results of Multiple Regression of 140 FDI Companies on Dependent variable - LTD/TA								
	Run 1[a]	**Run 1[b]**		**Run2[a]**	**Run 2[b]**		**Run3[a]**	**Run3[b]**
Intercept	0.087	0.058	Intercept	0.255	0.215	Intercept	0.124	0.004
Log of sales	0.009 (1.496) [0.137]	Excluded	Log of TNA	0.030 (4.037)** [.000]	0.029 (4.599)** [.000]	Log of TNA	0.019 (3.206)** [0.002]	0.500 (11.083)** [.000]
PBT/TNA	-0.672 (-6.511)** [.000]	-0.639 (-7,379)** [.000]	PBT/TNA	-0.724 (-5.729)** [.000]	-0.748 (-6.689)** [.000]	PBT/TNA	-0.615 (-6.021)** [.000]	-0.706 (-8.012)** [.000]
NFA/TNA	0.476 (9.023)** [.000]	0.528 (11.773)** [.000]	(Nfa+Inv+AR)/TNA	0.22 (3.241)** [0.001]	0.219 (3.283)** [0.001]	NFA/TNA	0.461 (8.776)** [.000]	0.014 (2.726)** [0.007]
COV of PBIT to TNA	0.004 (0.776) [0.439]	Excluded	COV of PBIT to TNA	-0.007 (-1.066) [0.289]	Excluded	COV of PBIT to TNA	0.005 (0.854) (0.395)	Excluded
CAGR of TNA	0.092 (0.911) [0.364]	Excluded	CAGR of TNA	-0.019 (-0.152) [0.880]	Excluded	CAGR of Sales	-0.094 (-1.034) [0.303]	Excluded
Log of age of firm	-0.011 (0.615) [0.539]	Excluded	Log of age of firm	-0.071 (-3.477)** [0.001]	-0.067 (-3.510)** [0.001]	Log of age of firm	-0.028 (-1.517) [0.132]	Excluded
Equity Div/PAT	-0.033 (-1.281) [0.202]	Excluded	Equity Div/PAT	-0.052 (-1.684) [0.095]	Excluded	Equity Div/PAT	-0.039 (-1.541) [0.126]	Excluded
CA/CL	-0.001 (-0.138) [0.891]	Excluded	CA/CL	-0.003 (-0.516) [0.607]	Excluded	CA/CL	-1.34E-05 (-0.003) [0.988]	Excluded
Net exp/Sales	-0.074 (-2.030)* [0.023]	-0.078 (-2.307)* [0.044]	Net exp/Sales	0.034 (0.820) [0.414]	Excluded	Net exp/Sales	-0.074 (-2.093)* [0.038]	-0.068 (-2.052)* [0.042]
R&D/Sales	0.508 (1.007) [0.316]	Excluded	R&D/Sales	1.277 (2.178)** [0.031]	1.272 (2.204)* [0.029]	R&D/Sales	0.394 (0.801) [0.425]	Excluded
INT/DEBT	-0.141 (-1.238) [0.218]	Excluded	INT/DEBT	-0.415 (-3.191)** [0.002]	-0.415 (-3.312)** [0.001]	INT/DEBT	-0.177 (-1.584) [0.116]	Excluded
PBDIT/INT	—	—	PBDIT/INT	—	—	PBDIT/INT	—	—
DIV/SC	—	—	DIV/SC	—	—	DIV/SC	—	—
Depr/TGA	—	—	Depr/TGA	—	—	Depr/TGA	—	—
R^2	0.666	0.64	R^2	0.526	0.510	R^2	0.680	0.659
Adjusted R^2	0.637	0.632	Adjusted R^2	0.485	0.488	Adjusted R^2	0.652	0.648
F statistic	23.184** [.000]	80.520** [.000]	F statistic	12.892** [.000]	23.057** [.000]	F statistic	24.681** [.000]	65.104** [.000]

[a] Multiple Regression, [b] Stepwise Regression,

* indicates significance at 5% level, ** indicates significance at 1% level,

(t-statistics), [p-value]

Table 5.21 Continued.....								
Results of Multiple Regression of 140 FDI Companies on Dependent variable - LTD/TA								
	Run4[a]	Run4[b]		Run5[a]	Run5[b]		Run6[a]	Run6[b]
Intercept	0.226	0.197	Intercept	0.098	-0.017	Intercept	0.255	0.232
Log of GTFA	0.021 (3.054)** [0.003]	0.021 (3.312)** [.001]	Log of TNA	0.018 (2.581)* [0.011]	Excluded	Log of GTFA	0.02 (3.126)** [0.002]	0.017 (2.972)** [0.004]
PBITDA/TGA	-0.651 (-4.180)** [.000]	-0.764 (-5.694)** [.000]	---	---	---	PBITDA/TGA	-0.289 (-1.468) [0.145]	-0.538 (-4.005)** [.000]
GFA/TGA	0.347 (5.456)** [.000]	0.356 (6.233)** [.000]	NFA/TNA	0.519 (9.118)** [.000]	0.595 (12.136)** [.000]	GFA/TGA	0.543 (7.458)** [.000]	0.552 (7.687)** [.000]
SD of PBITDA	0.178 (0.927) [0.356]	Excluded	COV of PBIT to TNA	0.01 (1.629) [0.106]	0.014 (2.356)* [0.020]	SD of PBITDA	0.159 (0.890) [0.375]	Excluded
CAGR of sales	-0.027 (-0.230) [0.818]	Excluded	CAGR of TNA	-0.186 (-1.703) [0.091]	Excluded	CAGR of sales	-0.034 (-0.315) [0.753]	Excluded
Log of age	-0.047 (-2.192)* [0.030]	-0.048 (-2.545)* [0.002]	Log of age of firm	-0.029 (-1.499) [0.136]	Excluded	Log of age	-0.055 (-2.737)** [0.007]	-0.049 (-2.753)** [0.007]
Equity Div/PAT	-0.061 (-2.079)* [0.040]	Excluded	Equity Div/PAT	-0.038 (-1.309) [0.193]	Excluded	Eq Div/PAT	-0.052 (-1.824) [0.071]	Excluded
CA/CL	-0.004 (-0.744) [0.458]	Excluded	CA/CL	-0.004 (-0.810) [0.419]	Excluded	CA/CL	-0.004 (-0.843) [0.401]	Excluded
Net exp/Sales	-0.061 (-1.410) [0.161]	Excluded	Net exp/Sales	-0.091 (-2.324)* [0.022]	-0.119 (-3.229)** [0.002]	Net exp/Sales	-0.105 (-2.549)* [0.012]	-0.091 (-2.451)** [0.016]
R&D/Sales	0.668 (1.160) [0.248]	Excluded	R&D/Sales	0.063 (0.114) [0.910]	Excluded	R&D/Sales	0.920 (1.696) [0.092]	Excluded
INT/DEBT	-0.202 (-1.534) [0.127]	Excluded	INT/DEBT	-0.167 (-1.344) [0.181]	Excluded	INT/DEBT	-0.272 (-2.205) [0.029]	-0.227 (-1.892) [0.061]
PBDIT/INT	1.49E-06 (-0.089) [9.29E-01]	Excluded	PBDIT/INT	---	---	PBDIT/INT	-5.66E-06 (-0.360) [0.719]	Excluded
DIV/SC	---	---	DIV/SC	-0.479 (-3.362)** [0.001]	-0.462 (-3.594)** [.000]	DIV/SC	-0.219 (-1.199) [0.233]	Excluded
Depr/TGA	---	---	Depr/TGA	---	---	Depr/TGA	-4.248 (-4.655)** [.000]	-3.976 (-4.414)** [.000]
R^2	0.565	0.530	R^2	0.602	0.568	R^2	0.630	0.600
Adjusted R^2	0.524	0.516	Adjusted R^2	0.568	0.555	Adjusted R^2	0.589	0.579
F statistic	13.742** [.000]	38.082** [.000]	F statistic	17.629** [.000]	44.386** [.000]	F statistic	15.204** [.000]	28.300** [.000]

[a] Multiple Regression, [b] Stepwise Regression,

* indicates significance at 5% level, ** indicates significance at 1% level,

(t-statistics), [p-value]

Profitability: Profitability as measured by PBT/TNA or PBITDA/TGA has significant negative impact on LTD/TA ratio, the 't' statistic being significant at 1% level of significance. This result confirms the prediction of Pecking Order Theory where highly profitable firms prefer to use internally generated funds out of surplus profit to finance their investments and hence resort to lower levels of debt in their Capital Structure. This finding is consistent with the results of Pandey I.M (2001), Drobetz & Fix (2003)[11] and Song (2005)[4].

Age: Log of Age has significant negative impact on Long Term Debt ratio, the 't' statistic being significant at 1% level of significance in Run 2 and Run 6 and at 5% level of significance in Run 4. Age has positive impact on TC&E/TA ratio but has negative impact on LTD/TA ratio. Age factor is also negatively related to Growth rate (Table 5.24 for correlation matrix). This indicates that mature well established firms might not have sufficient growth opportunities, hence might not need long term debt funds. They may also have sufficient built in internal reserves and might not need to borrow long term funds. This result supports the Pecking Order Theory.

Net Exports/Sales: It is important to note that although the impact of Net exports / Sales on LTD/TA ratio in simple regression (Table 5.8) is insignificant, out of six multiple regression runs on LTD/TA ratio reported, Net Exports/Sales has negative impact and becomes a significant predictor of LTD/TA ratio at 5% level of significance for Run 1^b, Run 3^b and 6^b respectively and is significant at 1% level of significance in Run 5^b. This must be due to the fact that Net Exporters can avail tax concessions and other benefits and hence do not need to resort to Long Term Debt funds for financing purposes.

