

CHAPTER – V

ANALYSIS OF FINANCIAL

AND

CAPITAL STRUCTURE

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ANALYSIS OF FINANCIAL AND CAPITAL STRUCTURE

5.0 INTRODUCTION:

In the preceding four chapters, the theoretical background for financial and capital structure is discussed. This chapter and the chapter following, deals with the empirical analysis conducted by researcher. As discussed in the preceding chapter for 17 Companies data is not available beyond 1996, as of January 2001; hence, 45 companies are taken for analysis of 16 years and 28 companies' analysis is carried out for 19 years. The present chapter analyses the trends in various ratios indicating financial and capital structure and ratios affecting financial/capital structure. Ratio analysis is divided in five groups as discussed in the preceding chapter. They are liquidity ratios, leverage ratios, activity ratios, profitability ratios and assets structural ratios. The present chapter is divided into two sections. Section - I gives the ratios and their findings for 45 companies considering 16 years data and Section - II gives the ratios and their findings for 28 companies considering 19 years data.

SECTION - I

5.1. LIQUIDITY RATIOS:

5.1.a CURRENT RATIO:

This ratio is derived as current assets divided by current liabilities.

Table V.1 presents the current ratio for 45 companies for the period of 16 years from 1981 -1996. It is very interesting to note from the Table that the minimum ratio is found to be 0.10 for the year 1987 for Atul. The highest ratio is found to be 4.83 for the year 1981 for Ficom. Wide fluctuations are observed over a period of time for given companies. To have an idea about over all average for respective year, average is derived for each year taking all companies together. Lowest average is found to be 1.26 taking all companies together for the year 1982 and the highest is found of 1.59 for the year 1996. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise and presented in the Table. The highest S.D. is found to be 0.75 for the year 1996 and the lowest is 0.26 for the year 1991. To make the deviations comparable C.V. are also computed. The highest C.V. is found to be 48.85 for the year 1981 and the lowest C.V. is found to be 19.29 for the year 1991. Thus the relative variations were found to be highest for the year 1981 and lowest variations were found for the year 1991. When the companywise current ratio is examined over a period of time, minimum average current ratio is found to be 0.70 for Jayant and the maximum average current ratio is found to be 2.09 for Cynamid. To have an idea about the variation between the years for various companies S.D. and C.V. are also computed companywise and presented in the Table. The highest S.D. is found to be 1.09 for Lakme and the lowest S.D. is found to be 0.06 for Hindustan Lever. The highest C.V. is found to be 65.12 for Lakme and the lowest 6.76 for Hindustan Lever. The grand average of current ratio

TABLE - V.1

CURRENT RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	2.37	2.78	2.68	2.17	1.28	1.11	1.00	1.02	1.07	1.27	1.39	1.40	1.46	2.11	2.04	1.43	1.66	0.60	36.09
2. Aegies	1.22	0.52	0.43	0.45	0.55	0.61	0.65	0.69	0.71	0.69	0.97	1.97	1.33	1.15	1.35	1.15	0.90	0.43	47.14
3. Alembic	1.21	1.23	1.20	1.21	1.19	1.18	1.20	1.13	1.14	1.45	1.04	0.95	1.11	1.33	1.43	1.45	1.22	0.14	11.64
4. Atul	1.54	1.06	1.76	2.21	2.02	1.54	0.10	1.10	1.64	1.73	1.62	2.31	1.94	2.59	2.01	1.82	1.69	0.58	34.50
5. Basf	1.14	1.08	1.26	1.25	1.67	1.69	1.76	1.73	1.50	1.41	1.40	1.56	1.40	1.31	1.26	1.39	1.43	0.21	14.77
6 Bayer	1.37	1.47	1.45	1.50	1.49	1.48	1.63	1.96	1.73	1.15	1.46	1.34	1.35	1.34	1.33	1.51	1.47	0.18	12.54
7. Borax	1.70	1.43	2.41	2.26	1.55	1.70	1.54	1.67	1.47	1.44	1.43	1.46	1.32	1.31	1.39	1.31	1.59	0.32	20.11
8. Burroughs	1.13	1.15	1.16	1.48	2.57	2.03	1.83	1.66	1.50	1.42	1.54	1.43	1.39	1.77	1.55	1.69	1.58	0.36	22.86
9. Cipla	1.12	1.14	1.13	1.13	1.19	1.35	1.48	1.50	1.46	1.54	1.32	1.31	1.39	1.21	1.31	2.08	1.35	0.24	17.70
10. Citurgia	0.88	1.33	3.02	2.33	2.17	2.69	1.58	1.40	1.23	1.06	1.17	1.29	1.28	1.24	1.22	1.23	1.57	0.63	39.92
11. Colour	1.17	1.15	1.20	1.33	1.29	1.64	1.60	1.50	1.21	1.19	1.06	1.31	1.41	1.55	1.60	1.42	1.35	0.18	13.61
12. Cynamid	1.77	1.77	2.56	3.02	2.84	1.93	1.79	1.96	1.48	1.44	1.71	1.83	1.80	2.02	2.64	2.79	2.09	0.51	24.38
13. D.C.W.	1.15	1.08	1.11	1.22	0.82	0.91	1.29	1.42	1.36	1.26	1.10	1.42	1.29	1.14	1.46	0.90	1.18	0.19	16.44
14. Deepak	1.38	1.63	1.60	1.53	1.44	1.44	1.51	1.39	1.30	1.31	1.11	2.22	2.60	1.71	1.64	1.46	1.58	0.36	22.97
15. Duphar	1.39	1.29	1.26	1.15	1.06	0.99	1.00	1.06	1.10	1.09	1.26	1.14	1.24	1.21	1.29	1.80	1.21	0.20	16.28
16. E.I.D.	1.03	1.23	1.25	1.27	1.27	1.24	1.20	1.19	1.22	1.27	1.22	1.23	1.11	1.38	1.58	1.97	1.29	0.21	16.64
17. E. Merck	0.78	0.54	1.01	1.03	1.05	1.13	1.26	1.26	1.17	1.11	1.06	0.97	1.21	1.40	1.38	1.46	1.11	0.23	20.93
18. Excel	1.23	1.23	1.56	1.69	1.68	1.89	1.55	1.23	1.19	1.26	1.39	1.47	1.79	2.18	1.73	1.62	1.54	0.28	18.28
19. Ficom	4.83	1.48	1.25	1.21	1.23	1.42	1.75	1.92	2.04	2.06	1.82	1.55	0.99	1.64	1.78	1.33	1.77	0.88	49.56
20. Fulford	1.04	1.07	1.19	1.17	1.18	1.14	1.16	1.20	1.23	1.17	1.21	1.28	1.39	1.35	1.34	1.35	1.22	0.10	8.31
21. German	1.16	1.19	1.20	1.19	1.27	1.23	1.24	1.30	1.27	1.43	1.30	1.20	1.35	1.74	1.81	1.72	1.35	0.21	15.76
22. Glaxo	1.37	1.32	1.22	1.12	1.18	1.21	1.62	1.76	1.32	1.45	1.35	1.10	1.21	1.77	1.53	1.41	1.37	0.21	15.28

Cont.

TABLE - V.1 cont.

Name	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	2.54	2.42	0.97	1.08	0.89	0.84	0.84	0.82	0.72	0.81	1.09	0.91	1.08	1.59	0.95	1.74	1.21	0.57	47.21
24. Guj-State	1.39	1.74	1.73	1.97	1.80	1.60	1.49	1.51	1.80	1.95	1.49	1.10	1.35	1.29	1.26	1.11	1.54	0.28	18.06
25. Hin-Ciba	1.65	1.54	1.44	1.70	1.95	1.70	1.96	2.26	2.08	1.91	1.64	1.41	1.59	1.48	2.17	1.67	1.76	0.26	14.96
26. Hin-Lever	1.28	1.27	1.30	1.31	1.27	1.14	0.98	1.25	1.25	1.17	1.18	1.21	1.30	1.25	1.23	1.18	1.22	0.08	6.76
27. Hochtect	1.11	1.12	1.11	1.26	1.49	1.40	1.27	1.15	1.08	1.14	1.20	1.29	1.28	1.42	1.38	1.14	1.24	0.13	10.31
28. I.C.I.	0.88	0.83	0.96	1.11	1.27	1.29	1.19	1.11	1.07	1.06	1.19	1.15	1.31	1.27	1.38	1.23	1.14	0.16	13.65
29. Ind-Dye	1.11	1.15	1.14	1.22	0.93	0.97	0.95	1.06	1.05	1.13	1.19	1.17	1.26	1.14	1.42	1.24	1.13	0.13	11.14
30. Ind-Oil	1.01	1.02	1.06	1.21	1.19	1.14	1.22	1.21	1.23	1.21	1.21	1.38	1.32	1.32	1.27	1.10	1.19	0.11	8.85
31. Jayant	0.83	0.78	0.74	0.79	0.95	0.98	0.83	0.69	0.66	0.73	0.60	0.48	0.44	0.46	0.53	0.63	0.70	0.17	23.77
32. Knoll	1.44	1.38	1.39	1.62	1.61	1.89	1.97	2.04	1.77	1.83	1.37	1.57	1.68	1.48	1.06	1.08	1.57	0.29	18.25
33. Lakme	1.09	0.97	1.27	1.32	1.26	1.30	1.60	1.75	1.46	1.47	1.41	1.28	1.69	1.58	1.69	5.68	1.68	1.09	65.12
34. National	1.15	1.08	0.98	1.06	1.34	1.59	1.58	1.43	1.49	1.54	1.60	1.59	1.57	1.33	1.50	1.10	1.37	0.23	16.43
35. Parke	2.39	2.56	2.52	2.33	2.28	1.86	1.78	1.76	1.58	1.61	1.46	1.51	1.40	1.58	1.50	1.64	1.86	0.41	22.05
36. Rallis	1.11	1.17	1.19	1.13	1.14	1.07	1.27	1.25	1.19	1.23	1.21	1.40	1.36	1.31	1.21	1.08	1.21	0.09	7.77
37. Ranbaxy	1.12	1.14	1.17	1.07	1.26	1.42	1.31	1.22	1.31	1.35	1.34	1.30	1.47	1.69	2.32	2.26	1.42	0.37	26.10
38. Searle	1.33	0.30	0.12	1.18	1.86	2.83	2.11	1.96	1.66	1.54	2.06	1.84	2.04	2.24	1.74	1.54	1.65	0.68	41.38
39. Synthetics	1.20	1.13	1.05	1.05	1.07	1.08	1.10	1.14	1.20	1.49	1.27	1.52	1.47	1.53	1.49	1.25	1.25	0.18	14.76
40. Tam-Dadha	1.24	1.21	1.11	1.08	1.14	1.15	1.17	1.15	1.32	1.24	1.15	1.17	1.18	1.23	2.24	2.18	1.31	0.36	27.14
41. Tata	0.86	0.85	0.97	1.45	1.04	1.57	1.21	1.63	1.86	1.73	1.89	2.38	1.92	1.04	2.08	2.08	1.53	0.49	31.76
42. Transpek	0.98	0.99	0.96	0.97	0.93	0.93	0.96	0.95	0.95	1.07	1.31	1.17	1.36	1.22	1.19	1.08	1.06	0.14	13.42
43. United	0.88	1.01	1.09	1.04	1.13	1.34	1.55	1.44	1.36	1.18	1.33	1.18	1.09	3.74	2.02	2.27	1.48	0.71	47.82
44. Zandu	1.20	1.20	0.99	1.19	1.14	1.13	1.18	1.35	1.43	1.54	1.52	1.41	1.46	1.51	1.54	1.43	1.33	0.18	13.33
45. Zuari	2.57	1.88	1.81	1.69	1.64	2.22	2.42	2.29	1.47	1.58	1.40	1.24	1.71	1.74	1.65	1.47	1.80	0.38	21.32
Average	1.39	1.26	1.33	1.39	1.39	1.42	1.37	1.41	1.34	1.35	1.33	1.39	1.42	1.53	1.54	1.59	1.40	0.33	22.60
S.D.	0.68	0.47	0.56	0.48	0.46	0.45	0.41	0.38	0.31	0.30	0.26	0.35	0.33	0.49	0.39	0.75	0.26		
C.V.	48.85	37.20	41.75	34.37	33.07	31.73	30.20	27.20	23.13	21.90	19.29	25.52	23.17	32.20	25.04	47.11	18.84		

for all companies for all years taken together comes to be 1.40. This ratio indicates that on an average sample companies have current assets 1.40 times of current obligations. This indicates that on an average sample companies have more current assets than current obligations. However, the companies having ratio less than one do not indicate satisfactory position.

5.1.b QUICK RATIO:

As a second indicator of financial structure this ratio is selected. It is derived as quick assets divided by current liabilities.

Table V.2 presents the quick ratio for 45 companies for the period of 16 years from 1981-1996. It is very interesting to note from the Table that the minimum ratio is found to be -0.10 for the year 1982 for E. Merck. The highest ratio is found to be 2.76 for the year 1994 for United. Wide fluctuations are observed over a period of time for given companies. To have a clear idea average of 45 companies for each of the year is computed. Moreover, average is also derived for each year. These are presented in the Table. Lowest average is found to be 0.61 taking all companies together for the year 1982 and the highest 1.03 is for the year 1996. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise and presented in the Table. The highest S.D. is found to be 0.75 for the year 1996 and the same is found to be lowest at 0.24 for the year 1989 and 1991. The highest C.V. is found to be 80.96 for the year 1981 and the lowest coefficient is found to be 31.38 for the year 1991. When the companywise

TABLE - V.2

QUICK RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	1.01	1.16	1.15	0.95	0.55	0.52	0.51	0.53	0.50	0.60	0.63	0.64	0.68	1.08	1.10	0.74	0.77	0.26	33.21
2. Aegies	0.88	0.30	0.21	0.22	0.32	0.40	0.42	0.46	0.46	0.45	0.71	1.42	0.94	0.83	0.88	0.77	0.60	0.33	54.76
3. Alembic	0.62	0.56	0.54	0.62	0.55	0.58	0.65	0.61	0.49	0.77	0.54	0.50	0.59	0.65	0.66	0.69	0.60	0.07	12.35
4. Atul	0.40	0.32	0.77	0.82	0.72	0.62	0.04	0.57	0.87	0.89	0.86	1.23	0.96	1.70	1.23	1.07	0.82	0.40	48.47
5. Basf	0.71	0.69	0.81	0.81	0.99	1.05	1.14	1.13	0.87	0.88	0.85	0.92	0.83	0.75	0.75	0.82	0.88	0.14	15.88
6. Bayer	0.64	0.60	0.59	0.73	0.72	0.71	0.90	1.11	0.90	0.53	0.71	0.61	0.78	0.83	0.82	0.99	0.76	0.16	20.66
7. Borax	0.65	0.58	1.68	1.39	0.60	0.72	0.43	0.83	0.54	1.00	0.80	1.03	0.73	1.11	1.13	0.54	0.86	0.34	39.69
8. Burroughs	0.76	0.78	0.78	0.80	1.28	1.03	0.88	0.87	0.84	0.66	0.67	0.61	0.73	1.27	1.09	1.00	0.88	0.20	23.20
9. Cipla	0.57	0.63	0.64	0.60	0.55	0.62	0.71	0.77	0.84	0.92	0.80	0.61	0.63	0.49	0.58	1.41	0.71	0.22	31.02
10. Citurgia	0.30	0.55	1.64	0.91	1.62	1.81	1.01	0.81	0.83	0.76	0.82	0.88	0.87	0.84	0.87	0.99	0.97	0.40	41.00
11. Colour	0.60	0.51	0.60	0.70	0.69	0.89	0.88	0.84	0.67	0.63	0.52	0.72	0.83	0.89	1.00	0.92	0.74	0.15	20.36
12. Cynamid	0.59	0.62	0.89	0.87	0.73	0.65	0.77	0.91	0.61	0.67	0.86	0.84	0.88	1.01	1.35	1.45	0.86	0.25	28.83
13. D.C.W.	0.62	0.53	0.59	0.72	0.45	0.50	0.72	0.82	0.78	0.71	0.57	1.00	0.57	0.57	0.96	0.54	0.67	0.16	23.92
14. Deepak	1.01	1.33	1.32	1.19	1.07	1.10	1.08	1.00	0.98	1.03	0.94	1.69	1.99	1.41	1.31	1.19	1.23	0.28	23.01
15. Duphar	0.47	0.45	0.52	0.64	0.65	0.52	0.55	0.56	0.48	0.49	0.58	0.48	0.59	0.56	0.51	1.01	0.57	0.13	23.41
16. E.I.D.	0.61	0.71	0.68	0.73	0.80	0.73	0.59	0.64	0.73	0.68	0.66	0.62	0.49	0.81	1.00	1.37	0.74	0.20	27.41
17. E. Merck	0.23	-0.10	0.38	0.39	0.41	0.48	0.67	0.65	0.60	0.58	0.58	0.55	0.64	0.66	0.56	0.63	0.49	0.20	40.73
18. Excel	0.68	0.59	0.57	0.62	0.71	0.85	0.78	0.66	0.62	0.63	0.81	0.88	1.06	1.41	1.26	1.18	0.83	0.26	31.43
19. Ficom	3.83	1.03	0.91	0.98	0.71	0.61	0.93	1.09	1.13	1.32	1.10	1.01	0.71	1.08	1.09	0.75	1.14	0.74	64.75
20. Fulford	0.66	0.76	0.60	0.59	0.58	0.70	0.82	0.88	0.80	0.73	0.83	0.85	0.69	0.74	0.75	0.82	0.74	0.10	13.01
21. German	0.50	0.53	0.58	0.69	0.79	0.68	0.61	0.59	0.49	0.64	0.51	0.53	0.78	0.95	1.14	1.03	0.69	0.20	28.90
22. Glaxo	0.27	0.34	0.42	0.46	0.48	0.42	0.57	0.91	0.50	0.59	0.54	0.37	0.38	0.92	0.92	0.88	0.56	0.22	39.69

Cont



TABLE - V.2 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	1.64	1.63	0.58	0.85	0.71	0.64	0.68	0.71	0.61	0.70	0.95	0.76	0.99	1.46	0.81	1.51	0.95	0.38	39.91
24. Guj-State	0.70	1.03	1.14	1.43	1.26	1.04	0.99	0.99	1.14	1.41	0.90	0.69	0.80	0.75	0.85	0.70	0.99	0.24	24.48
25. Hin-Ciba	0.59	0.62	0.56	0.79	0.87	0.85	1.01	1.30	1.16	1.02	0.82	0.67	0.87	0.81	1.50	1.06	0.91	0.26	28.52
26. Hin-Lever	0.26	0.31	0.33	0.39	0.29	0.28	0.28	0.29	0.35	0.34	0.34	0.37	0.43	0.59	0.69	0.61	0.39	0.13	33.69
27. Hochest	0.38	0.31	0.26	0.33	0.53	0.62	0.58	0.59	0.55	0.46	0.58	0.63	0.65	0.61	0.59	0.50	0.51	0.13	24.50
28. I.C.I.	0.39	0.40	0.52	0.60	0.76	0.73	0.53	0.49	0.50	0.55	0.63	0.71	0.80	0.95	0.93	0.84	0.65	0.18	27.34
29. Ind-Dye	0.47	0.52	0.63	0.75	0.51	0.50	0.57	0.66	0.63	0.67	0.68	0.72	0.84	0.73	0.89	0.75	0.66	0.12	18.80
30. Ind-Oil	0.46	0.38	0.42	0.42	0.40	0.32	0.57	0.71	0.84	1.00	1.00	1.09	1.10	0.96	0.87	0.80	0.71	0.28	39.63
31. Jayant	0.20	0.22	0.14	0.21	0.38	0.45	0.48	0.47	0.42	0.47	0.38	0.30	0.29	0.30	0.37	0.46	0.35	0.11	31.96
32. Knoll	0.42	0.38	0.40	0.46	0.43	0.61	0.92	1.10	0.98	1.02	0.73	0.68	0.89	0.93	0.48	0.52	0.68	0.25	37.15
33. Lakme	0.57	0.53	0.83	0.79	0.65	0.66	0.72	0.95	0.82	0.74	0.79	0.77	1.09	0.98	0.98	0.98	1.09	1.18	109.08
34. National	0.69	0.64	0.54	0.50	0.72	0.90	0.95	0.89	0.91	0.98	1.12	1.13	1.09	0.96	1.12	0.81	0.87	0.21	23.52
35. Parke	1.09	1.31	1.29	1.14	1.05	0.94	0.89	0.81	0.72	0.63	0.65	0.77	0.60	0.88	0.80	0.99	0.91	0.22	24.37
36. Rallis	0.54	0.60	0.70	0.55	0.57	0.52	0.67	0.66	0.58	0.69	0.61	0.81	0.75	0.69	0.67	0.50	0.63	0.09	13.85
37. Ranbaxy	0.50	0.54	0.66	0.59	0.64	0.79	0.77	0.70	0.73	0.68	0.74	0.73	0.84	1.21	1.90	1.67	0.85	0.40	46.56
38. Searle	0.62	0.16	0.07	0.62	1.12	1.67	1.33	1.40	1.06	0.95	1.40	1.13	1.12	1.15	0.97	0.92	0.98	0.43	44.18
39. Synthetics	0.59	0.49	0.62	0.68	0.62	0.50	0.43	0.53	0.53	0.71	0.77	1.09	0.98	1.05	1.17	0.88	0.73	0.24	32.63
40. Tam-Dadha	0.49	0.49	0.50	0.52	0.78	0.63	0.58	0.52	0.68	0.50	0.50	0.49	0.50	0.47	0.84	0.73	0.58	0.12	20.56
41. Tata	0.38	0.38	0.59	1.08	0.87	1.11	0.77	1.22	1.64	1.51	1.62	1.98	1.61	0.84	1.60	1.69	1.18	0.50	42.62
42. Transpek	0.68	0.74	0.69	0.68	0.67	0.68	0.69	0.66	0.64	0.75	0.97	0.87	1.08	0.99	0.90	0.88	0.79	0.14	17.97
43. United	0.46	0.58	0.57	0.53	0.55	0.68	0.91	0.99	0.78	0.82	0.78	0.76	0.72	2.76	1.39	1.66	0.93	0.58	62.23
44. Zandu	0.58	0.58	0.50	0.55	0.52	0.47	0.61	0.57	0.57	0.58	0.57	0.60	0.63	0.72	0.79	0.77	0.60	0.09	14.97
45. Zuari	0.97	0.91	1.16	1.04	0.70	0.97	1.21	1.20	0.83	0.73	0.76	0.88	0.88	1.12	1.16	0.98	0.97	0.17	17.26
Average	0.67	0.61	0.68	0.71	0.70	0.73	0.73	0.79	0.74	0.76	0.76	0.81	0.82	0.94	0.96	1.03	0.78	0.26	32.48
S.D.	0.55	0.32	0.35	0.27	0.27	0.30	0.25	0.25	0.24	0.25	0.24	0.33	0.29	0.39	0.31	0.75	0.20		
C.V.	80.96	52.63	50.96	38.00	38.00	41.53	34.12	31.59	33.17	32.72	31.38	40.02	35.89	41.66	31.96	72.65	25.34		

quick ratio is examined over a period of time, minimum average quick ratio is found to be 0.35 for Jayant and the maximum average quick ratio is found to be 1.23 for Deepak. On examining companywise S.D. over a period of time the highest S.D. is found to be 1.18 for Lakme and the lowest S.D. is found to be 0.07 for Alembic. The highest C.V. found to be 109.08 for Lakme and the lowest is 12.35 for Alembic. The grand average of quick ratio for all companies for all years for the period under consideration comes to be 0.78. This ratio indicates that on an average the sample companies have its quick assets 0.78 times of current liabilities. The companies that have Quick Ratio less than one may find it difficult to meet its current obligations.

5.2 CAPITAL STRUCTURE RATIOS:

As explained in the preceding chapter structural ratios explain the capital structure, especially the sources of financing for the organisation. The following Para discusses the findings of the same.

5.2.a DEBT-EQUITY RATIO:

This ratio is derived as debt divided by equity.

Table V.3 presents the debt equity ratio for 45 companies for the period of 16 years from 1981 - 1996. It can be observed from the Table that the minimum ratio is found to be -216 for the year 1983 for Jayant and the maximum ratio is found to be 12.62 for Jayant for the year 1984. In Jayant for the years 1981 (30.6.81) and 1982 (30.6.83) the net worth figures are -3.45 and -41.07. This seems to be abnormal. No

explanation is available for decrease in net worth. On account of this the D/E ratio is negative, that too by higher tune, for 1982 and 1983. Wide fluctuations are observed over a period of time for given companies and over a period of time between the companies. To have an overall idea average of 45 companies for each of the year is computed. The lowest average is found to be -2.77 for the year 1983 taking all companies together and the highest average is found to be 2.33 for the year 1981 and 1992. To have an idea about the variations between the companies S.D. are also computed yearwise. The Lowest S.D. is found to be 0.79 for the year 1989 and the highest is 32.57 for the year 1983. Same way C.V. are also computed yearwise. The lowest C.V. is -1177 for the year 1983 and the highest is 1954 for the year 1982 taking all companies together. When the companywise D/E ratio is examined over a period of time, minimum average D/E ratio is found for Jayant to the tune of -14.05 and the maximum average D/E ratio is found to be 4.14 for Fulford. The D/E ratio of Basf has remained steady over a period of time, which is reflected, in its minimum S.D. of 0.17, where as the D/E ratio has widely fluctuated for Jayant, which is reflected in its highest S.D. of 57.20. To have an idea about the variations between the companies C.V. are also computed companywise. The minimum C.V. is found to be -407 for Jayant where as it is found to be highest to the tune of 114.60 for E.I.D. The grand average of D/E ratio is 1.60. It is very important to note here that some companies are highly debt oriented e.g. E.I.D, Indian Oil and Ranbaxy for most of the years, where as some companies have substantially low debt e.g. Cynamid, Parke etc.

TABLE - V.3

DEBT-EQUITY RATIO

Name	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	0.63	0.49	0.62	0.84	1.38	1.93	2.51	2.79	2.89	3.08	2.45	2.46	2.32	1.06	1.02	1.81	1.77	0.90	51.01
2. Aegies	3.55	5.77	6.79	5.63	3.00	2.31	2.27	2.27	2.69	3.06	2.96	0.70	0.66	0.74	0.58	0.76	2.73	1.94	71.01
3. Alembic	2.43	2.11	2.28	2.14	1.98	1.89	1.98	2.03	2.29	2.65	3.05	3.13	3.87	3.50	3.54	3.36	2.64	0.66	25.19
4. Atul	0.78	1.11	0.98	0.90	0.89	0.76	0.85	1.99	1.91	1.82	1.95	2.18	1.54	1.44	0.96	1.86	1.37	0.52	37.66
5. Basf	1.62	1.56	1.26	1.59	1.71	1.71	1.73	1.65	1.70	1.74	1.82	1.72	1.70	1.45	1.25	1.75	1.62	0.17	10.35
6. Bayer	1.35	1.18	1.29	1.22	1.28	1.29	1.22	1.39	1.47	1.94	2.00	2.08	2.11	2.24	3.28	3.57	1.81	0.73	40.66
7. Borax	1.47	2.68	0.82	0.67	1.52	0.62	0.96	0.80	1.32	1.22	1.68	1.69	2.48	1.82	2.20	2.58	1.53	0.68	44.41
8. Burroughs	3.71	3.35	3.22	1.27	0.64	1.05	1.21	1.39	1.71	1.89	1.49	1.74	1.96	1.14	1.30	0.79	1.74	0.92	52.61
9. Cipla	4.03	4.08	4.21	4.35	2.62	1.85	1.82	1.74	1.77	1.24	1.68	1.73	1.86	1.99	1.73	0.82	2.34	1.15	48.96
10. Citurgia	2.86	1.94	1.06	0.91	1.06	0.83	0.66	1.62	1.73	1.74	2.25	1.99	2.04	2.18	2.37	2.16	1.71	0.64	37.23
11. Colour	1.37	1.38	1.50	1.55	1.68	2.16	2.16	2.23	2.62	2.89	3.50	3.26	1.98	1.34	1.34	1.29	2.01	0.72	35.87
12. Cynamid	0.63	0.77	0.71	0.65	0.69	0.93	0.89	0.90	1.20	1.29	1.12	1.19	0.92	0.72	0.49	0.45	0.85	0.25	30.03
13. D.C.W.	1.47	1.60	1.91	1.36	1.25	1.16	0.99	0.99	1.09	1.76	2.50	4.12	1.27	1.53	1.01	1.25	1.58	0.79	49.75
14. Deepak	1.09	1.29	1.61	1.07	1.01	1.28	0.90	1.09	1.28	1.31	2.65	1.64	1.95	1.89	2.09	2.44	1.54	0.53	34.55
15. Duphar	1.40	1.81	1.57	1.65	1.93	2.39	2.59	3.00	2.95	3.06	3.15	2.72	2.95	3.35	2.91	0.54	2.37	0.80	33.60
16. E.I.D.	7.01	5.36	4.95	4.13	3.69	3.84	2.53	2.42	2.18	2.03	2.44	2.71	2.64	1.81	1.22	1.24	1.26	1.44	114.60
17. E. Merck	2.87	2.24	2.50	2.60	2.73	2.62	2.31	1.98	2.47	3.59	5.20	7.18	4.49	1.56	1.56	1.29	2.95	1.53	51.74
18. Excel	1.40	1.21	1.49	2.02	2.17	2.13	2.15	2.14	2.18	2.28	1.98	1.71	1.55	1.45	1.29	1.35	1.78	0.38	21.47
19. Ficom	1.50	2.32	2.90	2.66	2.57	1.71	1.29	1.27	1.21	1.18	1.26	1.57	1.75	0.73	0.76	1.12	1.61	0.67	41.22
20. Fulford	8.10	7.69	3.50	4.20	4.09	4.74	4.62	3.97	3.72	4.97	3.91	3.02	2.21	2.48	2.53	2.43	4.14	1.70	41.16
21. German	1.55	2.16	2.47	2.87	3.76	3.54	3.16	2.70	2.78	2.41	2.58	3.39	3.29	1.50	1.32	1.23	2.54	0.81	31.74
22. Glaxo	0.95	1.10	1.09	1.09	1.07	1.01	0.95	1.58	1.52	1.48	1.76	1.96	2.10	0.97	0.89	0.86	1.27	0.40	31.62

Cont.