Volatility: Volatility indicator has positive impact on LTD/TA ratio, significant at 5% level of significance in (Run 5, Table 5.21) which means that FDI Companies in India are undertaking risks in spite of volatile profits. This finding is consistent with the results of Jong *et.al* (2005)[10]. This might also be an indication that these companies already have created sufficient internally generated reserves and hence have the ability to undertake risky investments and hence the positive relationship between volatility and Long Term Debt ratio.

Uniqueness: Uniqueness of a firm as measured by R&D/Sales has positive impact on LTD/TA ratio and is significant at 5% level of significance in regression Run 2. This indicates that a unique firm which is incurring huge expenditures on research and

development needs funds to finance these expenditures and these firms rely on Long Term Debt for their financing requirements.

Cost of Borrowings: Cost of Borrowings indicator INT/DEBT has significant negative impact on LTD/TA ratio in Run 2 and is significant at 1% level of significance which is consistent with the results of Bhole & Mahakud (2004)[12] who had found significant negative impact of Cost on Borrowings on leverage. It seems that FDI Companies shift their preferences to Short Term Trade Credit when Cost of Borrowings increase and this is confirmed by results of regressions on TC&E/TA ratio (Table 5.20).

Cost of Equity: In Run 5, Table 5.21, the regression coefficient of Cost of Equity as indicator DIV/SC has negative sign and the 't' statistic is significant at 1% level of significance. This result indicates that even if Cost of Equity increases, FDI Companies in India do not resort to Long Term Debt.

It can be observed that both Determinants- Cost of Equity and Cost of Borrowing have negative impact on LTD/TA ratio. Cost of Equity has positive impact on STD1/TA ratio (Table 5.19) and on TC&E/TA ratio (Table 5.20) and Cost of Borrowing has positive impact on TC&E/TA ratio. At the same time profitability has negative impact on all the three Debt Ratios: STD1/TA, TC&E/TA and LTD/TA. This means that even if a company has to pay high Cost on Equity, it does not resort to Long Term Debt. And if Cost of Borrowings increases, it does not resort to Equity but may resort to Short Term Debt Funds if needed. The companies also might be having sufficient internally generated funds to fall back upon as it can be observed that FDI Companies in India have not issued much Equity during the study period (Table 4.2.2, Chapter-4). A look at the trend of Reserve and Surplus indicates that internally generated reserves of FDI Companies are constantly increasing during the study period which explains the results of regression on Debt Ratios. The sample FDI Companies have sufficient internal reserves and hence if Cost of Borrowings or Cost of Equity increases, these companies either temporarily meet their funding requirements through very short term funds like trade credits or use their internal reserves.

Non Debt Tax Shields: The estimated coefficient of NDTS measure – Depr/TGA is significant in regression Run 6 and has significant negative impact on LTD/TA ratio, the 't' statistic being significant at 1% level of significance. Surprisingly the results of simple regression on LTD/TA ratio indicate positive impact of Depr/TGA on LTD/TA ratio.

This might be due to the fact that the indicator Depr/TGA is not a direct estimate of NDTS. When entered into simple linear regression with LTD/TA, the coefficient of Depr/TGA has a positive sign indicating that as fixed assets increase, depreciation also increases and since fixed assets have positive impact on LTD/TA ratio, Depr/TGA also results in positive relationship. At the same time, when Depr/TGA is entered in multiple regression model along with other Determinants, it enters the model with a significant negative coefficient which confirms that depreciation act as tax shield and hence the negative impact of NDTS on the LTD/TA ratio.

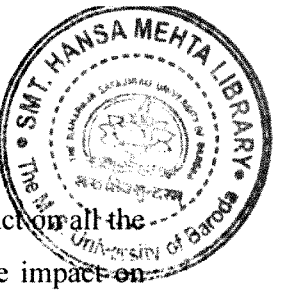
The impact of indicators for **Growth Rate, Debt Service Capacity, Dividend Payout** and **Liquidity** of a firm is found insignificant on LTD/TA ratio.

5.3.4 Results of Multiple Regressions on TL/TA Ratio

Table 5.22 presents the results of multiple regression runs conducted on Total Debt measure TL/TA ratio. Out of *thirty* multiple regression runs (Table 5.32) conducted on TL/TA ratio; six significant regression runs are reported (Refer VIF Table 5.28). The value of R^2 ranges from a minimum of 0.531 in Run 4^b to 0.581 in Run 5^b which indicates that a maximum of 58.1% variations in TL/TA ratio are explained by significant indicators selected in Regression Run 5^b.

Profitability: Profitability indicators have significant negative impact on TL/TA ratio in all the regression runs and the 't' statistic is significant at 1% level of significance. This indicates that pecking order theory is applicable to FDI Companies in India as profitability factor has negative impact on all Debt Ratios (Table 5.19, 5.20 & 5.21).

Collateral / Tangibility: Surprisingly collateral indicator NFA/TNA did not prove to be an important Determinant of TL/TA ratio but along with Inventories and Accounts receivables, it entered the model with a positive coefficient and the 't' statistic was significant at 1% level of significance in Run1 and Run5. INV/TNA alone also had positive impact on TL/TA ratio and the 't' statistic was significant at 1% level of significance. This might be due to the fact that among the Total Liabilities, a major contribution comes from Short Term Debt Funds especially Current Liabilities which are normally supported by Collaterals such as Inventory and Accounts Receivables and hence the positive impact on TL/TA ratio. NFA/TNA as a Collateral is used to obtain Long Term Debt funds as observed from the regression results in Table 5.20 hence does not



have a significant influence on TL/TA ratio.

Volatility: Contrary to expectations, Volatility indicator has positive impact on all the Debt Ratios and from Table 5.22 also; it is observed that it has positive impact on TL/TA ratio in all the regression runs and is statistically significant at 1% level of significance. This indicates that in-spite of fluctuations in profits; FDI Companies continue to borrow which means that these companies have already built in sufficient reserves in the form of retained profits which they used to repay the loans whenever they have insufficient cash flows.

Growth Rate: Growth rate indicators have positive impact on TL/TA ratio in Run 3 and Run 6 and 't' statistic is significant at 5% level of significance and the results are consistent with the finding of Pandey I.M (2001)[6] and Baral (2004)[10].

Liquidity indicator CA/CL has negative impact on TL/TA ratio and the 't' statistic is significant in all the regressions at 1% level of significance. This again might be due to the fact that a major contribution to Total Liabilities comes from Short Term Debt Funds and Trade Credits and hence if there is sufficient liquidity, the company may need to borrow less.

Size: As regards to Size indicator – Log of Sales, the estimated coefficient is significant in only one regression and has positive impact on TL/TA ratio, the 't' statistic being significant at 5% level of significance. The findings are consistent with the results of Bevan & Danbolt (2000)[1] who have also found significant positive relationship between company size and total liabilities.

Liquidity: Liquidity has significant negative impact on TL/TA ratio in all the reported regression runs and is significant at 1% level of significance which indicates that greater the liquidity, lower will be the dependence on debt funds.

Cost of Equity: Cost of Equity has a significant positive impact on TL/TA ratio and the 't' statistic is significant at 1% level of significance. This might also be due to the fact that a major proportion of Total Liabilities come from Short Term Debt and Current Liabilities and when Cost of Equity increases, companies prefer Short Term Debt Funds as observed in Table 5.20. Since increase in Cost of Equity had a negative impact on LTD/TA ratio (Table 5.21), the results confirm the belief that when Cost of Equity increases, FDI Companies in India either resort to Short Term Borrowings or prefer internal funds but do not resort to Long Term Debt funds.

Table 5.22

Results of Multiple Regression of 140 FDI Companies on Dependent variable - TL/TA

	Run 1[a]	Run 1[b]		Run 2[a]	Run 2[b]		Run3[a]	Run 3[b]
Intercept	0.512	0.422	Intercept	0.804	0.697	Intercept	0.781	0.618
Log of sales	0.019 (2.294)** [0.023]	Excluded	Log of sales	0.019 (2.300)* (0.023)	Excluded	Log of sales	0.018 (2.104)* [0.037]	Excluded
PBT/TNA	-0.797 (-5.103)** [.000]	-0.775 (-5.655)** [.000]	PBT/TNA	-1.016 (-7.044)** [.000]	-0.984 (-7.661)** [.000]	PBT/TNA	-1.038 (-7.134)** [.000]	-1.110 (-8.282)** [.000]
(Nfa+Inv+AR)/TNA	0.329 (3.915)** [.000]	0.367 (4.491)** [.000]	INV/TNA	0.53 (4.176)** [.000]	0.470 (4.224)** [.000]	INV/TNA	0.534 (4.298)** [.000]	0.463 (4.287)** [.000]
COV of PBIT to TNA	0.034 (4.160)** [.000]	0.034 (4.286)** [.000]	COV of PBIT to TNA	0.028 (3.385)** [0.001]	0.029 (3.572)** [.000]	COV of PBIT to TNA	0.027 (3.345)** [0.001]	0.028 (3.501)** [0.001]
CAGR of TNA	-0.125 (-0.854) [0.395]	Excluded	CAGR of TNA	0.017 (0.114) [0.909]	Excluded	CAGR of sales	0.077 (0.567) [0.571]	0.292 (2.549)* [0.012]
Log of age of firm	-0.037 (-1.486) [0.140]	Excluded	Log of age of firm	-0.063 (-2.454)* [0.015]	Excluded	Log of age of firm	-0.057 (-2.092)* [0.038]	Excluded
Equity Div/PAT	-0.02 (-0.537) [0.592]	Excluded	Equity Div/PAT	-0.030 (-0.813) [0.418]	Excluded	Equity Div/PAT	-0.028 (-0.760) [0.449]	Excluded
CA/CL	-0.028 (-4.135)** [.000]	-0.033 (-5.483)** [.000]	CA/CL	-0.031 (-4.539)** [.000]	-0.034 (-5.609)** [.000]	CA/CL	-0.031 (-4.535)** [.000]	-0.031 (-5.190)** [.000]
Net exp/Sales	-0.017 (-0.330) [0.742]	Excluded	Net exp/Sales	0.018 (0.347) [0.729]	Excluded	Net exp/Sales	0.017 (0.329) [0.743]	Excluded
R&D/Sales	-0.388 (-0.544) [0.588]	Excluded	R&D/Sales	0.320 (0.443) (0.658)	Excluded	R&D/Sales	0.325 (0.451) [0.653]	Excluded
INT/DEBT	-0.069 (-0.437) [0.663]	Excluded	INT/DEBT	-0.247 (-1.517) [0.132]	-0.342 (-2.137)* [0.034]	INT/DEBT	-0.231 (-1.407) [0.162]	Excluded
DIV/SC	—	—	DIV/SC	—	—	DIV/SC	—	—
R^2	0.583	0.56	R^2	0.589	0.556	R^2	0.59	0.562
Adjusted R^2	0.547	0.547	Adjusted R^2	0.554	0.539	Adjusted R^2	0.555	0.546
F statistic	16.282** [.000]	43.006** [.000]	F statistic	16.692** [.000]	33.531** [.000]	F statistic	16.761** [.000]	34.371** [.000]

[a] Multiple Regression, [b] Stepwise Regression,

* indicates significance at 5% level, ** indicates significance at 1% level,

(t-statistics), [p-value]

Table 5.22 Continued....								
Results of Multiple Regression of 140 FDI Companies on Dependent variable - TL/TA								
	Run4[a]	Run4[b]		Run5[a]	Run5[b]		Run6[a]	Run6[b]
Intercept	0.789	0.632	Intercept	0.503	0.406	Intercept	0.792	0.608
Log of sales	0.021 (2.339)** [0.021]	0.016 (2.135)* [0.035]	Log of sales	0.014 (1.723) [0.087]	Excluded	Log of sales	0.015 (1.768) [0.079]	Excluded
PBT/TNA	-1.457 (-7.192)** [.000]	-1.466 (-8.176)** [.000]	PBT/TNA	-1.198 (-6.187)** [.000]	-1.177 (-6.691)** [.000]	PBT/TNA	-1.395 (-7.565)** [.000]	-1.491 (-8.170)** [.000]
NFA/TNA	-0.043 (-0.551) [0.583]	Excluded	(Nfa+Inv+AR)/TNA	0.324 (4.002)** [.000]	0.361 (4.595)** [.000]	INV/TNA	0.508 (4.137)** [.000]	0.418 (3.884)** [.000]
COV of PBIT to TNA	0.032 (3.761)** [.000]	0.035 (4.257)** [.000]	COV of PBIT to TNA	0.034 (4.292)** [.000]	0.035 (4.505)** [.000]	COV of PBIT to TNA	0.028 (3.508)** [0.001]	0.031 (3.955)** [.000]
CAGR of TNA	-0.009 (-0.059) [0.953]	Excluded	CAGR of TNA	-0.020 (-0.137) [0.891]	Excluded	CAGR of TNA	0.112 (0.758) [0.450]	0.288 (2.187)* [0.030]
Log of age of firm	-0.039 (-1.439) [0.153]	Excluded	Log of age of firm	-0.034 (-1.383) [0.169]	Excluded	Log of age of firm	-0.058 (-2.346)* [0.021]	Excluded
Equity Div/PAT	-0.068 (-1.693) [0.093]	Excluded	Equity Div/PAT	-0.052 (-1.392) [0.166]	Excluded	Equity Div/PAT	-0.061 (-1.628) [0.106]	Excluded
CA/CL	-0.021 (-3.053)** [0.003]	-0.022 (-3.326)** [0.001]	CA/CL	-0.024 (-3.594)** [.000]	-0.027 (-4.474)** [.000]	CA/CL	-0.027 (-3.993)** [.000]	-0.027 (-4.387)** [.000]
Net exp/Sales	-0.039 (-0.729) [0.468]	Excluded	Net exp/Sales	-0.023 (-0.470) [0.639]	Excluded	Net exp/Sales	0.010 (0.198) [0.843]	Excluded
R&D/Sales	0.151 (0.199) [0.843]	Excluded	R&D/Sales	-0.061 (-0.088) [0.930]	Excluded	R&D/Sales	0.606 (0.860) [0.392]	Excluded
INT/DEBT	-0.102 (-0.600) [0.549]	Excluded	INT/DEBT	-0.065 (-0.426) [0.671]	Excluded	INT/DEBT	-0.236 (-1.498) [0.137]	Excluded
DIV/SC	0.834 (3.214)** [0.002]	0.718 (2.985)** [0.003]	DIV/SC	0.802 (3.291)** [.001]	0.776 (3.454)** [.001]	DIV/SC	0.764 (3.143)** [.002]	0.755 (3.244)** [0.001]
R^2	0.569	0.548	R^2	0.616	0.596	R^2	0.619	0.584
Adjusted R^2	0.528	0.531	Adjusted R^2	0.58	0.581	Adjusted R^2	0.583	0.565
F statistic	13.947** [.000]	32.491** [.000]	F statistic	16.974** [.000]	39.575** [.000]	F statistic	17.186** [.000]	31.078** [.000]

[a] Multiple Regression, [b] Stepwise Regression,

* indicates significance at 5% level, ** indicates significance at 1% level,

(t-statistics), [p-value]

Cost of Borrowings: Cost of borrowings indicator is insignificant in all the regression runs except in Run 2, where it enters the model with a negative coefficient significant at 5% level of significance. This indicates that generally, FDI Companies borrow less if Cost of Borrowings increase.

The impact of indicators for **Debt-Service Capacity, NDTS, Age, Dividend Payout, Uniqueness and Net Exports/Sales** of a firm is found generally insignificant on TL/TA ratio.

5.4 Conclusions - Multiple Regressions

The summarized multiple regression results have been presented in Table 5.23. The main conclusions derived from the results of multiple regressions conducted of each Debt Ratio (dependent variable) on various Determinants of Capital Structure (independent variables) are as follows:

1. At firm level multiple regression analysis, the study rejects the null hypotheses that there is no significant impact of Size of a company, Profitability of a company, Collateral value of assets, Volatility of companies' earnings, Growth rate of a company, existence of NDTS, Age of a company, Liquidity, Net Exports, Cost of borrowings, Cost of equity and Uniqueness of a company on a company's Debt Ratios. The study accepts the alternative hypotheses that all the above mentioned Determinants have significant impact on Debt Ratios (Capital Structure) of FDI Companies in India.

2. At firm level multiple regression analysis, the study accepts the null hypothesis that there is no significant impact of **Debt Service Capacity** of a company on Debt Ratios.

3. At firm level multiple regression analysis, the study accepts the null hypothesis that there is no significant impact of **Dividend Payout** of a company and Debt Ratios.

4. **Size** as measured by Log of sales has significant positive impact on TC&E/TA Ratio- (Table 5.20 -Run 1, 8 and 9) and on TL/TA Ratio (Table 5.22-Run 4) indicating that as the Size of company in terms of sales increases, its requirement

for short term funds to meet the financing requirements of working capital also increase which are met through availing trade credits facilities. The positive impact on TL/TA ratio is due to the fact that a major proportion of Total Liabilities come from Short Term Debt Funds, especially Trade Credits & Equivalents and hence the positive impact even on TL/TA ratio. Size as measured by Log of TNA has significant positive impact on LTD/TA Ratio (Table 5.21- Run 2 and 3). Size as measured by Log of GTFA has significant positive impact on LTD/TA Ratio (Table 5.21- Run 4 and 6). This finding is consistent with the predictions of Trade-Off Theory which says that large firms with tangible assets tend to borrow more.

5. **Profitability** has emerged as the most significant Determinant of Capital Structure of FDI Companies in India and has significant negative impact on all the forms of debt measures -STD1/TA Ratio (Table 5.19, Run 2, 4, 5 and 6), TC&E/TA Ratio (Table 5.20- Run 1, 4, 5, 7, 8 and 9), LTD/TA Ratio (Table 5.21 - Run 1 ,2, 3, and 6) and on TL/TA Ratio (Table 5.22 - Run 1, 2 ,3, 4, 5 and 6). This indicates that there are sufficient internally generated cash reserves and Profitable FDI Companies in India do not prefer to borrow even from short term sources like trade credit. This result confirms the prediction of Pecking-Order Theory where highly profitable firms prefer to use internally generated funds out of surplus profit to finance their investments firms and hence resort to lower levels of debt in their Capital Structure.

6. Another important Determinant of Debt Ratios is **Collateral Effect**. Collaterals in the form of fixed assets as measured by NFA/TNA have significant negative impact on Short Term Debt Ratios- STD1/TA Ratio (Table 5.19, Run 1, 2, 3, 4, 5 and 6) and on TC&E/TA Ratio (Table 5.20, Run 1, 4, 6, 8 and 9). Similarly another indicator of Collateral GFA/TGA also significant negative impact on TC&E/TA Ratio (Table 5.20, Run 5, 7). At the same time, NFA/TNA has significant positive impact on Long Term Debt Ratio – LTD/TA (Table 5.21, Run 1, 3 and 5) and GFA/TGA has significant positive impact on LTD/TA (Table 5.21, Run 4 and 6). This indicates that that

higher the proportion of tangible fixed assets, lower will be the reliance on short term debt. It also indicates that companies having high collaterals in the form of fixed assets will tend to borrow more from long term sources.