TABLE - V.3 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	0.63	0.76	1.16	1.95	1.84	2.27	1.67	1.95	1.50	1.90	1.79	1.72	1.69	0.98	1.22	1.13	1.51	0.47	31.32
24. Guj-State	0.85	0.83	0.72	0.71	0.88	1.02	1.31	1.61	1.85	1.22	1.69	2.43	2.59	2.34	2.07	2.03	1.51	0.65	43.07
25. Hin-Ciba	0.61	0.73	0.85	0.65	0.63	0.72	0.60	0.49	0.61	0.75	0.90	1.35	1.59	1.62	0.61	0.79	0.84	0.36	42.14
26. Hin-Lever	1.38	1.40	1.29	1.41	1.47	1.44	1.46	1.72	1.56	1.62	1.68	1.79	1.79	1.88	2.03	1.91	1.61	0.22	13.66
27. Hochtst	1.75	1.76	1.62	1.39	1.37	1.23	0.95	1.14	1.55	2.30	1.22	0.97	1.08	1.02	1.05	1.21	1.35	0.37	27.07
28. I.C.I.	1.83	2.22	2.48	1.78	1.28	1.20	1.42	1.84	1.97	2.43	2.00	2.18	2.43	1.54	1.33	1.23	1.82	0.45	24.61
29. Ind-Dye	1.84	1.89	2.02	2.51	1.63	1.94	2.30	2.93	3.19	3.30	3.31	3.63	4.02	4.15	1.82	1.91	2.65	0.85	32.18
30. Ind-Oil	3.93	3.14	2.81	2.80	2.79	3.10	2.29	2.20	2.22	3.06	3.12	2.38	2.38	2.20	1.88	2.08	2.65	0.54	20.28
31. Jayant	9.81	-71.30	-216.20	12.62	6.44	4.27	3.91	3.93	3.85	3.77	2.85	2.58	2.44	2.51	2.69	0.98	-14.05	57.20	-407.00
32. Knoll	1.60	1.61	1.60	1.66	1.48	1.17	1.01	1.01	1.04	1.31	1.40	1.29	1.22	1.52	1.55	1.47	1.37	0.22	16.41
33. Lakme	4.68	3.06	1.77	2.35	1.77	1.79	2.38	1.91	1.83	1.73	1.88	2.21	1.06	1.15	1.07	0.20	1.93	0.98	51.01
34. National	1.38	1.67	2.06	2.35	1.91	1.49	1.33	1.37	1.49	1.30	1.56	1.50	1.50	1.68	2.01	1.77	1.65	0.30	18.30
35. Parke	0.62	0.81	0.76	0.52	0.54	0.73	0.97	1.09	1.08	1.02	1.30	1.20	1.41	1.09	1.32	0.98	0.97	0.28	28.65
36. Rallis	3.83	3.45	3.29	3.31	3.04	3.14	3.37	2.46	2.78	3.28	3.22	3.19	3.43	3.27	3.86	5.00	3.37	0.55	16.34
37. Ranbaxy	3.07	3.08	3.55	3.52	3.54	4.12	4.59	4.15	3.13	3.05	2.84	3.43	1.92	1.72	0.94	0.81	2.97	1.10	36.94
38. Searle	1.11	1.57	1.29	0.88	0.71	0.54	0.64	0.74	1.09	1.36	0.81	0.89	0.88	0.73	0.95	1.09	0.95	0.28	29.33
39. Synthetics	2.08	2.61	3.06	3.27	3.29	1.63	0.99	0.73	0.98	1.12	1.47	2.35	3.06	2.39	1.98	1.91	2.06	0.86	41.62
40. Tam-Dradha	3.93	4.45	4.62	4.46	5.03	3.99	3.39	2.77	2.68	3.62	4.69	4.22	4.28	3.90	3.68	3.50	3.95	0.66	16.75
41. Tata	1.36	1.46	1.30	1.46	1.94	1.47	2.24	1.62	1.26	1.47	2.16	1.97	2.27	1.91	1.71	1.41	1.69	0.34	20.41
42. Transpek	1.36	1.12	1.19	1.50	1.96	2.65	2.79	3.16	3.37	3.33	3.47	3.82	1.78	1.92	1.75	1.67	2.30	0.91	39.43
43. United	2.51	2.61	2.16	2.35	2.48	2.84	3.40	3.29	2.88	4.10	2.48	2.48	2.58	0.49	0.67	0.99	2.40	0.96	40.22
44. Zandu	2.23	2.20	2.30	2.94	2.74	2.79	2.31	2.43	1.80	1.65	1.51	1.73	1.85	1.62	1.79	2.41	2.14	0.45	20.97
45. Zuari	0.79	1.10	1.06	1.02	1.06	1.24	1.09	1.12	1.48	1.28	1.24	1.86	1.48	1.75	1.62	1.26	1.28	0.29	22.64
Average	2.33	0.57	-2.77	2.28	2.06	1.97	1.91	1.95	2.00	2.19	2.27	2.33	2.14	1.78	1.67	1.61	1.60	1.95	121.50
S.D.	1.97	11.05	32.57	1.98	1.23	1.08	1.04	0.90	0.79	0.98	0.96	1.13	0.89	0.84	0.83	0.92	2.50		
C.V.	84.26	1954	-1177	86.8	59.94	55.0	54.14	46.0	39.69	44.63	42.49	48.44	41.56	46.91	49.75	57.16	156.1		

Thus within the industry there seems to be wide variations. The overall average of 2:1 to 1.5:1 is generally accepted.

5.2.b. PROPRIETARY RATIO or TE/TA RATIO:

Where as the D/E ratio examines the proportion of debt to equity, this ratio examines the extent to which assets are financed from owners' fund. Thus, this ratio is derived as the shareholders' funds divided by total assets or total equity divided by total assets.

Table V.4 presents the total equity to total assets ratio for 45 companies for the period of 16 years from 1981-1996. It can be observed from the Table that the minimum ratio is found to be -0.01 for Jayant for the year 1982 and the maximum ratio is found to be 0.83 for Lakme for the year 1996. Wide fluctuations are observed over a period of time for given companies. On examining the yearwise average the lowest average ratio is found to be 0.33 for the year 1991 and 1992 and the same is found to be highest to the tune of 0.42 for the year 1996 taking all companies together. On examining the variations the highest S.D. is found to be 0.15 for the year 1981 and the lowest is 0.09 for the year 1989, 1991, 1992 and 1993 taking all companies together. The minimum C.V. is 26.01 for the year 1989 and the maximum is 39.37 for the year 1981 taking all companies together. When the companywise TE/TA ratio is examined over a period of time, minimum average TE/TA ratio is found to be 0.20 for Jayant and the maximum TE/TA ratio is 0.56 for Hindustan Ciba. The highest S.D. is found to be

TABLE - V.4
 PROPRIETARY RATIO OF TOTAL EQUITY TO TOTAL ASSETS RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	0.61	0.67	0.62	0.54	0.42	0.34	0.28	0.26	0.25	0.25	0.29	0.29	0.30	0.49	0.50	0.36	0.40	0.15	36.38
2. Aegies	0.22	0.15	0.13	0.15	0.25	0.30	0.31	0.31	0.27	0.25	0.25	0.59	0.60	0.58	0.63	0.57	0.35	0.18	52.10
3. Alembic	0.29	0.32	0.30	0.32	0.34	0.35	0.34	0.33	0.30	0.27	0.25	0.24	0.21	0.22	0.22	0.23	0.28	0.05	17.04
4. Atul	0.56	0.47	0.51	0.53	0.53	0.57	0.57	0.46	0.35	0.35	0.34	0.31	0.39	0.41	0.51	0.34	0.45	0.09	20.40
5. Basf	0.37	0.38	0.44	0.38	0.36	0.37	0.36	0.38	0.37	0.37	0.35	0.37	0.37	0.41	0.44	0.36	0.38	0.03	6.99
6. Bayer	0.43	0.46	0.44	0.45	0.44	0.44	0.45	0.42	0.41	0.34	0.33	0.32	0.32	0.31	0.23	0.22	0.38	0.08	20.94
7. Borax	0.41	0.27	0.55	0.60	0.40	0.62	0.51	0.55	0.43	0.45	0.37	0.37	0.29	0.35	0.31	0.28	0.42	0.11	26.94
8. Burroughs	0.21	0.23	0.24	0.44	0.61	0.49	0.45	0.42	0.37	0.35	0.40	0.36	0.34	0.47	0.43	0.56	0.40	0.11	28.07
9. Cipla	0.19	0.19	0.19	0.18	0.27	0.35	0.35	0.36	0.36	0.45	0.37	0.37	0.35	0.33	0.37	0.55	0.33	0.10	30.78
10. Citurgia	0.26	0.34	0.49	0.52	0.34	0.55	0.60	0.38	0.37	0.36	0.31	0.33	0.33	0.31	0.30	0.32	0.38	0.10	26.44
11. Colour	0.40	0.40	0.38	0.37	0.36	0.32	0.32	0.31	0.28	0.26	0.22	0.23	0.34	0.45	0.43	0.44	0.34	0.07	21.06
12. Cynamid	0.61	0.56	0.59	0.61	0.59	0.52	0.53	0.53	0.45	0.44	0.47	0.46	0.52	0.58	0.67	0.69	0.55	0.08	13.74
13. D.C.W.	0.39	0.37	0.34	0.42	0.44	0.46	0.50	0.50	0.48	0.36	0.29	0.20	0.44	0.40	0.50	0.45	0.41	0.08	20.64
14. Deepak	0.47	0.43	0.38	0.47	0.40	0.34	0.53	0.48	0.44	0.43	0.27	0.38	0.34	0.35	0.32	0.29	0.39	0.07	18.62
15. Duphar	0.42	0.36	0.39	0.38	0.34	0.29	0.28	0.25	0.25	0.25	0.24	0.27	0.25	0.23	0.26	0.65	0.32	0.11	33.50
16. E.I.D.	0.12	0.15	0.16	0.19	0.21	0.20	0.28	0.29	0.31	0.33	0.29	0.27	0.27	0.36	0.45	0.43	0.27	0.10	35.46
17. E. Merck	0.26	0.31	0.28	0.28	0.27	0.28	0.30	0.34	0.29	0.22	0.16	0.12	0.18	0.39	0.39	0.44	0.28	0.08	29.98
18. Excel	0.42	0.46	0.40	0.33	0.32	0.32	0.32	0.32	0.31	0.31	0.34	0.37	0.39	0.41	0.44	0.43	0.37	0.05	14.26
19. Ficom	0.40	0.30	0.26	0.27	0.28	0.37	0.44	0.44	0.45	0.46	0.44	0.39	0.36	0.58	0.57	0.47	0.41	0.10	23.69
20. Fulford	0.11	0.12	0.22	0.19	0.20	0.17	0.18	0.20	0.21	0.17	0.20	0.25	0.31	0.29	0.28	0.29	0.21	0.06	28.17
21. German	0.44	0.32	0.29	0.26	0.21	0.22	0.24	0.27	0.26	0.29	0.28	0.23	0.23	0.40	0.43	0.45	0.30	0.08	27.19
22. Glaxo	0.51	0.47	0.48	0.48	0.48	0.50	0.51	0.39	0.38	0.40	0.36	0.34	0.32	0.51	0.53	0.54	0.45	0.07	16.02

Cont.

TABLE - V.4 cont.

\ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	0.61	0.57	0.46	0.34	0.35	0.31	0.38	0.34	0.40	0.34	0.36	0.37	0.37	0.51	0.45	0.47	0.41	0.09	21.43
24. Guj-State	0.54	0.55	0.58	0.58	0.53	0.50	0.43	0.38	0.35	0.45	0.37	0.29	0.28	0.30	0.33	0.33	0.42	0.11	25.69
25. Hin-Ciba	0.62	0.58	0.54	0.60	0.61	0.58	0.63	0.67	0.62	0.57	0.53	0.43	0.39	0.38	0.62	0.56	0.56	0.09	15.74
26. Hin-Lever	0.42	0.42	0.44	0.42	0.41	0.41	0.41	0.37	0.39	0.38	0.37	0.36	0.36	0.35	0.33	0.34	0.39	0.03	8.34
27. Hoechst	0.36	0.36	0.38	0.42	0.42	0.45	0.51	0.47	0.39	0.30	0.45	0.51	0.48	0.50	0.49	0.45	0.43	0.06	13.85
28. I.C.I.	0.34	0.33	0.30	0.36	0.44	0.45	0.41	0.35	0.34	0.29	0.33	0.31	0.29	0.39	0.43	0.45	0.36	0.06	15.67
29. Ind-Dye	0.35	0.34	0.33	0.28	0.38	0.34	0.30	0.25	0.24	0.23	0.23	0.22	0.20	0.19	0.36	0.34	0.29	0.06	21.76
30. Ind-Oil	0.20	0.24	0.26	0.26	0.26	0.24	0.30	0.31	0.31	0.25	0.24	0.30	0.30	0.31	0.35	0.32	0.28	0.04	13.93
31. Jayant	0.10	-0.01	0.00	0.07	0.12	0.18	0.20	0.20	0.20	0.20	0.25	0.27	0.29	0.28	0.27	0.50	0.20	0.13	64.73
32. Knoll	0.38	0.38	0.38	0.37	0.44	0.64	0.50	0.50	0.49	0.43	0.42	0.44	0.45	0.40	0.39	0.40	0.44	0.07	15.42
33. Lakme	0.18	0.25	0.36	0.30	0.36	0.36	0.30	0.34	0.35	0.37	0.35	0.31	0.49	0.47	0.48	0.83	0.38	0.14	38.11
34. National	0.42	0.37	0.33	0.30	0.34	0.40	0.43	0.42	0.40	0.44	0.39	0.40	0.40	0.37	0.33	0.36	0.38	0.04	10.54
35. Parke	0.62	0.55	0.57	0.66	0.65	0.58	0.51	0.48	0.48	0.49	0.43	0.46	0.42	0.48	0.43	0.50	0.52	0.08	14.71
36. Rallis	0.20	0.22	0.23	0.22	0.24	0.24	0.23	0.29	0.26	0.23	0.24	0.24	0.16	0.23	0.21	0.17	0.23	0.03	13.91
37. Ranbaxy	0.23	0.24	0.21	0.22	0.22	0.19	0.18	0.19	0.24	0.25	0.26	0.23	0.34	0.37	0.51	0.55	0.28	0.11	40.54
38. Searle	0.48	0.39	0.46	0.61	0.61	0.65	0.61	0.57	0.48	0.42	0.55	0.53	0.53	0.58	0.51	0.48	0.53	0.07	14.04
39. Synthetics	0.33	0.28	0.25	0.23	0.23	0.38	0.50	0.58	0.50	0.47	0.41	0.30	0.25	0.30	0.34	0.34	0.35	0.11	30.72
40. Tam-Dadha	0.20	0.18	0.18	0.18	0.17	0.20	0.23	0.27	0.27	0.22	0.18	0.19	0.19	0.20	0.21	0.22	0.21	0.03	14.66
41. Tata	0.42	0.40	0.43	0.40	0.34	0.40	0.31	0.38	0.44	0.40	0.32	0.34	0.31	0.34	0.37	0.41	0.38	0.05	12.11
42. Transpek	0.42	0.47	0.46	0.40	0.34	0.27	0.26	0.24	0.23	0.23	0.22	0.21	0.36	0.34	0.36	0.37	0.32	0.09	27.05
43. United	0.28	0.28	0.32	0.30	0.29	0.26	0.23	0.23	0.26	0.20	0.29	0.29	0.28	0.67	0.60	0.50	0.33	0.14	41.53
44. Zandu	0.30	0.30	0.29	0.25	0.27	0.26	0.30	0.29	0.36	0.38	0.40	0.37	0.35	0.38	0.36	0.29	0.32	0.05	14.50
45. Zuari	0.53	0.45	0.46	0.47	0.47	0.43	0.46	0.46	0.39	0.43	0.43	0.34	0.39	0.36	0.38	0.44	0.43	0.05	11.41
Average	0.37	0.35	0.36	0.37	0.37	0.38	0.38	0.37	0.36	0.34	0.33	0.33	0.34	0.39	0.41	0.42	0.37	0.08	22.23
S.D.	0.15	0.14	0.14	0.14	0.13	0.13	0.12	0.11	0.09	0.10	0.09	0.09	0.09	0.11	0.11	0.13	0.09		
C.V.	39.37	39.24	37.70	38.66	34.97	34.44	32.48	30.10	26.01	28.18	27.20	28.84	27.82	27.88	28.25	30.92	23.38		

0.18 for Aegies and the lowest is 0.03 for Basf, Hindustan Lever, Rallis and Tam-Dadha. The C.V. is also computed company wise. The highest C.V. is found to be 64.73 for Jayant and the lowest is 10.54 for National. The grand average of TE/TA ratio for all companies taken together and all years taken together comes to 0.37. This ratio indicates that on an average 37% of total assets are financed through equity.

5.2.c INTEREST COVERAGE RATIO:

This ratio is derived as Earning Before Interest and Tax plus Depreciation divided by Interest.

Table V.5 presents the interest coverage ratio for 45 companies for the period of 16 years from 1981-1996. It can be observed from the Table that the minimum ratio is found to be -5.36 for the year 1990 for E.I.D. The highest ratio is found to be 77.09 for Ranbaxy for the year 1995. Wide fluctuations are observed over a period of time for given companies. Averages of 45 companies for each of the year is computed. The lowest average is found to be 3.09 for the year 1993 and the highest is 6.51 for the year 1995. On examining variations the highest S.D. is found to be 11.41 for the year 1995 and the lowest 1.89 for the year 1992. Similarly, yearwise C.V. are also computed. The lowest C.V. is found to be 59.25 taking all companies together for the year 1992 and the same is found to be highest at 175.3 for the year 1995 taking all companies together. When the companywise interest coverage ratio is examined over a period of time minimum average interest coverage ratio is found for E.I.D. at 1.42 and the maximum is found

TABLE - V.5

INTEREST COVERAGE RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	3.94	2.06	3.52	2.73	1.78	1.32	0.65	1.25	1.49	1.30	1.95	1.89	2.88	7.79	14.62	0.94	3.13	3.51	111.90
2. Aegies	5.29	1.31	0.91	1.02	2.14	3.36	3.84	3.37	2.24	1.91	2.07	1.63	1.37	3.14	6.79	2.96	2.71	1.60	59.01
3. Alembic	1.48	2.84	3.30	2.53	1.77	1.80	1.90	1.89	2.01	1.56	1.71	2.02	1.64	1.92	1.80	1.58	1.98	0.50	25.06
4. Atul	4.80	3.57	3.26	2.50	2.13	1.78	1.18	1.04	1.38	3.10	2.52	1.25	1.14	1.64	1.17	1.70	2.13	1.08	50.77
5. Basf	4.54	3.81	3.52	3.30	3.00	2.73	3.00	3.83	4.27	3.88	4.06	4.69	3.31	4.08	4.57	3.88	3.78	0.59	15.73
6 Bayer	2.81	3.18	4.65	4.51	4.66	4.18	4.12	4.66	4.61	3.10	3.45	3.17	3.04	3.20	2.12	1.20	3.54	1.01	28.66
7 Borax	4.96	3.38	15.68	15.63	3.70	5.86	5.13	3.09	2.72	3.17	2.62	3.04	2.33	3.05	5.40	3.43	5.20	4.22	81.10
8. Burroughs	7.61	6.74	5.90	4.74	5.53	2.11	1.55	2.72	3.08	1.79	1.85	1.81	1.72	2.25	3.08	0.79	3.33	2.09	62.83
9. Cipla	5.31	4.75	6.03	5.84	4.56	3.39	3.03	4.25	5.01	8.85	6.41	3.68	2.55	2.89	4.24	3.65	4.65	1.61	34.51
10. Citurgia	3.11	4.26	5.98	6.44	7.81	6.55	9.81	10.79	6.04	6.45	4.06	4.41	5.67	3.75	1.69	2.94	5.61	2.45	43.61
11. Colour	3.83	3.42	2.72	2.58	2.70	2.58	3.64	2.97	2.50	2.31	2.18	1.74	2.15	3.21	3.80	4.03	2.90	0.69	23.70
12. Cynamid	4.72	2.66	3.40	5.56	7.36	5.84	4.23	4.57	4.74	5.68	6.70	7.83	6.86	12.58	21.00	21.64	7.83	5.73	73.11
13. D.C.W.	5.96	4.18	1.26	1.94	2.86	5.16	5.87	3.98	3.43	5.05	5.49	3.62	4.06	3.40	6.23	2.63	4.07	1.48	36.26
14. Deepak	7.26	6.55	5.93	4.46	3.83	3.56	2.81	2.81	3.32	3.11	3.07	3.53	2.01	1.77	1.59	1.39	3.56	1.73	48.57
15. Duphar	4.29	2.50	3.42	5.59	4.17	3.24	2.65	2.95	2.36	2.43	2.55	2.27	2.04	1.92	2.17	-0.91	2.73	1.38	50.68
16. E.I.D.	1.87	1.80	1.61	1.32	1.16	1.69	-0.43	1.19	3.18	-5.36	2.53	2.63	0.76	1.77	3.72	3.21	1.42	2.08	146.70
17. E. Merck	2.91	3.57	3.10	3.01	2.92	2.72	2.67	2.57	2.63	2.22	1.50	1.18	1.45	2.22	4.10	4.62	2.71	0.91	33.73
18. Excel	2.50	3.03	4.00	3.20	2.27	1.93	1.79	2.69	3.31	3.86	4.20	5.40	4.43	3.38	4.01	3.34	3.33	0.97	29.09
19. Ficom	2.43	2.32	1.60	2.37	4.22	5.73	6.90	6.93	6.76	5.10	3.80	3.38	3.76	3.54	2.40	2.15	3.96	1.81	45.73
20. Fulford	2.35	2.86	3.39	3.45	2.72	2.57	2.46	2.28	2.05	1.54	1.51	1.43	2.00	2.52	1.99	3.03	2.38	0.62	26.07
21. German	3.98	4.18	3.69	3.53	2.73	2.40	1.81	2.38	2.14	3.00	1.85	0.98	1.34	3.52	7.00	6.41	3.18	1.66	52.28
22. Glaxo	6.19	5.66	6.01	7.39	9.98	9.58	5.77	5.43	2.94	2.97	2.97	2.29	2.27	3.15	4.13	5.83	5.16	2.41	46.62

Cont.

TABLE - V.5 cont

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	18.29	16.81	9.15	2.86	3.88	3.67	2.37	3.25	5.21	4.14	5.13	4.74	5.69	3.48	4.76	6.19	6.23	4.70	75.57
24. Guj-State	10.37	5.87	6.31	8.08	8.71	9.95	3.80	2.77	2.93	5.82	4.86	3.66	2.46	1.73	2.01	3.25	5.16	2.84	55.03
25. Hin-Ciba	7.63	8.06	8.68	9.71	13.31	12.64	12.93	26.21	31.85	13.88	11.14	6.00	6.08	5.19	6.10	9.51	11.81	7.36	62.32
26. Hin-Lever	10.01	9.85	9.15	8.44	6.33	7.20	6.65	5.62	6.20	7.95	8.76	8.44	7.61	10.06	12.34	15.10	8.73	2.44	27.91
27. Hochtect	4.32	3.96	4.02	4.17	3.78	2.57	1.60	1.29	1.49	1.90	1.70	1.83	2.08	3.03	6.94	4.67	3.08	1.56	50.44
28. I.C.I.	5.58	3.04	2.78	3.57	3.38	3.19	3.04	2.68	2.86	-1.51	2.59	-1.37	-1.94	-2.04	8.12	10.39	2.77	3.43	123.80
29. Ind-Dye	1.73	1.99	2.06	2.18	1.47	0.58	0.74	1.59	1.15	1.65	1.81	2.00	1.84	1.67	1.69	1.41	1.60	0.45	28.23
30. Ind-Oil	2.57	3.13	5.19	6.73	6.46	8.46	13.44	10.05	6.34	3.09	1.77	1.63	3.23	4.00	4.01	0.59	5.04	3.42	67.70
31. Jayant	0.36	0.53	1.34	1.92	3.52	3.25	2.65	2.66	2.74	1.70	2.07	2.12	1.69	1.49	1.80	2.66	2.03	0.88	43.09
32. Knoll	9.86	10.50	11.59	13.29	14.21	16.52	17.13	15.64	10.21	6.96	6.83	5.20	5.98	5.18	6.58	6.87	10.16	4.16	40.93
33. Lakme	0.73	3.11	1.29	0.55	3.25	2.29	2.40	2.10	2.54	2.44	1.62	1.21	0.89	4.86	4.96	5.39	2.48	1.52	61.30
34. National	3.94	2.47	1.46	2.29	3.54	4.32	4.65	5.38	6.19	5.99	5.18	3.90	2.82	1.59	2.81	2.54	3.69	1.50	40.64
35. Parke	11.57	5.03	5.41	8.57	13.59	7.54	4.74	6.42	7.81	13.17	8.78	5.56	10.68	11.17	10.34	1.67	8.25	3.35	40.57
36. Rallis	2.06	1.90	1.95	0.36	2.04	2.73	2.99	2.77	2.88	1.67	1.53	1.85	2.01	2.59	2.43	2.16	2.12	0.65	30.45
37. Ranbaxy	2.04	2.71	2.63	2.44	2.39	2.20	1.89	2.14	2.33	2.89	2.75	2.75	3.36	4.71	77.09	42.80	9.82	20.55	209.30
38. Searle	7.05	4.06	3.38	6.94	13.69	11.50	7.30	6.46	5.67	5.24	4.17	3.69	4.00	4.93	6.37	3.70	6.13	2.87	46.80
39. Synthetics	1.95	0.95	0.71	1.73	2.25	1.45	1.39	3.96	3.81	2.81	2.77	2.97	2.48	1.53	1.52	2.79	2.19	0.95	43.43
40. Tam-Dadha	2.31	2.10	2.27	3.37	3.01	2.45	2.66	2.63	2.39	1.93	1.18	1.56	1.94	1.73	1.83	1.68	2.19	0.56	25.80
41. Tata	7.29	5.34	4.63	4.05	3.06	2.32	2.89	2.27	2.43	2.14	2.04	2.59	2.91	3.01	3.32	3.48	3.36	1.39	41.44
42. Transpek	2.75	2.97	7.01	7.63	3.86	3.26	3.58	3.37	3.36	2.97	2.56	4.07	3.30	3.00	2.42	2.18	3.64	1.52	41.83
43. United	2.47	1.96	3.61	4.38	4.01	3.72	1.88	0.62	0.82	1.65	3.89	6.36	5.29	3.80	7.02	6.29	3.61	1.96	54.26
44. Zandu	2.39	1.92	2.36	2.36	3.43	3.68	6.50	8.64	6.89	6.11	5.01	4.23	2.95	4.18	4.24	3.24	4.26	1.92	45.01
45. Zuari	6.65	3.95	5.52	6.36	6.20	4.19	3.95	3.24	3.41	3.08	3.99	4.67	2.94	3.33	6.54	3.72	4.48	1.33	29.56
Average	4.80	4.02	4.34	4.57	4.74	4.44	4.12	4.43	4.31	3.66	3.58	3.19	3.09	3.58	6.51	4.95	4.27	0.82	19.21
S.D.	3.37	2.85	2.97	3.16	3.41	3.31	3.47	4.37	4.64	3.20	2.21	1.89	2.12	2.56	11.41	6.95	3.87		
C.V.	70.11	71.03	68.29	69.22	71.89	74.65	84.08	98.70	107.7	87.44	61.67	59.25	68.64	71.51	175.3	140.4	90.57		

to be 11.81 for the Hindustan Ciba. The interest coverage ratio has widely fluctuated for Ranbaxy, which is reflected in its highest S.D. and C.V. of 20.6 and 209.3 respectively. The S.D. is found at 0.45 for Indian Dyes. Minimum C.V. is 15.73 for Basf. The grand average of interest coverage ratio for all companies taken together and all years taken together comes to be 4.27. This indicates that on an average companies' Earning Before Interest and Tax is 4.27 times the interest payments. This indicates a sound position of companies on an average, for period under study.