7. One of the interesting findings is that, while Collateral effect as measured by FA/TA has significant negative impact on Short Term Debt Ratios, at the same time Collateral effect as measured by INV/TNA has significant positive impact on STD1/TA ratio (Table 5.19, Run 35 and 6), on TC&E/TA Ratio (Table 5.20, Run 3 and 9) and on TL/TA ratio (Table 5.22, Run 2, 3 and 6). The indicator (Nfa+Inv+AR)/TNA has significant positive impact on TC&E/TA Ratio (Table 5.20, Run 2) , LTD/TA ratio (Table 5.21, Run 2) and on TL/TA ratio (Table 5.22, Run 1and 5). This indicates that FDI Companies in India follow the **'Matching Principle'** as their financing policy. "According to this principle, the maturity of the sources of financing should match the maturity of the assets being financed. This means that fixed assets and permanent current assets should be supported by long term sources of finance whereas fluctuating current assets must be supported by short term sources of finance", Chandra Prasanna,(5th Edition, page 597)[13].

8. **Volatility** has positive impact on all the Debt measures- STD1/TA Ratio (Table 5.19, Run 1, 2, 3, 4, 5 and 6), TC&E/TA Ratio (Table 5.20- Run 1, 2, 3,4,6 ,8 and 9). and 5), LTD/TA Ratio (Table 5.21 - Run 1 ,2, 3, and 6) and on TL/TA Ratio (Table 5.22 - Run 1, 2 ,3, 4, 5 and 6). These results indicate that FDI Companies in India are having sufficient internally generated reserves and hence do not face risk of bankruptcy. Therefore these companies do not hesitate to borrow debt funds even in case of volatile earnings.

9. **Growth rate** measured in terms of sales has positive impact on STD1/TA Ratio (Table 5.19, Run 6) and on TL/TA ratio (Table 5.22, Run 3) which indicates that growth in sales is supported by borrowing from short term debt sources. The positive impact of CAGR of Sales on TL/TA ratio is due to the fact that a major proportion of Total Liabilities is made up of Short Term Debt Funds and since Short Term Debt Funds support growth in sales, CAGR

of Sales has positive impact even on TL/TA ratio (Table 5.22, Run 3). Growth in assets as measured by CAGR of TNA has significant positive impact on TL/TA Ratio (Table 5.22, Run 6).

10. **NDTS** indicator Depr/TGA has significant negative impact only on Long term debt ratio- LTD/TA Ratio (Table 5.21, Run 6). The result confirms that depreciation act as tax shield and hence the negative relationship between NDTS and LTD/TA Ratio. Surprisingly the results of simple regression on LTD/TA ratio indicate positive impact of Depr/TGA on LTD/TA ratio. "This can be attributed to the omission of an important variable. On account of this omission, regression may give biased estimate.", Maddala G.S (2002)[14]. So in this study when we run simple regression, other important variables are omitted; therefore results of multiple regressions are much more reliable.

11. **Age of a firm** has significant positive impact on TC&E/TA ratio (Table 5.20, Run 2). And significant negative impact on LTD/TA Ratio (Table 5.21, Run 2, 4 and Run 6). Age factor is also negatively related to Growth rate (Table 5.24 - correlation matrix). The results indicate that mature well established firms might not have sufficient growth opportunities, hence might not need Long Term Debt funds. They may also have sufficient built in internal reserves and might not need to borrow Long Term funds. They may borrow Short Term Debt if required. The positive impact of Age on TC&E/TA ratio confirms this result and indicates that as the firm grows in Age, its ability to avail Short Term Trade Credit increases. These results support the Pecking Order Theory. But while interpreting the impact of Age factor on Debt Ratios, the sample data feature has to be kept in mind, since the sample data is for eighteen years (1991 to 2008) and the youngest company in the sample is of 19 years and the oldest company is of 107 years with a median age of 39.5 years.

12. **Liquidity** has significant negative impact on Short Term Debt Ratios- STD1/TA (Table 5.19, Run 1, 2, 3, 4, 5 and 6) and on TC&E/TA ratio (Table 5.20, Run 1, 2, 3, 4, 5, 6, 7, 8 and 9). Liquidity also has significant negative impact on Total Debt ratio- TL/TA ratio (Table 5.22, Run 1, 2, 3, 4, 5 and 6).

The results indicate that higher the proportion of liquid assets, the company may resort to low levels of Short Term Debt Funds. Liquidity has insignificant impact on Long Term Debt Ratios. Since Total Liabilities include a major portion as Short Term Debt Funds, it explains the negative impact of Liquidity on TL/TA Ratio.

13. **Net Exports** have significant negative impact on LTD/TA ratio (Table 5.21, Run 1, 3, 5 and 6). This must be due to the fact that net exporters can avail tax concessions and other benefits and hence do not need to resort to long term debt funds for financing purposes. Net exports have insignificant impact on other Debt Ratios.

14. **Cost of Equity** has significant positive impact on Short Term Debt Ratios- STD1/TA (Table 5.19, Run 4, 5 and 6) and TC&E/TA (Table 5.20, Run 7, 8 and 9). This indicates that as the Cost of Equity in the form of dividend payments increase, FDI Companies in India prefer Short Term Debt Funds for financing purposes. Cost of Equity has significant negative impact on LTD/TA ratio (Table 5.21, Run 5), indicating that even if Cost of Equity rises, FDI Companies do not prefer to borrow from Long Term Debt sources.

15. **Uniqueness** of a firm has significant negative impact on TC&E/TA ratio (Table 5.20, Run 2) and positive impact on LTD/TA ratio (Table 5.21, Run 2). The results indicate that unique firms tend to borrow more Long Term Debt than Short Term Debt. A unique firm which is incurring huge expenditures on research and development needs funds to finance these expenditures and these firms rely on Long Term Debt for their financing requirements.

16. **Cost of Borrowings** has significant positive impact on TC&E/TA ratio (Table 5.20, Run 1, 2, 3 4, 5, and 6) and has significant negative impact on LTD/TA Ratio (Table 5.21, Run 2 and 6), TL/TA Ratio (Table 5.22, Run 2). The results indicate that as cost of borrowings increase, preference for Trade Credits & Equivalents increase and preference for Long Term Debt reduces.

Table 5.23					
Summary of Results of Mutiple Regressions					
Dependent variables- Debt Ratios		**STD1/TA**	**TC&E/TA**	**LTD/TA**	**TL/TA**
Independent Variables	**Indicators**				
Size	Log of sales	N.S	+VE**	N.S	+VE**
	Log of TNA	N.S	N.S	+VE**	---
	Log of GTFA	---	N.S	+VE**	---
Profitability	PBT/TNA	-VE**	-VE*	-VE**	-VE**
	PBITDA/TGA	---	-VE**	-VE**	---
Collateral	NFA/TNA	-VE**	-VE**	+VE**	N.S
	GFA/TGA	---	-VE**	+VE**	---
	(Nfa+Inv+AR)/TNA	---	+VE**	+VE**	+VE**
	Inventories/TNA	+VE**	+VE**	---	+VE**
Volatility	COV of PBIT/TNA	+VE**	+VE*	+VE*	+VE**
	SD of PBITDA	---	N.S	N.S	---
Growth rate	CAGR of TNA	N.S	N.S	N.S	+VE*
	CAGR of sales	+VE**	N.S	N.S	+VE*
NDTS	Depr/TGA	---	N.S	-VE**	---
Debt Service capacity	PBDIT/INT	---	N.S	N.S	---
Age	Log of age of firm	N.S	+VE*	-VE**	N.S
Dividend payout	Equity Div/PAT	N.S	N.S	N.S	N.S
Liquidity	CA/CL	-VE**	-VE**	N.S	-VE**
Net Exports	Net exp/Sales	N.S	N.S	-VE*	N.S
Cost of Equity	DIV/SC	+VE**	+VE*	-VE**	+VE**
Uniqueness	R&D/Sales	N.S	-VE**	+VE*	N.S
Cost of Borrowing	Int/TD	N.S	+VE**	-VE *	-VE **
*** indicates significance at 5% level, ** indicates significance at 1% level**					
Not Significant=(NS), Positive= (+VE), Negative =(-VE)					
A Dash means -- the indicator is not included in final regression runs					

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Table 5.24 (page 1)