5.2.d LONG-TERM DEBT to TOTAL ASSETS RATIO:

This ratio is derived as long-term debt divided by total assets.

Table V.6 presents the long-term debt to total assets ratio for 45 companies for the period of 16 years from 1981 - 1996. It is very interesting to note from the Table that some of the companies do not have any long-term debt at all e.g. Fulford. Therefore, the ratio is zero. There are some other companies like Borex, Burroughs, Cynamid, Hindustan Ciba, Hindustan Lever, Parke, Rallis, and Synthetics for which this ratio is zero for some of the years, as there is no long-term debt for those years. The minimum ratio is found to be -4.16 for the year 1983 for Searle. In general negative ratio is not expected, however, on account of negative long-term debt for Searle for the year 1982, it is found to be negative. The highest ratio is found to be 0.69 for the year 1996 for Aegies. Wide fluctuations are observed over a period

TABLE - V.6

LONG-TERM DEBT TO TOTAL ASSETS RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	0.00	0.01	0.07	0.12	0.05	0.03	0.02	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.11	0.03	0.04	112.10
2. Aegies	0.56	0.30	0.28	0.35	0.38	0.36	0.35	0.33	0.32	0.31	0.37	0.26	0.16	0.14	0.09	0.69	0.33	0.15	44.76
3. Alembic	0.11	0.06	0.04	0.03	0.03	0.08	0.09	0.09	0.11	0.25	0.08	0.04	0.18	0.26	0.33	0.36	0.13	0.11	81.97
4. Atul	0.05	0.04	0.06	0.10	0.09	0.07	0.07	0.36	0.22	0.20	0.24	0.18	0.20	0.17	0.15	0.30	0.16	0.09	61.08
5. Basf	0.09	0.12	0.20	0.19	0.19	0.16	0.14	0.11	0.05	0.01	0.02	0.09	0.08	0.04	0.08	0.30	0.12	0.08	66.42
6. Bayer	0.03	0.03	0.03	0.04	0.03	0.03	0.09	0.20	0.18	0.07	0.22	0.06	0.08	0.11	0.24	0.29	0.11	0.09	80.21
7. Borax	0.08	0.08	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.14	0.11	0.09	0.24	0.16	0.07	0.07	105.10
8. Burroughs	0.04	0.03	0.04	0.05	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	130.80
9. Cipla	0.05	0.07	0.12	0.16	0.12	0.10	0.10	0.08	0.06	0.08	0.05	0.07	0.14	0.13	0.12	0.09	0.10	0.03	33.43
10. Citurgia	0.47	0.44	0.38	0.32	0.19	0.26	0.06	0.23	0.08	0.04	0.13	0.12	0.08	0.04	0.03	0.05	0.18	0.15	82.50
11. Colour	0.08	0.05	0.06	0.06	0.04	0.14	0.13	0.13	0.02	0.04	0.06	0.21	0.18	0.11	0.14	0.11	0.10	0.06	56.94
12. Cynamid	0.01	0.05	0.15	0.16	0.15	0.09	0.05	0.09	0.03	0.00	0.07	0.09	0.01	0.00	0.00	0.00	0.06	0.06	95.97
13. D.C.W.	0.03	0.01	0.09	0.09	0.02	0.06	0.13	0.16	0.16	0.28	0.32	0.22	0.22	0.23	0.13	0.17	0.14	0.09	63.93
14. Deepak	0.13	0.20	0.23	0.17	0.11	0.10	0.10	0.09	0.06	0.03	0.17	0.05	0.16	0.03	0.04	0.11	0.11	0.06	54.73
15. Duphar	0.01	0.02	0.06	0.07	0.07	0.06	0.09	0.10	0.07	0.04	0.12	0.07	0.10	0.08	0.06	0.03	0.06	0.03	45.35
16. E.I.D.	0.14	0.16	0.15	0.13	0.11	0.10	0.09	0.11	0.11	0.10	0.09	0.14	0.12	0.11	0.07	0.25	0.12	0.04	34.24
17. E. Merck	0.03	0.06	0.08	0.08	0.07	0.06	0.06	0.06	0.04	0.06	0.09	0.09	0.09	0.04	0.01	0.02	0.06	0.02	40.03
18. Excel	0.07	0.03	0.17	0.26	0.21	0.19	0.11	0.01	0.01	0.03	0.07	0.06	0.10	0.18	0.07	0.08	0.10	0.08	72.48
19. Ficom	0.56	0.40	0.37	0.33	0.28	0.23	0.18	0.19	0.19	0.16	0.12	0.15	0.12	0.09	0.10	0.08	0.22	0.13	60.43
20. Fulford	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	191.50
21. German	0.00	0.00	0.03	0.12	0.15	0.06	0.06	0.05	0.04	0.06	0.12	0.13	0.11	0.08	0.05	0.03	0.07	0.05	68.01
22. Glaxo	0.08	0.11	0.05	0.04	0.06	0.04	0.13	0.11	0.01	0.08	0.09	0.01	0.08	0.07	0.04	0.02	0.06	0.04	55.17

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TABLE - V.6 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	0.20	0.21	0.21	0.18	0.19	0.18	0.18	0.16	0.18	0.31	0.32	0.31	0.34	0.35	0.31	0.27	0.25	0.07	28.05
24. Guj-State	0.07	0.10	0.04	0.06	0.07	0.06	0.12	0.12	0.10	0.11	0.24	0.25	0.27	0.24	0.23	0.20	0.14	0.08	56.99
25. Hin-Ciba	0.00	0.01	0.02	0.02	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.18	0.16	0.01	0.01	0.03	0.06	187.70
26. Hin-Lever	0.04	0.03	0.02	0.02	0.01	0.01	0.02	0.03	0.03	0.01	0.00	0.02	0.06	0.04	0.03	0.03	0.03	0.01	58.40
27. Hocheat	0.03	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02	0.06	0.08	0.10	0.09	0.09	0.11	0.11	0.06	0.03	59.16
28. I.C.I.	0.08	0.12	0.12	0.09	0.06	0.04	0.04	0.06	0.08	0.09	0.09	0.08	0.15	0.04	0.06	0.03	0.08	0.03	42.74
29. Ind-Dye	0.07	0.08	0.06	0.05	0.05	0.04	0.05	0.09	0.09	0.08	0.06	0.06	0.12	0.08	0.05	0.02	0.06	0.03	38.86
30. Ind-Oil	0.09	0.10	0.10	0.16	0.15	0.10	0.07	0.02	0.01	0.03	0.03	0.11	0.09	0.10	0.10	0.07	0.08	0.04	51.44
31. Jayant	0.45	0.50	0.43	0.29	0.28	0.21	0.17	0.16	0.13	0.15	0.15	0.12	0.10	0.09	0.07	0.04	0.21	0.14	68.43
32. Knoll	0.12	0.10	0.09	0.07	0.04	0.10	0.05	0.07	0.01	0.10	0.04	0.07	0.07	0.02	0.02	0.03	0.06	0.03	54.53
33. Lakme	0.02	0.04	0.12	0.16	0.12	0.10	0.10	0.12	0.03	0.03	0.02	0.02	0.02	0.01	0.08	0.01	0.06	0.05	81.82
34. National	0.00	0.00	0.03	0.12	0.11	0.10	0.08	0.06	0.07	0.07	0.04	0.03	0.03	0.05	0.19	0.08	0.07	0.05	73.21
35. Parke	0.05	0.14	0.11	0.00	0.00	0.00	0.06	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	154.30
36. Rallis	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.03	0.05	0.09	0.08	0.02	0.03	124.40
37. Ranbaxy	0.11	0.08	0.04	0.04	0.04	0.04	0.05	0.03	0.03	0.04	0.09	0.02	0.08	0.00	0.01	0.11	0.05	0.03	66.59
38. Searle	0.02	-1.54	-4.16	0.07	0.08	0.09	0.03	0.03	0.03	0.02	0.06	0.05	0.08	0.07	0.04	0.02	-0.31	1.10	-350.90
39. Synthetics	0.03	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.03	0.09	0.09	0.07	0.12	0.13	0.13	0.11	0.05	0.05	94.16
40. Tam-Dadha	0.19	0.20	0.16	0.10	0.06	0.06	0.04	0.01	0.06	0.04	0.06	0.05	0.04	0.06	0.37	0.37	0.12	0.11	98.14
41. Tata	0.10	0.07	0.06	0.06	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.15	0.23	0.29	0.26	0.22	0.10	0.10	98.18
42. Transpek	0.06	0.04	0.04	0.07	0.06	0.03	0.04	0.08	0.05	0.13	0.17	0.13	0.13	0.15	0.11	0.07	0.08	0.04	52.81
43. United	0.21	0.17	0.11	0.09	0.11	0.10	0.08	0.07	0.08	0.04	0.03	0.07	0.10	0.06	0.07	0.15	0.10	0.05	47.24
44. Zandu	0.05	0.06	0.08	0.10	0.10	0.11	0.12	0.14	0.10	0.14	0.19	0.18	0.21	0.18	0.17	0.23	0.13	0.05	39.24
45. Zuari	0.28	0.24	0.16	0.07	0.09	0.19	0.16	0.13	0.04	0.02	0.02	0.01	0.08	0.11	0.21	0.10	0.12	0.08	69.17
Average	0.11	0.07	0.01	0.11	0.09	0.09	0.08	0.09	0.07	0.08	0.10	0.09	0.11	0.10	0.10	0.12	0.09	0.08	65.15
S.D.	0.14	0.27	0.64	0.09	0.08	0.08	0.07	0.08	0.07	0.08	0.09	0.08	0.07	0.08	0.09	0.14	0.09		
C.V.	129.7	394.1	4369	84.41	89.56	89.99	81.96	90.67	101.6	107.4	94.00	83.62	67.84	83.73	90.45	108.8	100.4		

of time for given companies. Taking yearwise average the lowest average is found to be 0.01 for the year 1983 and the highest is 0.12 for the year 1996. To have an idea about the variations between the companies S.D. are also computed yearwise. The highest S.D. is found to be 0.64 for the year 1983 and the lowest S.D. is found to be 0.07 for the years 1987, 1989 and 1993. To have an idea about variations in the companies C.V. are also computed yearwise. The highest C.V. is found to be 4369 for the year 1983 and it is found to be lowest to the tune of 67.8 for the year 1993 taking all companies together. The high variations for year 1983 are mainly attributable to Searle for which ratio is negative to the tune of -4.16. If one omits Searle in 1983 S.D. goes down to 0.10 from 0.64 and C.V. goes down to 92.5 from 4369. When the companywise LTD/TA ratio is examined over a period of time, minimum average LTD/TA ratio is found to be -0.31 for Searle and the maximum average ratio is found to be 0.33 for Aegies. The LTD/TA ratio has widely fluctuated for Searle, which is reflected in its highest S.D. of 1.10 and the lowest S.D. is found to be 0.00 for Fulford. Same way the company wise C.V. are also computed. The highest C.V. is found to be 191.5 for Fulford and the lowest C.V. is found to be -351 for Searle. Ignoring the sign this variation is maximum. More stable ratio is found for Gujarat Alkalies with C.V. of 26.05. The grand average of LTD/TA ratio for all companies taken together and all years taken together comes to 0.09. This ratio of all companies indicates that all companies are managing their business with lower debt, in the other sense it shows that management of all companies are very

efficient and they do not have more burden of interest payment because they possess very less amount of debt.

5.2.e TOTAL DEBT to TOTAL ASSETS RATIO:

This ratio is derived as total debt divided by total assets.

Table V.7 presents the total debt to total assets ratio for 45 companies for the period of 16 years from 1981-1996. It can be observed from the Table that the minimum TD/TA ratio is found to be 0.31 for the year 1996 for Cynamid. The highest ratio is found to be 1.00 for the year 1982 and 1983 for Jayant. Wide fluctuations are observed over a period of time for given companies. The TD/TA ratio of Bassf has remained steady over the period of time. On finding yearwise average taking all companies together lowest average is found to be 0.58 for the year 1996 taking all companies together and the highest is 0.67 for the year 1991 and 1992. Thus even though the total debt was at minimum of 31% and at maximum of 100% of Total Assets, on an average it has ranged between 58% to 67%. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise and presented in the Table. The highest S.D. is found to be 0.15 for 1981 and the lowest is 0.09 for 1989, 1991, 1992 and 1993. The C.V. is found to be 23.04 the highest for the year 1981 and the lowest 13.43 for the year 1991 taking all companies together. When the companywise TD/TA ratio is examined over a period of time, minimum average TD/TA ratio is found for Hindustan Ciba to the tune of 0.44 and the maximum average TD/TA ratio is found to be 0.80 for Jayant.

TABLE - V.7

TOTAL DEBT TO TOTAL ASSETS RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	0.39	0.33	0.38	0.46	0.58	0.66	0.72	0.73	0.72	0.75	0.71	0.71	0.70	0.51	0.50	0.64	0.59	0.14	24.25
2. Aegies	0.78	0.85	0.87	0.85	0.75	0.70	0.69	0.69	0.73	0.75	0.75	0.41	0.40	0.42	0.37	0.43	0.65	0.18	27.67
3. Alembic	0.71	0.68	0.70	0.68	0.66	0.65	0.66	0.67	0.70	0.73	0.75	0.76	0.79	0.78	0.78	0.77	0.72	0.05	6.71
4. Atul	0.44	0.53	0.49	0.47	0.47	0.43	0.43	0.54	0.65	0.65	0.66	0.69	0.61	0.59	0.49	0.66	0.55	0.09	16.77
5. Basf	0.63	0.62	0.56	0.62	0.64	0.63	0.64	0.62	0.63	0.63	0.65	0.63	0.63	0.59	0.56	0.64	0.62	0.03	4.29
6. Bayer	0.57	0.54	0.56	0.55	0.56	0.56	0.55	0.58	0.59	0.66	0.67	0.68	0.68	0.69	0.77	0.78	0.62	0.08	12.58
7. Borax	0.59	0.73	0.45	0.40	0.60	0.38	0.49	0.45	0.57	0.55	0.63	0.63	0.71	0.65	0.69	0.72	0.58	0.11	19.73
8. Burroughs	0.79	0.77	0.76	0.56	0.39	0.51	0.55	0.58	0.63	0.65	0.60	0.64	0.66	0.53	0.57	0.44	0.60	0.11	18.56
9. Cipla	0.81	0.81	0.81	0.82	0.73	0.65	0.65	0.64	0.64	0.55	0.63	0.63	0.65	0.67	0.63	0.45	0.67	0.10	15.00
10. Citurgia	0.74	0.66	0.51	0.48	0.36	0.45	0.40	0.62	0.63	0.64	0.69	0.67	0.67	0.69	0.70	0.68	0.60	0.12	19.91
11. Colour	0.60	0.60	0.62	0.63	0.64	0.68	0.68	0.69	0.72	0.74	0.78	0.77	0.66	0.55	0.57	0.56	0.66	0.07	10.98
12. Cynamid	0.39	0.44	0.41	0.39	0.41	0.48	0.47	0.47	0.55	0.56	0.53	0.54	0.48	0.42	0.33	0.31	0.45	0.08	16.84
13. D.C.W.	0.61	0.63	0.66	0.58	0.56	0.54	0.50	0.50	0.52	0.64	0.71	0.80	0.56	0.60	0.50	0.55	0.59	0.08	14.25
14. Deepak	0.53	0.57	0.62	0.53	0.60	0.66	0.47	0.52	0.56	0.57	0.73	0.62	0.66	0.65	0.68	0.71	0.61	0.07	12.07
15. Duphar	0.58	0.64	0.61	0.62	0.66	0.71	0.72	0.75	0.75	0.75	0.76	0.73	0.75	0.77	0.74	0.35	0.68	0.11	15.68
16. E.I.D.	0.88	0.85	0.84	0.81	0.79	0.80	0.72	0.71	0.69	0.67	0.71	0.73	0.73	0.64	0.55	0.57	0.73	0.10	13.07
17. E. Merck	0.74	0.69	0.71	0.72	0.73	0.72	0.70	0.66	0.71	0.78	0.84	0.88	0.82	0.61	0.61	0.56	0.72	0.08	11.73
18. Excel	0.59	0.55	0.60	0.67	0.68	0.68	0.68	0.68	0.69	0.69	0.66	0.63	0.61	0.59	0.56	0.57	0.63	0.05	8.07
19. Ficom	0.60	0.70	0.74	0.73	0.72	0.63	0.56	0.56	0.55	0.54	0.56	0.61	0.64	0.42	0.43	0.53	0.60	0.10	16.18
20. Fulford	0.89	0.88	0.78	0.81	0.80	0.83	0.82	0.80	0.79	0.83	0.80	0.75	0.69	0.71	0.72	0.71	0.79	0.06	7.59
21. German	0.56	0.68	0.71	0.74	0.79	0.78	0.76	0.73	0.74	0.71	0.72	0.77	0.77	0.60	0.57	0.55	0.70	0.08	11.75
22. Glaxo	0.49	0.53	0.52	0.52	0.52	0.50	0.49	0.61	0.62	0.60	0.64	0.66	0.68	0.49	0.47	0.46	0.55	0.07	13.08

Cont.

TABLE - V.7 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	0.39	0.43	0.54	0.66	0.65	0.69	0.62	0.66	0.60	0.66	0.64	0.63	0.63	0.49	0.55	0.53	0.59	0.09	15.12
24. Guj-State	0.46	0.45	0.42	0.42	0.47	0.50	0.57	0.62	0.65	0.55	0.63	0.71	0.72	0.70	0.67	0.67	0.58	0.11	18.94
25. Hin-Ciba	0.38	0.42	0.46	0.40	0.39	0.42	0.37	0.33	0.38	0.43	0.47	0.57	0.61	0.62	0.38	0.44	0.44	0.09	19.86
26. Hin-Lever	0.58	0.58	0.56	0.58	0.59	0.59	0.59	0.63	0.61	0.62	0.63	0.64	0.64	0.65	0.67	0.66	0.62	0.03	5.15
27. Hocheat	0.64	0.64	0.62	0.58	0.58	0.55	0.49	0.53	0.61	0.70	0.55	0.49	0.52	0.50	0.51	0.55	0.57	0.06	10.62
28. I.C.I.	0.66	0.67	0.70	0.64	0.66	0.55	0.59	0.65	0.66	0.71	0.67	0.69	0.71	0.61	0.57	0.55	0.64	0.05	8.34
29. Ind-Dye	0.65	0.66	0.67	0.72	0.62	0.66	0.70	0.75	0.76	0.77	0.77	0.78	0.80	0.81	0.64	0.66	0.71	0.06	8.73
30. Ind-Oil	0.80	0.76	0.74	0.74	0.74	0.76	0.70	0.69	0.69	0.75	0.76	0.70	0.70	0.69	0.65	0.68	0.72	0.04	5.40
31. Jayant	0.90	1.00	1.00	0.93	0.88	0.82	0.80	0.80	0.80	0.80	0.75	0.73	0.71	0.72	0.73	0.50	0.80	0.12	15.40
32. Knoll	0.62	0.62	0.62	0.62	0.65	0.36	0.50	0.50	0.51	0.57	0.58	0.56	0.55	0.60	0.61	0.60	0.57	0.07	12.45
33. Lakme	0.82	0.75	0.64	0.70	0.64	0.64	0.70	0.66	0.65	0.63	0.65	0.68	0.51	0.53	0.52	0.17	0.62	0.14	23.33
34. National	0.58	0.63	0.67	0.70	0.66	0.60	0.57	0.58	0.60	0.56	0.61	0.60	0.60	0.63	0.67	0.64	0.62	0.04	6.51
35. Parke	0.38	0.45	0.43	0.34	0.35	0.42	0.49	0.52	0.52	0.51	0.57	0.54	0.58	0.52	0.57	0.50	0.48	0.08	15.85
36. Rallis	0.80	0.78	0.77	0.78	0.76	0.76	0.77	0.71	0.74	0.77	0.76	0.76	0.83	0.77	0.79	0.83	0.77	0.03	3.96
37. Ranbaxy	0.77	0.76	0.79	0.78	0.78	0.81	0.82	0.81	0.76	0.75	0.74	0.77	0.66	0.63	0.49	0.45	0.72	0.11	15.52
38. Searle	0.52	0.61	0.54	0.39	0.38	0.35	0.39	0.43	0.52	0.58	0.45	0.47	0.47	0.42	0.49	0.52	0.47	0.08	15.96
39. Synthetics	0.67	0.72	0.75	0.77	0.77	0.62	0.50	0.42	0.50	0.53	0.59	0.70	0.75	0.70	0.66	0.66	0.65	0.11	16.90
40. Tam-Dadha	0.80	0.82	0.82	0.82	0.83	0.80	0.77	0.73	0.73	0.78	0.82	0.81	0.81	0.80	0.79	0.78	0.79	0.03	3.80
41. Tata	0.58	0.60	0.57	0.60	0.66	0.60	0.69	0.62	0.56	0.60	0.68	0.66	0.69	0.66	0.63	0.59	0.62	0.05	7.31
42. Transpek	0.58	0.53	0.54	0.60	0.66	0.73	0.74	0.76	0.77	0.77	0.78	0.79	0.64	0.66	0.64	0.63	0.68	0.09	13.02
43. United	0.72	0.72	0.68	0.70	0.71	0.74	0.77	0.76	0.74	0.80	0.71	0.71	0.72	0.33	0.40	0.50	0.67	0.14	20.22
44. Zandu	0.70	0.70	0.71	0.75	0.73	0.74	0.70	0.71	0.64	0.62	0.60	0.63	0.65	0.62	0.64	0.71	0.68	0.05	6.89
45. Zuari	0.47	0.55	0.54	0.53	0.53	0.57	0.54	0.54	0.61	0.57	0.57	0.66	0.61	0.64	0.62	0.56	0.57	0.05	8.63
Average	0.63	0.65	0.64	0.63	0.63	0.62	0.62	0.63	0.64	0.66	0.67	0.67	0.66	0.61	0.59	0.58	0.63	0.08	13.22
S.D.	0.15	0.14	0.14	0.14	0.13	0.13	0.12	0.11	0.09	0.10	0.09	0.09	0.09	0.11	0.11	0.13	0.09		
C.V.	23.04	21.21	21.30	22.66	21.42	21.07	20.15	17.79	14.25	14.56	13.43	14.05	14.34	17.76	19.38	22.58	13.55		

The TD/TA ratio has widely fluctuated for Aegies, which is reflected in its highest S.D. and C.V. of 0.18 and 27.67 respectively. The lowest S.D. is 0.03, for Basf, Hindustan Lever and Tam-Dadha. The lowest C.V. is 3.80 for Tam-Tadha. This indicates relative stability in total debt to total assets ratio. The grand average of TD/TA ratio for all companies taken together and all years taken together comes to 0.63. This ratio indicates that on an average companies are using total debt to the tune of 63% to finance their total assets.

5.3 ACTIVITY RATIOS:

5.3.a.i INVENTORY TURNOVER RATIO :

This ratio is derived as cost of goods sold divided by average inventory.

Table V.8 presents the Inventory Turnover ratio for 45 companies for the period of 16 years from 1981-1996. It is very interesting to note from the Table that the minimum ratio is found to be 1.16 for the year 1981 for Jayant. The highest ratio is found to be 23.20 for the year 1993 for Gujarat Alkalies. Wide fluctuations are observed over a period of time for given companies. On examining the yearwise average the lowest average is found to be 3.41 taking all companies together for the year 1981 and the same is found to be highest at 4.87 for the year 1989. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise and presented in the table. The highest S.D. is found to be 3.08 for the year 1993 and the same is found to be lowest at 1.46 for the year 1981. The highest C.V. is found to

TABLE - V.8

INVENTORY TURNOVER RATIO-I

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	3.73	3.79	3.33	3.48	3.40	3.50	3.59	4.00	4.07	3.33	3.20	3.72	4.21	4.40	5.12	4.85	3.86	0.56	14.40
2. Aegies	5.63	4.34	4.24	3.91	4.28	5.54	5.63	4.90	4.89	5.15	4.20	5.10	4.83	4.33	4.19	4.35	4.72	0.57	11.99
3. Alembic	3.40	3.36	3.20	3.34	3.75	3.36	3.42	4.01	3.33	4.20	4.17	4.58	6.07	5.32	4.02	3.45	3.94	0.81	20.53
4. Atul	2.82	2.90	2.82	2.96	3.22	3.93	7.20	8.04	7.53	4.31	3.63	3.34	3.18	3.56	3.47	3.18	4.13	1.77	42.81
5. Basf	4.68	5.11	5.10	4.74	3.90	3.71	3.99	4.38	4.46	3.57	3.35	3.35	3.43	3.84	4.19	4.19	4.13	0.58	14.16
6. Bayer	2.53	2.61	3.04	3.43	3.67	3.50	3.87	4.55	4.93	3.69	3.55	3.38	3.73	3.70	3.96	3.85	3.62	0.60	16.68
7. Borax	2.81	2.35	3.20	8.79	4.62	3.93	3.83	3.75	3.34	4.46	5.02	4.75	5.31	8.63	14.24	3.61	5.17	3.02	58.49
8. Burroughs	2.87	3.24	3.26	3.53	4.01	4.14	3.81	4.57	5.06	3.07	3.20	3.76	4.24	5.72	5.71	3.84	4.00	0.88	22.01
9. Cipla	3.03	5.77	5.96	5.43	4.49	4.44	4.56	5.95	7.73	6.51	5.56	4.22	4.30	3.59	3.51	4.28	4.96	1.24	25.02
10. Citurgia	1.93	1.90	2.08	3.21	4.06	4.34	4.35	3.71	3.66	4.17	4.03	4.87	4.84	3.79	3.97	5.85	3.80	1.09	28.64
11. Colour	3.78	3.56	3.36	3.43	3.69	3.56	3.71	3.74	3.81	3.43	3.13	3.43	4.18	4.59	4.89	5.33	3.85	0.60	15.64
12. Cynamid	2.00	2.47	2.64	2.59	2.51	2.53	2.73	3.26	3.35	2.99	3.01	3.38	3.32	3.52	3.19	3.22	2.92	0.43	14.79
13. D.C.W.	3.35	3.05	3.67	3.93	5.63	5.30	5.08	6.50	7.38	6.65	5.96	4.41	3.90	4.44	5.24	6.22	5.04	1.29	25.51
14. Deepak	5.04	6.38	7.60	7.32	5.53	5.08	5.80	5.55	5.75	5.49	5.45	3.92	3.93	4.66	4.97	5.31	5.49	1.00	18.24
15. Duphar	2.13	2.10	2.81	4.29	5.23	4.48	3.97	3.96	3.59	3.15	2.88	2.97	2.96	2.86	2.41	3.36	3.32	0.88	26.40
16. E.I.D.	8.72	10.01	9.99	8.67	8.54	8.25	5.91	5.56	6.46	3.96	4.77	4.95	4.03	4.62	5.57	5.13	6.57	2.11	32.09
17. E. Merck	2.88	2.94	2.75	2.52	2.48	2.79	3.45	3.49	3.41	3.18	3.17	3.19	3.30	3.42	3.41	3.25	3.10	0.33	10.77
18. Exxel	3.83	4.15	3.64	2.77	2.53	2.61	2.67	3.82	4.45	3.46	3.31	3.85	3.71	3.28	3.82	4.50	3.53	0.63	17.74
19. Ficom	4.84	5.48	4.95	7.96	6.02	4.23	3.95	4.65	4.93	3.97	2.32	2.86	4.18	4.18	2.59	2.65	4.36	1.43	32.90
20. Fulford	1.26	3.26	3.29	3.15	2.94	3.62	4.87	5.89	5.79	4.55	4.24	5.57	6.10	5.62	5.78	5.93	4.49	1.44	31.99
21. German	2.82	3.05	3.17	3.56	3.52	3.06	2.66	2.82	3.20	3.50	2.98	2.82	3.57	3.79	3.80	3.68	3.25	0.38	11.65
22. Glaxo	2.51	2.76	2.84	3.07	3.75	4.34	4.50	4.30	2.64	3.53	3.77	3.81	3.81	5.20	6.80	6.71	4.02	1.30	32.32

Cont.