Pearsons Correlations Matrix of Explanatory Variables for Debt Ratios

Variables	Log of sales	Log of GTFA	Log of TNA	PBIT/TNA	PBITDA/TGA	PBT/TNA	PBIT/Sales	PBIT/CE	NFA/TNA	GFA/TGA	(Nfa+Inv+AR)/TNA	L&B/TGA	P&E/TGA	INV/TNA	SD of PBIT	SD of %Δ in PBIT	SD of PBITDA/TGA
Log of sales	1																
Log of GTFA	.876(**)	1															
Log of TNA	.945(**)	.937(**)	1														
PBIT/TNA	.294(**)	.169(*)	.239(**)	1													
PBITDA/TGA	.299(**)	.186(*)	.250(**)	.986(**)	1												
PBT/TNA	.281(**)	0.146	.230(**)	.972(**)	.967(**)	1											
PBIT/Sales	0.123	0.082	0.1	.341(**)	.310(**)	.326(**)	1										
PBIT/CE	.199(*)	0.05	0.144	.690(**)	.673(**)	.634(**)	.239(**)	1									
NFA/TNA	0.037	.438(**)	0.159	-0.14	-0.105	-.187(*)	0.041	-.239(**)	1								
GFA/TGA	-0.015	.395(**)	0.077	-0.153	-0.134	-.195(*)	0.062	-.245(**)	.951(**)	1							
(Nfa+Inv+AR)/TNA	0.048	0.104	-0.038	-.305(**)	-.307(**)	-.384(**)	0.161	-0.135	.336(**)	.367(**)	1						
L&B/TGA	-0.074	0.044	-0.006	0.008	-0.011	0.002	0.042	-0.035	.186(*)	.176(*)	-.171(*)	1					
P&E/TGA	-.188(*)	-0.118	-0.139	-0.045	-0.043	-0.02	0.032	-0.062	0.05	0.089	0.079	-0.039	1				
INV/TNA	0.128	-0.093	-0.023	0.016	-0.026	-0.04	0.101	.185(*)	-.422(**)	-.335(**)	.390(**)	-.222(**)	0.119	1			
SD of PBIT	.652(**)	.627(**)	.679(**)	.226(**)	.231(**)	.224(**)	0.044	0.162	0.102	0.047	-0.109	-0.095	-0.096	-0.048	1		
SD of %Δ in PBIT	-.239(**)	-0.153	-0.118	-.316(**)	-.302(**)	-.309(**)	-.698(**)	-.237(**)	-0.08	-0.116	-.407(**)	.280(**)	-0.04	-.218(**)	-0.074	1	
SD of PBITDA/TGA	-0.162	-.206(*)	-0.149	-0.065	-0.073	-0.103	-.555(**)	0.024	-0.126	-.180(*)	-.287(**)	0.07	-0.064	-0.064	0.012	.533(**)	1
COV of PBIT	0.076	0.076	0.075	-.206(*)	-.188(*)	-.189(*)	-0.054	-0.14	0.004	0.001	0.024	0.016	-0.02	0.029	-0.01	0.049	0.055
COV of PBIT/CE	-0.022	-0.059	-0.019	0.109	0.111	0.128	0.137	.206(*)	-0.081	-0.092	-0.057	0.037	0.026	-0.003	0.013	-0.082	-0.059
COV of PBIT/TNA	-0.093	-.178(*)	-0.108	-.254(**)	-.296(**)	-.273(**)	.426(**)	-0.109	-0.107	-0.097	0.085	0.006	0.004	0.118	-0.073	-0.156	0.137
CAGR of TNA	.324(**)	.357(**)	.418(**)	.324(**)	.383(**)	.354(**)	.269(**)	.199(*)	0.163	0.053	-0.087	-0.056	-0.068	-.303(**)	.297(**)	-.249(**)	-.282(**)
CAGR of sales	.313(**)	.310(**)	.320(**)	.278(**)	.334(**)	.296(**)	.423(**)	0.135	.238(**)	0.149	0.124	-0.076	-0.054	-.250(**)	.272(**)	-.460(**)	-.371(**)
Depr/TGA	0.025	.262(**)	0.031	0.081	0.138	0.094	0.085	-0.103	.506(**)	.644(**)	0.123	-0.036	0.07	-.268(**)	0.012	-0.153	-.234(**)
Depr+ET/TGA	0.098	0.145	0.129	.226(**)	.249(**)	.233(**)	0.077	0.06	0.137	0.116	0.013	0.054	-0.021	-.186(*)	0.136	-0.077	0.109
Depr/PBITDA	-0.032	0.041	-0.014	-0.116	-0.112	-0.139	0.016	-0.117	.174(*)	.179(*)	0.052	-0.019	-0.027	-0.14	-0.031	0.024	0.048
PBDIT/INT	0.117	0.061	0.111	.331(**)	.322(**)	.328(**)	0.046	0.165	-0.039	-0.06	-.183(*)	-0.002	0.088	-0.015	.236(**)	-0.039	.206(*)
Age in yrs	.345(**)	.195(*)	.272(**)	.189(*)	0.145	.202(*)	-0.026	0.118	-.282(**)	-.260(**)	-0.033	-0.098	-0.024	.326(**)	0.065	-0.074	-0.046
Log of age	.335(**)	.197(*)	.274(**)	.174(*)	0.121	.188(*)	-0.046	0.108	-.291(**)	-.260(**)	-0.035	-0.09	-0.016	.324(**)	0.066	-0.058	-0.024
Eq Div/PAT	.219(**)	0.157	.190(*)	.241(**)	.253(**)	.268(**)	-0.026	.173(*)	-0.061	-0.071	-0.148	0.048	-0.097	-0.038	0.058	0.007	0.015
CA/CL	-.302(**)	-.195(*)	-.242(**)	0.087	0.072	0.108	0.073	-0.056	0.022	0.059	-0.033	-0.053	0.037	-0.018	-.183(*)	-0.067	-0.078
Net exp/Sales	-0.125	0.027	-0.024	0.083	0.072	0.083	0.005	-0.062	.250(**)	.215(*)	-0.143	.297(**)	0.051	-.273(**)	-0.049	0.059	.205(*)
DIV/SC	.359(**)	.229(**)	.297(**)	.681(**)	.666(**)	.676(**)	0.089	.565(**)	-0.112	-0.148	-.248(**)	0.013	-0.087	0.069	.315(**)	-0.104	0.038
R&D/Sales	0.007	0.113	0.087	0.031	0.036	0.05	0.063	-0.014	.181(*)	0.159	-0.007	-0.072	.178(*)	-.170(*)	-0.022	-0.049	-0.084
INT/DEBT	-0.01	-0.147	-0.053	0.067	0.045	0.058	-0.073	0.109	-.352(**)	-.352(**)	-0.044	-0.052	-0.038	.321(**)	-0.137	0.086	0.106

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

Table No. 5.24 (page 2)

Pearsons Correlations Matrix of Explanatory Variables for Debt Ratios

Variables	COV of PBIT	COV of PBIT/CE	COV of PBIT/TNA	CAGR of TNA	CAGR of sales	Depr/TGA	Depr+ET/TGA	Depr/PBITDA	PBDIT/INT	Age in yrs	Log of age	Eq Div/PAT	CA/CL	Net exp/Sales	DIV/SC	R&D/Sales	INT/DEBT
Log of sales																	
Log of GTFA																	
Log of TNA																	
PBIT/TNA																	
PBITDA/TGA																	
PBT/TNA																	
PBIT/Sales																	
PBIT/CE																	
NFA/TNA																	
GFA/TGA																	
(Nfa+Inv+AR)/TNA																	
L&B/TGA																	
P&E/TGA																	
INV/TNA																	
SD of PBIT																	
SD of %Δ in PBIT																	
SD of PBITDA/TGA																	
COV of PBIT	1																
COV of PBIT/CE	0.072	1															
COV of PBIT/TNA	.404(**)	-0.013	1														
CAGR of TNA	-0.032	0.151	-0.142	1													
CAGR of sales	-0.035	0.117	-0.023	.837(**)	1												
Depr/TGA	0.003	-0.024	-0.154	0.151	.235(**)	1											
Depr+ET/TGA	-0.03	-0.076	-0.018	.323(**)	.316(**)	.175(*)	1										
Depr/PBITDA	-0.011	-.797(**)	.180(*)	-0.107	-0.042	0.091	0.084	1									
PBDIT/INT	-0.022	0.02	-0.047	0.129	0.046	-0.045	.192(*)	-0.035	1								
Age in yrs	0.023	-0.086	-0.089	-0.152	-.255(**)	-.249(**)	-0.091	-0.084	0.073	1							
Log of age	0.042	-0.099	-0.077	-.168(*)	-.302(**)	-.257(**)	-0.104	-0.072	0.098	.974(**)	1						
Eq Div/PAT	-0.109	0.058	-.182(*)	0.1	0.068	0.024	-0.003	-0.071	0.052	0.015	0.021	1					
CA/CL	-0.079	0.089	-0.098	0.055	-0.045	0.058	.282(**)	-0.079	0.001	-0.092	-0.076	-0.101	1				
Net exp/Sales	-0.008	-0.128	0.06	0.109	0.052	-0.013	.655(**)	0.129	0.125	0.007	0.011	-0.062	.307(**)	1			
DIV/SC	-0.092	0.049	-.180(*)	0.131	0.125	-0.028	0.046	-0.055	.170(*)	.191(*)	.179(*)	.388(**)	-0.136	-0.024	1		
R&D/Sales	0.022	0.038	-0.032	-0.025	-0.03	.171(*)	0.038	-0.002	0.056	0.072	0.092	0.086	0.004	0.114	-0.041	1	
INT/DEBT	-0.052	-0.01	-0.03	-.250(**)	-.285(**)	-.312(**)	-0.093	-0.034	0.005	.193(*)	.223(**)	0.006	-0.116	-0.105	0.081	0.02	1

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

Table 5.25

Variance Inflationary Factor (Multiple Regressions on STD1/TA Ratio)

	Run 1[b]	Run 2[b]	Run 3[b]	Run4[b]	Run5[b]	Run6[b]
Log of sales	----	----	----	----	----	----
Log of GTFA	----	----	----	----	----	----
Log of TNA	----	----	----	----	----	----
PBITDA/TGA	----	----	----	----	----	----
PBT/TNA	----	1.148	----	2.138	2.552	2.224
NFA/TNA	1.012	1.067	1.222	1.068	1.419	1.319
GFA/TGA	----	----	----	----	----	----
(Nfa+Inv+AR)/TNA	----	----	----	----	----	----
INV/TNA	----	----	1.225		1.293	1.276
SD of PBITDA/TGA	----	----	----	----	----	----
COV of PBIT/TNA	1.021	1.116	1.028	1.116	1.136	1.119
CAGR of TNA	----	----	----	----	----	----
CAGR of sales	----	----	----		2.104	----
Depr/TGA	----	----	----	----	----	----
PBDIT/INT	----	----	----		----	----
Log of age	----	----	----	----	----	----
Eq Div/PAT	----	----	----		----	----
CA/CL	1.01	1.018	1.01	1.109	1.131	1.113
Net exp/Sales	----	----	----	----	----	----
DIV/SC	----	----	----	2.010	2.104	2.066
R&D/Sales	----	----	----	----	----	----
INT/DEBT	----	----	----	----	----	----