TABLE - V.8 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	3.63	5.57	6.06	7.44	9.86	9.66	11.67	15.66	19.31	17.79	20.77	19.99	23.20	22.35	16.55	11.71	13.83	6.42	46.45
24. Guj-State	2.07	2.88	3.29	3.74	4.02	4.05	3.57	3.23	3.47	3.56	3.17	3.23	2.71	2.25	2.95	3.12	3.21	0.56	17.34
25. Hin-Ciba	3.74	2.95	3.26	3.46	3.89	4.20	4.48	5.42	5.96	4.46	4.09	3.69	4.12	4.77	4.74	4.30	4.22	0.77	18.32
26. Hin-Lever	3.48	3.67	3.35	3.55	3.24	2.85	3.31	3.03	2.99	3.47	3.60	3.69	3.76	4.43	5.55	5.87	3.74	0.85	22.84
27. Hochest	2.89	3.04	2.94	2.93	3.30	4.05	4.37	5.15	5.54	3.72	3.09	4.14	4.89	4.55	3.32	3.78	3.86	0.85	22.17
28. I.C.I.	2.98	4.10	5.72	5.87	5.73	5.60	3.87	3.52	3.93	3.43	4.03	4.80	5.34	5.94	4.91	4.69	4.65	0.98	20.98
29. Ind-Dye	2.96	3.24	4.23	4.65	4.26	3.07	4.00	4.49	4.28	3.95	4.10	4.18	4.63	4.07	3.57	3.20	3.93	0.55	14.06
30. Ind-Oil	5.55	7.51	8.81	8.01	7.39	5.92	5.89	7.14	7.60	8.91	8.92	7.13	8.88	6.48	5.67	10.11	7.50	1.37	18.31
31. Jayant	1.16	2.43	2.26	1.37	1.79	2.39	2.78	3.46	3.85	3.15	3.13	3.51	3.90	4.45	4.09	5.09	3.05	1.11	36.38
32. Knoll	2.93	3.16	3.25	3.23	3.17	3.04	3.42	4.39	4.00	3.90	3.76	3.52	4.04	4.53	4.26	3.92	3.66	0.51	13.93
33. Lakme	3.73	4.57	4.23	4.70	5.25	6.63	5.65	3.99	4.55	4.14	4.56	6.21	5.60	5.20	4.85	4.17	4.88	0.82	16.83
34. National	3.73	4.33	4.03	3.90	4.00	4.21	4.56	4.98	5.12	4.26	4.23	4.96	4.86	6.13	5.66	5.66	4.66	0.71	15.22
35. Parke	4.13	4.99	5.10	5.55	6.09	6.21	6.46	6.29	5.81	3.87	3.67	4.30	4.17	4.53	4.57	5.31	5.06	0.92	18.25
36. Rallis	5.66	5.84	6.03	3.31	4.75	4.82	4.82	5.36	4.52	4.67	5.69	4.72	5.05	5.43	6.18	5.66	5.16	0.72	13.98
37. Ranbaxy	2.48	2.75	2.74	2.65	2.55	2.62	2.98	3.22	3.13	2.74	3.01	3.34	3.45	3.92	3.74	3.02	3.02	0.42	14.05
38. Searle	2.81	3.37	3.23	3.56	4.54	4.81	4.00	3.70	3.68	2.75	3.20	3.97	3.88	3.46	3.60	4.07	3.66	0.55	15.11
39. Synthetics	2.10	1.97	2.61	3.81	3.54	3.39	3.41	4.38	4.67	4.49	5.39	5.10	4.13	2.75	4.30	4.63	3.79	1.03	27.20
40. Tam-Dadha	2.10	2.66	2.98	3.34	3.95	3.72	3.54	3.14	1.75	2.44	2.37	4.16	1.67	3.27	3.17	3.25	2.97	0.74	25.07
41. Tata	3.23	3.22	2.71	5.23	5.28	3.87	2.49	2.19	3.42	3.06	2.37	2.41	2.84	3.16	2.99	3.19	3.23	0.90	27.93
42. Transpek	7.34	10.32	12.48	10.96	9.37	8.05	8.01	7.61	7.58	7.64	8.18	7.24	7.12	7.27	6.84	7.61	8.35	1.60	19.17
43. United	2.87	3.19	3.19	2.77	2.65	2.25	2.11	2.71	3.10	3.47	3.26	4.17	3.25	2.70	2.90	2.91	2.97	0.48	16.29
44. Zandu	2.43	2.59	2.87	2.98	3.11	2.56	2.70	2.55	2.53	2.17	2.25	2.35	2.46	2.88	3.13	3.28	2.68	0.33	12.31
45. Zuari	2.86	3.79	4.58	5.12	4.20	3.72	3.75	3.96	4.69	3.37	3.69	6.20	4.68	4.82	5.55	5.47	4.40	0.90	20.35
Average	3.41	3.93	4.15	4.40	4.39	4.26	4.34	4.69	4.87	4.35	4.34	4.52	4.66	4.81	4.84	4.68	4.42	1.05	22.16
S.D.	1.46	1.84	2.09	2.01	1.73	1.58	1.68	2.13	2.64	2.42	2.85	2.60	3.08	2.95	2.56	1.78	1.83		
C.V.	42.76	46.81	50.44	45.70	39.41	37.07	38.59	45.39	54.26	55.65	65.53	57.55	66.08	61.29	52.92	37.98	41.55		

be 66.08 for the year 1993 and the lowest C.V. is found to be 37.07 for the year 1986. When the companywise inventory turnover ratio is examined over a period of time, minimum average inventory turnover ratio is found to be 2.68 for Zandu and the maximum is found to be 13.83 for Gujarat Alkalies. To have an idea about the variations between the companies S.D. and C.V. are also computed companywise. The highest S.D. is found to be 6.42 for Gujarat Alkalies and the lowest is found to be 0.33 for E. Merck and Zandu. The highest coefficient is found to be 58.49 for Borax and the lowest is 10.77 for E. Merck. The grand average of inventory turnover ratio for all companies taken together comes to 4.42. This indicates that on an average the inventory has turned over 4 times for given amount of sale. This ratio indicates the liquidity of inventory. A high inventory turnover ratio indicates active sales, while lower the ratio indicates dull business, over investment in inventory, accumulation of large stock etc. Inventory turnover is an effective tool to measure the liquidity of inventory.

5.3.a.ii INVENTORY TURNOVER RATIO:

As was discussed in the preceding chapter inventory turnover ratio can be computed in two ways. This is the second method for that. This ratio is derived as sales divided by average inventory.

Table V.9 presents the inventory turnover ratio for 45 companies for the period of 16 years from 1981-1996. It is very interesting to note from the table that the minimum ratio is found to be 1.34 for the

TABLE - V.9

INVENTORY TURNOVER RATIO-II

Name \Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	4.59	4.62	4.20	4.44	4.32	4.28	4.15	4.70	4.84	4.02	3.94	4.42	5.00	5.57	6.47	5.73	4.71	0.69	14.67
2. Aegies	6.69	5.39	5.04	4.69	5.35	7.25	7.86	6.99	6.58	6.69	5.78	6.29	5.60	5.81	6.92	6.93	6.24	0.89	14.22
3. Alembic	4.54	4.76	4.53	4.44	4.79	4.39	4.41	5.09	3.92	5.00	5.24	5.83	7.64	6.68	5.13	4.51	5.06	0.95	18.75
4. Atul	3.36	3.37	3.24	3.32	3.59	4.41	8.13	9.03	8.51	5.17	4.34	3.89	3.62	4.15	4.01	3.89	4.75	1.96	41.21
5. Basf	6.62	7.17	7.08	6.62	5.53	5.11	5.45	6.05	6.15	4.99	4.77	4.93	4.89	5.16	5.46	5.43	5.71	0.80	13.96
6. Bayer	3.59	3.35	4.00	4.40	4.82	4.62	5.05	5.93	6.36	4.75	4.80	4.66	5.11	5.40	5.41	5.09	4.83	0.78	16.11
7. Borax	3.69	2.91	3.96	10.10	5.30	4.86	4.67	4.43	3.91	5.26	5.86	5.61	6.09	9.70	16.40	4.11	6.05	3.39	55.97
8. Burroughs	3.98	4.48	4.36	4.34	4.88	4.83	4.54	5.73	6.42	3.80	3.91	4.51	5.03	6.87	7.08	4.42	4.95	1.03	20.85
9. Cipla	4.05	4.59	4.81	4.99	4.61	4.19	4.04	5.14	6.49	5.88	5.26	4.03	3.69	3.52	3.38	3.83	4.53	0.87	19.11
10. Citurgia	3.32	3.62	4.14	4.92	5.96	6.03	6.56	5.59	5.38	5.91	5.67	6.68	6.55	4.86	4.56	7.10	5.43	1.11	20.49
11. Colour	4.72	4.28	3.96	4.02	4.31	4.21	4.49	4.41	4.42	3.98	4.22	4.66	4.53	4.94	4.64	4.62	3.97	0.68	17.02
12. Cynamid	2.55	3.12	3.39	3.52	3.50	3.44	3.64	4.29	4.38	4.09	4.22	4.66	4.72	5.37	6.08	7.52	6.14	1.43	23.33
13. D.C.W.	4.65	3.94	4.45	4.70	6.45	6.39	6.29	7.71	8.67	8.05	7.36	5.84	4.72	6.16	6.47	6.56	7.27	1.31	17.98
14. Deepak	7.17	8.85	10.12	9.61	7.41	6.80	7.41	7.04	7.49	7.28	7.04	5.47	5.40	6.16	6.47	6.56	4.26	1.19	27.95
15. Duphar	2.83	2.66	3.60	5.55	6.95	5.89	5.17	5.15	4.64	3.95	3.75	3.80	3.80	3.68	3.10	3.62	4.26	1.19	27.95
16. E.I.D.	9.36	10.74	10.76	9.32	9.21	9.01	6.32	6.24	7.48	4.04	5.58	5.76	4.59	5.45	5.02	5.70	7.16	2.24	31.22
17. E. Merck	3.65	3.58	3.67	3.37	3.26	3.65	4.55	4.60	4.55	4.28	4.09	4.13	4.37	4.49	4.52	4.29	4.07	0.46	11.38
18. Excel	5.02	5.58	5.01	3.81	3.42	3.49	3.58	5.27	6.22	5.05	5.00	6.00	5.61	4.91	5.39	6.23	4.97	0.94	18.80
19. Ficom	5.22	7.21	6.18	10.01	7.96	5.85	5.68	6.48	6.69	5.28	3.17	3.93	5.80	5.50	3.30	3.57	5.74	1.79	31.19
20. Fulford	3.90	4.50	4.45	4.12	3.77	4.56	6.03	7.22	7.00	5.50	4.98	6.55	7.21	6.97	7.10	7.36	5.70	1.36	23.83
21. German	3.70	4.09	4.27	4.67	4.52	3.89	3.29	3.56	3.94	4.33	3.62	3.32	4.31	4.95	4.96	4.74	4.14	0.55	13.25
22. Glaxo	3.53	4.08	4.31	4.16	4.86	6.05	5.95	5.45	3.38	4.48	4.85	4.68	4.68	6.40	8.24	8.27	5.21	1.46	28.05

Cont.