Table 5.26

Variance Inflationary Factor (Multiple Regressions on TC&E/TA Ratio)

	Run 1[b]	Run 2[b]	Run 3[b]	Run4[b]	Run5[b]	Run6[b]	Run7[b]	Run8[b]	Run9[b]
Log of sales	1.255	----	----	----	----	----	----	1.286	1.340
Log of GTFA	----	----	----	----	----	----	----	----	----
Log of TNA	----	----	----	----	----	----	----	----	----
PBITDA/TGA	----	----	----	----	1.025	----	1.897	----	----
PBT/TNA	1.285	----	----	1.148	----	----	----	2.189	2.306
NFA/TNA	1.231	----	----	1.221		1.161	----	1.232	1.368
GFA/TGA	----	----	----	----	1.023	----	1.027	----	----
(Nfa+Inv+AR)/TNA	----	1.010	----	----	----	----	----	----	----
INV/TNA	----	----	1.137	----	----	----	----	----	1.333
SD of PBITDA/TGA	----	----	----	----	----	----	----	----	----
COV of PBIT/TNA	1.126	1.025	1.031	1.125	----	1.029	----	1.126	1.120
CAGR of TNA	----	----	----	----	----	----	----	----	----
CAGR of sales	----	----	----	----	----	----	----	----	----
Depr/TGA	----	----	----	----	----	----	----	----	----
PBDIT/INT	----	----	----	----	----	----	----	----	----
Log of age	----	1.071	----	----	----	----	----	----	----
Eq Div/PAT	----	----	----		----	----	----	----	----
CA/CL	1.184	1.029	1.026	1.033	1.010	1.026	1.073	1.242	1.243
Net exp/Sales	----	----	----	----	----	----	----	----	----
DIV/SC	----	----	----	----	----	----	1.924	2.062	2.096
R&D/Sales	----	1.009	----	----	----	----	----	----	----
INT/DEBT	1.168	1.066	1.139	1.166	----	1.165	----	1.170	----

Table 5.27

Variance Inflationary Factor (Multiple Regressions on LTD/TA Ratio)

	Run 1[b]	Run 2[b]	Run3[b]	Run4[b]	Run5[b]	Run6[b]
Log of sales	----	----	----	----	----	----
Log of GTFA	----	----	----	1.426	----	1.461
Log of TNA	----	1.146	1.118	----	----	----
PBITDA/TGA	----	----	----	1.094	----	1.260
PBT/TNA	1.056	1.265	1.145	----	----	----
NFA/TNA	1.118	----	1.182	----	1.104	
GFA/TGA	----	----	----	1.446	----	2.624
(Nfa+Inv+AR)/TNA	----	1.179	----	----	----	----
INV/TNA	----	----	----	----	----	----
SD of PBITDA/TGA	----	----	----	----	----	----
COV of PBIT/TNA	----	----	----	----	1.061	----
CAGR of TNA	----	----	----	----	----	----
CAGR of sales	----	----	----	----	----	----
Depr/TGA	----	----	----	----	----	2.075
PBDIT/INT	----	----	----	----	----	----
Log of age	----	1.175	----	1.211	----	1.269
Eq Div/PAT	----	----	----	----	----	----
CA/CL	----	----	----	----	----	----
Net exp/Sales	1.087	----	1.100	----	1.076	1.156
DIV/SC	----	----	----	----	1.053	----
R&D/Sales	----	1.013	----	----	----	----
INT/DEBT	----	1.071	----	----	----	1.191

Table 5.28

Variance Inflationary Factor (Multiple Regressions on TL/TA Ratio)

	Run 1[b]	Run 2[b]	Run3[b]	Run4[b]	Run5[b]	Run6[b]
Log of sales	----	----	----	1.268	----	----
Log of GTFA	----	----	----	----	----	----
Log of TNA	----	----	----	----	----	----
PBITDA/TGA	----	----	----	----	----	----
PBT/TNA	1.268	1.094	1.208	2.098	2.26	2.34
NFA/TNA	----	----	----	----	----	----
GFA/TGA	----	----	----	----	----	----
(Nfa+Inv+AR)/TNA	1.174	----	----	----	1.175	----
INV/TNA	----	1.138	1.088	1.088	----	1.128
SD of PBITDA/TGA	----	----	----	----	----	----
COV of PBIT/TNA	1.086	1.104	1.108	----	1.087	1.101
CAGR of TNA	----	----	----	----	----	1.284
CAGR of sales	----	----	1.187	----	----	----
Depr/TGA	----	----	----	----	----	----
PBDIT/INT	----	----	----	----	----	----
Log of age	----	----	----	----	----	----
Eq Div/PAT	----	----	----	----	----	----
CA/CL	1.017	1.035	1.024	1.219	1.108	1.109
Net exp/Sales	----	----	----	----	----	----
DIV/SC	----	----	----	2.058	2.009	2.078
R&D/Sales	----	----	----	----	----	----
INT/DEBT	----	1.144	----	----	----	----

Table 5.29

Regression runs on Debt ratio:STD1/TA

Run1	**Run2**	**Run3**	**Run4**	**Run5**	**Run6**	**Run7**	**Run8**	**Run9**	**Run10**	**Run11**
Log of sales	Log of sales	Log of sales	Log of sales	Log of sales	Log of sales	Log of TNA	Log of TNA	Log of TNA	Log of TNA	Log of TNA
PBT/TNA(-)	PBT/TNA	PBT/TNA	PBT/TNA(-)	PBT/TNA	PBT/TNA	PBT/TNA(-)	PBT/TNA	PBT/TNA	PBT/TNA(-)	PBT/TNA
NFA/TNA(-)	(Nfa+Inv+AR)/TNA	INV/TNA(+)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA	INV/TNA(+)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA	INV/TNA(+)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA
COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)
CAGR of TNA	CAGR of TNA(-)	CAGR of TNA	CAGR of sales	CAGR of sales	CAGR of sales	CAGR of TNA	CAGR of TNA(-)	CAGR of TNA	CAGR of sales	CAGR of sales
Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age
Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT
CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)
Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales
R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales(-)
INT/DEBT	INT/DEBT(+)	INT/DEBT	INT/DEBT	INT/DEBT(+)	INT/DEBT	INT/DEBT	INT/DEBT(+)	INT/DEBT	INT/DEBT	INT/DEBT(+)
R sq= .522	R sq =0.349	R sq =0.429	**R sq= .522**	R sq =0.329	R sq =0.429	**R sq= .522**	R sq =0.349	R sq =0.429	**R sq= .522**	R sq =0.329
Adj R sq= .508	Adj R sq=.325	Adj R sq=.416	**Adj R2= .508**	Adj R sq=.309	Adj R sq=.416	**Adj R2= .508**	Adj R sq=.325	Adj R sq=.416	**Adj R2= .508**	Adj R sq=.309
Run12	**Run13**	**Run14**	**Run15**	**Run16**	**Run17**	**Run18**	**Run19**	**Run20**	**Run21**	**Run22**
Log of TNA	Log of GTFA	Log of sales	Log of sales	Log of sales	Log of TNA	Log of TNA	Log of TNA	Log of sales	Log of sales	Log of sales
PBT/TNA	PBITDA/TGA(-)	------	------	------	------	------	------	------	------	------
INV/TNA(+)	GFA/TGA(-)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA	INV/TNA(+)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA	INV/TNA(+)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA	INV/TNA(+)
COV PBIT/TNA(+)	SD of PBITDA/TGA	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)
CAGR of sales	CAGR of sales	CAGR of TNA	CAGR of TNA(-)	CAGR of TNA	CAGR of TNA	CAGR of TNA(-)	CAGR of TNA	CAGR of sales	CAGR of sales	CAGR of sales
Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age
Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT
CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)
Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales
R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales
INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT(+)	INT/DEBT	INT/DEBT	INT/DEBT(+)	INT/DEBT	INT/DEBT	INT/DEBT(+)	INT/DEBT
------	PBDIT/INT	DIV/SC	DIV/SC	DIV/SC	DIV/SC	DIV/SC	DIV/SC	DIV/SC	DIV/SC	DIV/SC
R sq =0.429	R sq =.411	R sq =.490	R sq =.349	R sq =0.429	R sq =.490	R sq =.349	R sq =0.429	R sq =.490	R sq =0.329	R sq =0.429
Adj R sq=.416	Adj R sq=.398	Adj R sq=.478	Adj R sq=.325	Adj R sq=.416	Adj R sq=.478	Adj R sq=.325	Adj R sq=.416	Adj R sq=.478	Adj R sq=.309	Adj R sq=.416
Run23	**Run24**	**Run25**	**Run26**	**Run27**	**Run28**	**Run29**	**Run30**	**Run31**	**Run32**	**Run33**
Log of TNA	Log of sales	Log of TNA	Log of GTFA	Log of sales	Log of sales	Log of sales	Log of TNA	Log of sales	Log of sales	Log of TNA
------	------	------	PBITDA/TGA(-)	PBT/TNA(-)	PBT/TNA	PBT/TNA	PBT/TNA	------	PBT/TNA(-)	PBT/TNA(-)
NFA/TNA(-)	(Nfa+Inv+AR)/TNA	INV/TNA(+)	GFA/TGA(-)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA	INV/TNA(+)	INV/TNA(+)	NFA/TNA(+)	NFA/TNA(-)	NFA/TNA(-)
COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	SD of PBITDA/TGA	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)
CAGR of sales	CAGR of sales	CAGR of sales	CAGR of sales	CAGR of TNA	CAGR of TNA(-)	CAGR of TNA	CAGR of TNA	CAGR of sales	CAGR of sales(+)	CAGR of sales(+)
Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age
Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT
CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)
Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales
DIV/SC	DIV/SC	DIV/SC	DIV/SC(+)	DIV/SC(+)	DIV/SC	DIV/SC	DIV/SC	DIV/SC	DIV/SC(+)	DIV/SC(+)
R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales
INT/DEBT	INT/DEBT(+)	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT(+)	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT
------	------	------	Depr/TGA	------	------	------	------	INV/TNA(+)	INV/TNA(+)	INV/TNA(+)
------	------	------	PBDIT/INT	------	------	------	------	------	------	------
R sq =.490	R sq =0.329	R sq =0.429	R sq =0.431	**R sq= .561**	R sq= .349	R sq =0.429	R sq =0.430	**R sq =.544**	**R sq =.609**	**R sq =.609**
Adj R sq=.478	Adj R sq=.309	Adj R sq=.416	Adj R sq=.414	**Adj R2= .544**	Adj R2= .325	Adj R sq=.416	Adj R sq=.417	**Adj R sq=.530**	**Adj R sq=.589**	**Adj R sq=.589**

Table 5.30

Regression runs on Debt ratio:TC&E/TA

Run1	Run2	Run3	Run4	Run5	Run6	Run7	Run8	Run9	Run10	Run11
Log of sales(+)	Log of sales	Log of sales	Log of sales(+)	Log of sales	Log of sales	Log of TNA	Log of TNA	Log of TNA	Log of TNA	Log of TNA
PBT/TNA(-)	PBT/TNA	PBT/TNA	PBT/TNA(-)	PBT/TNA	PBT/TNA	PBT/TNA(-)	PBT/TNA	PBT/TNA	PBT/TNA(-)	PBT/TNA
NFA/TNA(-)	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA(+)
COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)
CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of sales	CAGR of sales	CAGR of sales	CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of sales	CAGR of sales
Log of age	Log of age (+)	Log of age	Log of age	Log of age (+)	Log of age	Log of age	Log of age (+)	Log of age	Log of age	Log of age (+)
Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT
CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)
Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales
R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales(-)
INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)
R sq= .650	**R sq =0.516**	**R sq =0.548**	**R sq= .650**	**R sq =0.516**	**R sq =0.548**	**R sq= .623**	**R sq =0.516**	**R sq =0.548**	**R sq= .623**	**R sq =0.516**
Adj R sq= .634	**Adj R sq=.494**	**Adj R sq=.535**	**Adj R2= .634**	**Adj R sq=.494**	**Adj R sq=.535**	**Adj R2= .609**	**Adj R sq=.494**	**Adj R sq=.535**	**Adj R2= .609**	**Adj R sq=.494**

Run12	Run13	Run14	Run15	Run16	Run17	Run18	Run19	Run20	Run21	Run22
Log of TNA	Log of GTFA	Log of sales	Log of sales	Log of sales	Log of TNA	Log of TNA	Log of TNA	Log of sales	Log of sales	Log of sales
PBT/TNA	PBITDA/TGA(-)	------	------	------	------	------	------	------	------	------
INV/TNA(+)	GFA/TGA(-)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)
COV PBIT/TNA(+)	SD of PBITDA/TGA	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)
CAGR of sales	CAGR of sales	CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of sales	CAGR of sales	CAGR of sales
Log of age	Log of age	Log of age	Log of age (+)	Log of age	Log of age	Log of age (+)	Log of age	Log of age	Log of age	Log of age
Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT
CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)
Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales
R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales
INT/DEBT(+)	INT/DEBT	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT
------	PBDIT/INT	DIV/SC	DIV/SC	DIV/SC	DIV/SC	DIV/SC	DIV/SC	DIV/SC	DIV/SC	DIV/SC
R sq =0.548	**R sq =.533**	**R sq =.596**	**R sq =0.516**	**R sq =0.548**	**R sq =.596**	**R sq =0.516**	**R sq =0.548**	**R sq =.596**	**R sq =0.516**	**R sq =0.548**
Adj R sq=.535	**Adj R sq=.522**	**Adj R sq=.584**	**Adj R sq=.494**	**Adj R sq=.535**	**Adj R sq=.584**	**Adj R sq=.494**	**Adj R sq=.535**	**Adj R sq=.584**	**Adj R sq=.494**	**Adj R sq=.535**

Run23	Run24	Run25	Run26	Run27	Run28	Run29	Run30	Run31	Run32	Run33
Log of TNA	Log of sales	Log of TNA	Log of GTFA	Log of sales(+)	Log of sales	Log of sales	Log of TNA	Log of sales	Log of sales(+)	Log of TNA
------	------	------	PBITDA/TGA(-)	PBT/TNA(-)	PBT/TNA	PBT/TNA	PBT/TNA	------	PBT/TNA(-)	PBT/TNA(-)
NFA/TNA(-)	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	GFA/TGA(-)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	INV/TNA(+)	NFA/TNA(+)	NFA/TNA(-)	NFA/TNA(-)
COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	SD of PBITDA/TGA	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)
CAGR of sales	CAGR of sales	CAGR of sales	CAGR of sales	CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of sales	CAGR of sales	CAGR of sales
Log of age	Log of age (+)	Log of age	Log of age	Log of age	Log of age (+)	Log of age	Log of age	Log of age	Log of age	Log of age
Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT
CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)
Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales
DIV/SC	DIV/SC	DIV/SC	DIV/SC(+)	DIV/SC(+)	DIV/SC	DIV/SC	DIV/SC	DIV/SC	DIV/SC(+)	DIV/SC(+)
R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales
INT/DEBT(+)	INT/DEBT(+)	INT/DEBT(+)	INT/DEBT	INT/DEBT	INT/DEBT(+)	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT
------	------	------	Depr/TGA	------	------	------	------	INV/TNA(+)	INV/TNA(+)	INV/TNA(+)
------	------	------	PBDIT//INT	------	------	------	------	------	------	------
R sq =.596	**R sq =0.516**	**R sq =0.548**	**R sq =0.549**	**R sq= .665**	**R sq =0.516**	**R sq =0.548**	**R sq =0.549**	**R sq =.544**	**R sq =.673**	**R sq =.661**
Adj R sq=.584	**Adj R sq=.494**	**Adj R sq=.535**	**Adj R sq=.536**	**Adj R2= .647**	**Adj R sq=.494**	**Adj R sq=.535**	**Adj R sq=.536**	**Adj R sq=.530**	**Adj R sq=.655**	**Adj R sq=.646**

Table 5.31

Regression runs on Debt ratio:LTD/TA

Run1	Run2	Run3	Run4	Run5	Run6	Run7	Run8	Run9	Run10	Run11
Log of sales	Log of sales	Log of sales	Log of sales	Log of sales(+)	Log of sales(+)	Log of TNA	Log of TNA(+)	Log of TNA(+)	Log of TNA(+)	Log of TNA(+)
PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)
NFA/TNA(+)	(Nfa+Inv+AR)/TNA(+)	INV/TNA	NFA/TNA(+)	(Nfa+Inv+AR)/TNA(+)	INV/TNA	NFA/TNA(+)	(Nfa+Inv+AR)/TNA(+)	INV/TNA	NFA/TNA(+)	(Nfa+Inv+AR)/TNA(+)
COV PBIT/TNA	COV PBIT/TNA	COV PBIT/TNA	COV PBIT/TNA	COV PBIT/TNA	COV PBIT/TNA	COV PBIT/TNA	COV PBIT/TNA	COV PBIT/TNA	COV PBIT/TNA	COV PBIT/TNA
CAGR of TNA	CAGR of TNA(+)	CAGR of TNA(+)	CAGR of sales	CAGR of sales	CAGR of sales	CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of sales	CAGR of sales
Log of age	Log of age	Log of age	Log of age	Log of age (-)	Log of age (-)	Log of age	Log of age (-)	Log of age (-)	Log of age	Log of age (-)
Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT
CA/CL	CA/CL	CA/CL	CA/CL	CA/CL	CA/CL	CA/CL	CA/CL	CA/CL	CA/CL	CA/CL
Net exp/Sales(-)	Net exp/Sales	Net exp/Sales	Net exp/Sales(-)	Net exp/Sales	Net exp/Sales	Net exp/Sales(-)	Net exp/Sales	Net exp/Sales	Net exp/Sales(-)	Net exp/Sales
R&D/Sales	R&D/Sales(+)	R&D/Sales(+)	R&D/Sales	R&D/Sales(+)	R&D/Sales(+)	R&D/Sales	R&D/Sales(+)	R&D/Sales(+)	R&D/Sales	R&D/Sales(+)
INT/DEBT	INT/DEBT(-)	INT/DEBT(-)	INT/DEBT	INT/DEBT(-)	INT/DEBT(-)	INT/DEBT	INT/DEBT(-)	INT/DEBT(-)	INT/DEBT	INT/DEBT(-)
R sq= .64	R sq =0.435	R sq =0.396	**R sq =0.64**	R sq =0.46	R sq =0.431	**R sq =0.64**	**R sq =0.51**	R sq =0.470	**R sq =0.659**	**R sq =0.51**
Adj R sq= .63	Adj R sq=.414	Adj R sq=.378	**Adj R sq= .63**	Adj R sq=.439	Adj R sq=.410	**Adj R sq= .63**	**Adj R sq=.488**	Adj R sq=.450	**Adj R sq=.64**	**Adj R sq=.488**
Run12	**Run13**	**Run14**	**Run15**	**Run16**	**Run17**	**Run18**	**Run19**	**Run20**	**Run21**	**Run22**
Log of TNA(+)	Log of GTFA(+)	Log of sales	Log of sales	Log of sales(+)	Log of TNA	Log of TNA(+)	Log of TNA(+)	Log of sales	Log of sales	Log of sales(+)
PBT/TNA(-)	PBITDA/TGA(-)	NFA/TNA(+)	(Nfa+Inv+AR)/TNA(+)	INV/TNA	NFA/TNA(+)	(Nfa+Inv+AR)/TNA(+)	INV/TNA	NFA/TNA(+)	(Nfa+Inv+AR)/TNA(+)	INV/TNA
INV/TNA	GFA/TGA(+)	COV PBIT/TNA(+)	COV PBIT/TNA	COV PBIT/TNA	COV PBIT/TNA(+)	COV PBIT/TNA	COV PBIT/TNA	COV PBIT/TNA(+)	COV PBIT/TNA	COV PBIT/TNA
COV PBIT/TNA	SD of PBITDA/TGA	CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of TNA(-)	CAGR of TNA(-)	CAGR of sales	CAGR of sales	CAGR of sales
CAGR of sales	CAGR of sales	Log of age	Log of age (-)	Log of age (-)	Log of age	Log of age (-)	Log of age (-)	Log of age	Log of age (-)	Log of age (-)
Log of age (-)	PBDIT/INT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT
Eq Div/PAT	Log of age (-)	CA/CL	CA/CL(-)	CA/CL	CA/CL	CA/CL	CA/CL	CA/CL	CA/CL	CA/CL
CA/CL	Eq Div/PAT	Net exp/Sales(-)	Net exp/Sales	Net exp/Sales	Net exp/Sales(-)	Net exp/Sales	Net exp/Sales	Net exp/Sales(-)	Net exp/Sales	Net exp/Sales
Net exp/Sales	CA/CL	DIV/SC(-)	DIV/SC(-)	DIV/SC(-)	DIV/SC(-)	DIV/SC(-)	DIV/SC(-)	DIV/SC(-)	DIV/SC(-)	DIV/SC(-)
R&D/Sales(+)	Net exp/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales
INT/DEBT(-)	R&D/Sales	INT/DEBT	INT/DEBT(-)	INT/DEBT(-)	INT/DEBT	INT/DEBT(-)	INT/DEBT(-)	INT/DEBT	INT/DEBT(-)	INT/DEBT(-)
	INT/DEBT									
R sq =0.470	**R sq =.53**	**R sq =.568**	R sq =.34	R sq =.237	**R sq =.568**	R sq =.403	R sq =.311	**R sq =.568**	R sq =.332	R sq =.237
Adj R sq=.45	**Adj R sq=.51**	**Adj R sq=.555**	Adj R sq=.308	Adj R sq=.214	**Adj R sq=.555**	Adj R sq=.376	Adj R sq=.286	**Adj R sq=.555**	Adj R sq=.308	Adj R sq=.214
Run23	**Run24**	**Run25**	**Run26**	**Run27**	**Run28**	**Run29**	**Run30**			
Log of TNA	Log of sales	Log of TNA(+)	Log of GTFA(+)	Log of sales	Log of sales	Log of sales	Log of TNA(+)			
NFA/TNA(+)	(Nfa+Inv+AR)/TNA(+)	INV/TNA	PBITDA/TGA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)			
COV PBIT/TNA(+)	COV PBIT/TNA	COV PBIT/TNA	GFA/TGA(+)	NFA/TNA(+)	(Nfa+Inv+AR)/TNA(+)	INV/TNA	INV/TNA			
CAGR of sales	CAGR of sales	CAGR of sales(-)	SD of PBITDA/TGA	COV PBIT/TNA	COV PBIT/TNA	COV PBIT/TNA	COV PBIT/TNA			
Log of age	Log of age (-)	Log of age (-)	CAGR of sales	CAGR of TNA	CAGR of TNA(+)	CAGR of TNA(+)	CAGR of TNA			
Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Depr/TGA(-)	Log of age	Log of age	Log of age	Log of age (-)			
CA/CL	CA/CL(-)	CA/CL	PBDIT/INT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT			
Net exp/Sales(-)	Net exp/Sales	Net exp/Sales	Log of age (-)	CA/CL	CA/CL	CA/CL	CA/CL			
DIV/SC(-)	DIV/SC(-)	DIV/SC(-)	Eq Div/PAT	Net exp/Sales(-)	Net exp/Sales	Net exp/Sales	Net exp/Sales			
R&D/Sales	R&D/Sales	R&D/Sales	CA/CL	DIV/SC	DIV/SC	DIV/SC	DIV/SC			
INT/DEBT	INT/DEBT(-)	INT/DEBT(-)	Net exp/Sales(-)	R&D/Sales	R&D/Sales(+)	R&D/Sales(+)	R&D/Sales(+)			
			DIV/SC	INT/DEBT	INT/DEBT(-)	INT/DEBT(-)	INT/DEBT(-)			
			R&D/Sales							
			INT/DEBT(-)							
R sq =.568	R sq =.332	R sq =.308	**R sq =0.60**	**R sq= .64**	R sq= .435	R sq =.396	R sq =.47			
Adj R sq=.555	Adj R sq=.308	Adj R sq=.282	**Adj R sq=.579**	**Adj R2= .63**	Adj R2= .414	Adj R sq=.378	Adj R sq=.45			

Table 5.32

Regression runs on Debt ratio:TL/TA

Run1	Run2	Run3	Run4	Run5	Run6	Run7	Run8	Run9	Run10	Run11
Log of sales(+)	Log of sales	Log of sales	Log of sales(+)	Log of sales	Log of sales	Log of TNA	Log of TNA	Log of TNA	Log of TNA	Log of TNA
PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)
NFA/TNA	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	NFA/TNA	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	NFA/TNA	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	NFA/TNA	(Nfa+Inv+AR)/TNA(+)
COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)
CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of sales	CAGR of sales	CAGR of sales(+)	CAGR of TNA	CAGR of TNA(-)	CAGR of TNA	CAGR of sales	CAGR of sales
Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age
Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT
CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)
Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales
R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales
INT/DEBT	INT/DEBT	INT/DEBT(-)	INT/DEBT	INT/DEBT(+)	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT(-)	INT/DEBT	INT/DEBT
R sq= .518	**R sq =0.560**	**R sq =0.556**	**R sq= .518**	**R sq =0.560**	**R sq =0.562**	R sq= .495	**R sq =0.560**	**R sq =0.556**	R sq= .495	**R sq =0.560**
Adj R sq= .504	**Adj R sq=.547**	**Adj R sq=.539**	**Adj R2= .504**	**Adj R sq=.547**	**Adj R sq=.546**	Adj R2= .483	**Adj R sq=.547**	**Adj R sq=.539**	Adj R2= .483	**Adj R sq=.547**

Run12	Run13	Run14	Run15	Run16	Run17	Run18	Run19	Run20	Run21	Run22
Log of TNA	Log of GTFA	Log of sales	Log of sales	Log of sales	Log of TNA	Log of TNA	Log of TNA	Log of sales	Log of sales	Log of sales
PBT/TNA(-)	PBITDA/TGA(-)	------	------	------	------	------	------	------	------	------
Inv/TNA(+)	GFA/TGA	NFA/TNA	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	NFA/TNA	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	NFA/TNA(-)	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)
COV PBIT/TNA(+)	SD of PBITDA/TGA	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)
CAGR of sales(+)	CAGR of sales	CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of TNA	CAGR of TNA(-)	CAGR of TNA	CAGR of sales	CAGR of sales	CAGR of sales
Log of age	Log of age	Log of age	Log of age	Log of age (-)	Log of age	Log of age	Log of age (-)	Log of age	Log of age	Log of age (-)
Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT
CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)
Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales
R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales(-)	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales
INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT(+)	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT
------	PBDIT/INT	DIV/SC(-)	DIV/SC	DIV/SC(-)	DIV/SC(-)	DIV/SC	DIV/SC(-)	DIV/SC(-)	DIV/SC	DIV/SC(-)
R sq =0.562	R sq =.345	R sq =.319	R sq =.456	R sq =0.406	R sq =.319	R sq =.456	R sq =0.406	R sq =.319	R sq =.456	R sq =0.406
Adj R sq=.546	Adj R sq=.336	Adj R sq=.304	Adj R sq=.444	Adj R sq=.384	Adj R sq=.304	Adj R sq=.444	Adj R sq=.384	Adj R sq=.304	Adj R sq=.444	Adj R sq=.384

Run23	Run24	Run25	Run26	Run27	Run28	Run29	Run30
Log of TNA	Log of sales	Log of TNA	Log of GTFA	Log of sales(+)	Log of sales	Log of sales	Log of TNA
------	------	------	PBITDA/TGA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)	PBT/TNA(-)
NFA/TNA	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	GFA/TGA	NFA/TNA	(Nfa+Inv+AR)/TNA(+)	INV/TNA(+)	INV/TNA(+)
COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	SD of PBITDA/TGA	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)	COV PBIT/TNA(+)
CAGR of sales	CAGR of sales	CAGR of sales	CAGR of sales	CAGR of TNA	CAGR of TNA	CAGR of TNA(+)	CAGR of TNA(+)
Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age	Log of age
Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT	Eq Div/PAT
CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)	CA/CL(-)
Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales	Net exp/Sales
DIV/SC(-)	DIV/SC	DIV/SC(-)	DIV/SC	DIV/SC(+)	DIV/SC(+)	DIV/SC(+)	DIV/SC(+)
R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales	R&D/Sales
INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT	INT/DEBT
------	------	------	Depr/TGA	------	------	------	------
------	------	------	PBDIT/INT	------	------	------	------
R sq =.319	R sq =.456	R sq =0.406	R sq =0.345	**R sq= .548**	**R sq= .596**	**R sq =0.584**	**R sq =0.584**
Adj R sq=.304	Adj R sq=.444	Adj R sq=.384	Adj R sq=.336	**Adj R2= .531**	**Adj R2= .581**	**Adj R sq=.565**	**Adj R sq=.565**