TABLE - V.9 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.	
23. Guj-Alkaly	6.39	8.21	8.61	9.58	12.96	13.49	15.14	20.28	24.90	26.27	29.91	29.42	36.24	32.47	24.04	19.11	19.81	9.54	48.13	
24. Guj-State	2.79	3.64	4.14	4.83	5.08	4.90	4.18	3.96	4.32	4.42	4.07	4.06	3.39	2.84	3.88	4.36	4.05	0.65	16.12	
25. Hin-Ciba	3.91	4.05	4.57	4.86	5.35	5.71	6.11	7.71	8.64	6.55	6.02	5.03	5.41	6.21	6.04	5.49	5.73	1.23	21.47	
26. Hin-Lever	4.09	4.31	4.01	4.25	3.91	3.54	4.08	3.71	3.65	4.20	4.41	4.59	4.73	5.43	6.33	7.00	4.51	0.96	21.33	
27. Hochest	3.77	3.94	3.81	3.82	4.20	4.86	5.05	5.89	6.44	4.50	3.91	5.16	6.18	5.94	4.28	4.80	4.78	0.91	19.08	
28. I.C.I.	3.58	4.94	6.97	7.25	6.62	6.50	4.51	3.68	4.02	3.37	4.95	4.88	5.22	6.00	6.00	5.72	5.26	1.24	23.47	
29. Ind-Dye	3.30	3.64	4.60	5.06	4.61	3.29	4.32	4.96	4.71	4.44	4.65	4.83	5.40	4.82	4.23	3.70	4.41	0.63	14.18	
30. Ind-Oil	5.86	7.98	9.35	8.60	7.95	6.39	6.43	7.82	8.04	9.51	9.73	8.75	10.34	7.73	7.03	10.17	8.23	1.37	16.61	
31. Jayant	1.34	2.56	2.56	1.89	2.64	3.65	3.97	4.94	5.54	4.20	4.89	5.88	5.89	6.01	5.42	4.97	4.15	1.54	37.13	
32. Knoll	4.26	4.57	4.73	4.89	4.77	4.32	4.73	6.12	5.44	5.26	5.07	4.74	5.26	6.06	5.65	5.33	5.08	0.56	10.93	
33. Lakme	4.49	6.02	5.18	5.49	6.84	8.13	6.86	4.88	5.58	5.29	5.96	7.53	6.88	7.18	6.95	6.15	6.21	1.03	16.54	
34. National	4.29	5.02	4.62	4.75	5.14	5.43	5.72	6.20	6.51	5.45	5.33	6.04	5.79	7.08	6.90	7.18	5.72	0.88	15.45	
35. Parke	5.24	6.56	6.85	7.15	7.71	7.75	8.04	7.98	7.42	5.41	5.14	5.97	6.32	6.48	6.67	6.63	6.71	0.94	14.03	
36. Rallis	6.38	6.61	6.85	3.62	5.52	5.97	5.79	6.04	5.21	5.34	6.23	5.31	5.98	6.21	6.95	6.34	5.90	0.80	13.62	
37. Ranbaxy	3.39	4.02	4.04	3.89	3.78	3.74	4.10	4.48	4.42	3.82	4.11	4.70	5.11	5.94	5.69	4.47	4.36	0.71	16.22	
38. Searle	4.25	5.04	4.94	6.13	7.63	7.37	5.72	5.30	5.12	3.88	4.37	5.50	5.35	4.83	5.01	5.38	5.36	1.00	18.69	
39. Synthetics	2.35	2.13	2.76	4.16	3.93	3.74	3.76	5.02	5.39	5.09	6.18	6.10	4.92	3.34	4.95	5.72	4.35	1.28	29.36	
40. Tam-Dadha	2.61	2.41	2.93	3.13	3.26	4.15	4.30	3.76	2.30	3.05	2.85	5.24	2.10	4.06	3.93	4.06	3.38	0.87	25.62	
41. Tata	4.05	3.98	3.37	6.07	6.19	4.99	3.98	3.44	4.70	4.92	3.53	3.72	4.24	4.39	4.70	7.11	4.59	1.07	23.40	
42. Transpek	8.89	12.41	16.04	14.41	12.15	10.72	10.86	10.43	10.46	9.55	10.24	9.74	9.68	9.61	8.88	9.41	10.84	2.00	18.46	
43. United	4.31	5.02	5.06	4.34	4.12	3.60	3.13	3.51	4.21	4.60	5.03	5.83	5.71	4.02	3.91	3.92	4.39	0.77	17.42	
44. Zandu	3.22	3.54	3.69	3.89	4.03	3.69	4.15	4.09	4.03	3.52	3.41	3.66	3.64	4.32	4.43	4.64	3.87	0.39	10.18	
45. Zuari	4.03	4.75	6.14	6.65	5.49	4.81	4.76	4.73	5.81	4.23	4.56	7.42	5.86	5.90	7.62	7.36	5.63	1.16	20.66	
Average	4.39	4.94	5.23	5.51	5.53	5.42	5.49	5.89	6.09	5.53	5.59	5.85	6.07	6.20	6.20	5.98	5.62	1.29	21.46	
S.D.	1.59	2.11	2.47	2.40	2.13	2.03	2.12	2.68	3.31	3.45	3.98	3.82	4.82	4.24	3.43	2.52	2.52			
C.V.	36.17	42.75	47.30	43.63	38.61	37.44	38.58	45.42	54.34	62.53	71.24	65.35	79.47	68.35	55.29	42.15	44.92			

year 1981 for Jayant. The highest ratio is found to be 36.24 for the year 1993 for Gujarat Alkalies. Wide fluctuations are observed over a period of time for given companies. On examining yearwise average the lowest average is found to be 4.39 taking all companies together for the year 1981 and the same is found to be highest at 6.20 for the year 1994 and 1995. To have an idea about the variations between the companies S.D. and C.V. is also computed yearwise. The highest S.D. is found to be 4.82 for the year 1993 and the same is the lowest at 1.59 for the year 1981. The highest C.V. is found to be 79.47 for the year 1993 and the lowest is found to be 36.17 for the year 1981. When the companywise inventory turnover ratio is examined over a period of time, minimum average inventory turnover ratio is found to be 3.38 for Tam-Dadha and the maximum average is found to be 19.81 for Gujarat Alkalies. To have an idea about the variations between the companies S.D. and C.V. are also computed companywise. The highest S.D. and C.V. are found to be 9.54 Gujarat Alkalies and 55.97 for Borax and the lowest S.D. and C.V. are found to be 0.39 and 10.18 for Zandu. The grand average of inventory turnover ratio for all companies taken together comes to be 5.62. This ratio indicates that all companies are selling its products 5.62 times of average inventory in a year. A high inventory turnover ratio indicates a good inventory management.

5.3.b AVERAGE COLLECTION PERIOD:

This ratio is derived as average debtors divided by sales multiplied by number of working days of the year.

Table V.10 presents the Average Collection Period for 45 companies for the period of 16 years from 1981-1996. It is very interesting to note from the Table that the minimum ratio is found to be 8 days for the year 1981 for Hindustan Lever. The highest ratio is found to be 167 for the year 1991 for Ficom. This imposes that the collection period ranged between 8 days to 167 days. On examining yearwise average the lowest average is found to be 50.84 taking all companies together for the year 1982 and the highest is at 76.75 for the year 1996. On examining variations the highest S.D. is found to be 46.00 for the year 1996 and the lowest is 22.31 for the year 1982. The highest C.V. is 61.38 (1991) and the lowest is 43.65 for the year 1987. When the companywise average collection period is examined over a period of time, minimum ratio is found to be 13.20 for Glaxo and the maximum average is found to be 108 for Ficom. To have an idea about the variations between the companies S.D. and C.V. are also computed companywise. The highest S.D. and C.V. are found to be 88.30 and 103.42 respectively for Lakme and the lowest S.D. is found to be 3.18 for Glaxo. The lowest C.V. is 11.10 for Colour. The grand average of average collection period for all companies taken together comes to be 60.95. This ratio indicates the speed of their collection of debt. Lower ratio indicates the better Collection Policy. Higher ratio shows poor management of the credit policy. The above finding indicates that on an average companies take about 61 days for collection of amount from debtors though in extreme cases it is 157 days.

TABLE - V.10

AVERAGE COLLECTION PERIOD

Name\Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	52.85	51.93	58.97	58.08	57.72	60.79	71.97	71.16	63.96	71.47	68.86	59.25	55.37	56.75	54.66	52.11	60.37	7.03	11.65
2. Aegies	63.56	69.53	59.35	55.54	63.82	70.46	76.44	89.91	94.24	87.58	127.2	104.3	82.55	79.56	67.11	62.79	78.38	18.94	24.16
3. Alembic	65.05	55.19	52.74	61.26	57.79	62.88	75.91	73.30	73.19	58.71	61.74	51.20	40.50	41.39	45.84	53.89	58.16	10.69	18.37
4. Atul	39.72	44.02	45.49	45.02	50.21	57.28	71.46	93.84	34.57	55.09	68.91	69.37	68.00	65.46	79.89	85.93	60.89	17.26	28.35
5. Basf	66.32	70.17	79.88	86.06	91.72	96.93	102.0	98.01	81.31	92.80	103.7	96.34	90.02	80.90	76.91	79.62	87.04	11.15	12.81
6. Bayer	78.67	74.47	53.14	55.35	57.44	56.25	58.03	59.05	50.90	51.95	48.69	52.40	57.45	69.41	73.17	82.58	61.18	10.78	17.61
7. Borax	57.62	78.24	61.84	36.00	51.65	42.61	32.12	35.61	40.45	57.59	81.87	88.25	69.50	61.57	68.62	70.25	58.36	17.43	29.86
8. Burroughs	54.21	52.53	65.73	64.60	48.69	49.32	53.84	41.34	33.03	42.90	33.32	28.52	37.36	48.71	68.62	86.60	50.58	15.27	30.18
9. Cipla	40.74	41.75	47.82	44.76	37.36	36.26	38.84	29.77	25.74	31.17	36.79	31.77	27.23	29.50	18.59	27.34	34.09	7.78	22.81
10. Citurgia	18.71	26.52	37.37	28.92	27.21	34.15	25.75	26.98	31.91	41.36	44.16	24.20	18.78	40.32	72.04	74.02	35.77	16.37	45.75
11. Colour	68.63	65.01	71.78	87.84	88.14	90.87	86.32	91.39	90.61	94.83	88.99	82.58	78.88	74.10	74.02	84.07	82.38	9.15	11.10
12. Cynamid	55.66	48.96	48.60	41.64	34.70	41.61	52.77	51.69	49.69	61.69	75.93	67.18	67.91	68.39	71.03	68.57	56.63	12.30	21.71
13. D.C.W.	35.95	38.96	28.89	32.40	27.16	22.55	22.65	23.75	27.29	29.82	30.20	35.46	37.31	30.81	47.32	61.79	33.27	10.03	30.16
14. Deepak	26.56	25.03	25.27	31.47	45.84	56.31	53.37	52.25	48.19	60.12	70.56	78.63	91.32	112.9	124.1	130.5	64.47	34.48	53.48
15. Duphar	52.23	59.41	49.94	49.72	66.47	75.38	76.46	73.73	63.27	64.80	71.88	65.05	69.15	81.01	81.15	68.13	66.74	10.06	15.07
16. E.I.D.	31.19	26.16	22.98	25.39	32.04	37.30	38.28	35.01	36.44	62.79	37.01	33.50	32.53	37.27	55.85	66.88	38.16	12.75	33.40
17. E. Merck	62.86	56.71	51.87	57.54	60.90	59.59	63.58	71.21	67.32	73.18	84.10	92.43	82.96	63.89	46.37	48.22	65.17	12.99	19.93
18. Excel	56.81	46.28	35.08	40.37	54.39	62.99	73.60	60.31	51.90	58.69	64.14	58.37	60.77	79.02	88.35	90.64	61.36	15.48	25.22
19. Ficom	166.9	105.5	131.5	114.8	88.24	55.36	56.25	59.63	55.98	80.53	153.2	142.1	121.8	120.0	159.5	115.7	107.9	38.27	35.45
20. Fulford	108.4	92.94	85.40	85.62	88.68	94.04	101.1	98.91	91.10	100.8	124.7	100.5	53.07	31.86	30.17	27.20	82.16	29.81	36.28
21. German	61.67	57.61	60.10	73.98	107.8	116.2	103.1	78.33	54.51	47.64	52.55	60.91	71.28	62.08	50.06	49.18	69.19	21.72	31.39
22. Glaxo	12.09	9.69	12.33	20.10	15.90	9.18	10.94	12.97	18.58	14.59	13.35	11.01	10.60	10.65	12.48	16.65	13.20	3.18	24.11

Cont.

TABLE - V.10 cont.

Name	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	27.31	36.03	49.95	53.23	55.28	62.65	66.16	63.03	59.59	63.35	59.59	56.94	55.58	69.78	69.78	63.95	57.01	11.46	20.11
24. Guj-State	92.07	70.59	70.68	78.15	78.87	79.01	101.7	109.7	85.10	99.47	103.9	96.13	118.2	125.8	112.0	115.1	96.04	17.55	18.28
25. Hin-Ciba	30.92	33.49	36.86	43.59	43.54	42.72	44.93	44.66	42.42	48.61	49.85	54.18	57.63	57.67	63.88	84.04	48.69	12.95	26.61
26. Hin-Lever	8.04	12.71	23.08	26.80	26.45	27.09	26.92	27.07	25.78	25.60	25.86	25.63	26.26	28.42	30.61	27.46	24.61	5.83	23.71
27. Hochtst	34.17	27.30	19.68	18.06	23.21	31.81	36.55	35.24	41.37	46.27	48.08	40.74	31.90	28.76	29.80	27.29	32.51	8.72	26.83
28. I.C.I.	52.92	48.80	49.20	52.83	60.87	60.36	65.85	69.72	68.66	96.51	74.53	93.91	99.60	103.8	107.4	87.35	74.52	20.58	27.61
29. Ind-Dye	66.66	61.72	68.83	90.53	94.78	109.2	94.64	106.3	110.3	108.9	98.98	96.18	100.7	116.9	114.6	121.0	97.51	18.00	18.46
30. Ind-Oil	38.72	24.36	18.21	16.20	12.69	10.89	9.81	11.13	11.93	12.43	13.81	17.44	19.19	22.47	21.19	18.13	17.41	7.20	41.36
31. Jayant	59.59	34.41	30.44	48.74	60.90	67.19	84.34	102.9	105.2	130.7	111.0	88.70	92.58	98.10	123.4	154.3	87.03	34.97	40.18
32. Knoll	24.65	21.70	19.33	17.12	15.49	17.57	22.55	26.70	32.71	31.19	34.61	36.52	36.08	37.21	43.54	48.36	29.08	9.92	34.12
33. Lakme	35.66	28.22	42.75	52.08	31.79	26.03	29.82	47.64	59.38	51.15	263.1	216.4	71.25	62.26	51.37	297.3	85.39	88.30	103.42
34. National	54.59	54.12	63.36	54.75	49.09	45.28	41.94	39.76	32.91	42.24	52.65	51.87	59.13	64.41	75.43	73.50	53.44	11.82	22.12
35. Parke	50.29	46.89	46.51	31.39	22.91	31.84	39.19	35.71	33.85	39.44	40.13	42.54	39.25	46.34	59.71	65.85	41.99	10.73	25.55
36. Rallis	40.88	42.32	51.42	88.63	47.81	46.08	52.91	55.43	59.62	61.94	52.85	65.29	64.57	55.13	50.00	46.12	55.06	11.59	21.05
37. Ranbaxy	45.39	38.00	46.09	58.83	66.24	74.57	83.61	77.26	57.78	52.34	56.99	54.15	54.66	66.31	93.08	107.9	64.58	18.67	28.91
38. Searle	50.42	56.69	69.06	51.00	48.15	58.25	87.78	121.2	104.3	98.50	112.4	101.2	77.88	73.08	66.62	64.42	77.56	23.72	30.58
39. Synthetics	99.11	103.5	104.9	113.6	123.8	93.14	63.74	41.17	40.47	47.40	58.44	77.85	100.7	157.4	147.1	133.8	94.13	36.73	39.02
40. Tam-Dadha	79.57	90.37	82.61	90.77	96.44	77.60	77.23	81.73	136.6	91.34	87.76	49.97	124.0	58.07	53.31	46.86	82.76	24.38	29.46
41. Tata	28.26	32.71	62.77	49.86	51.45	46.75	58.71	73.32	80.88	112.4	126.0	78.30	47.67	62.21	82.40	93.25	67.94	26.99	39.72
42. Transpek	66.82	60.48	51.95	44.48	50.94	63.74	62.51	58.22	51.42	62.20	70.80	71.64	69.27	81.97	83.07	88.79	64.89	12.48	19.22
43. United	67.24	68.72	65.51	64.64	59.73	71.12	107.4	137.3	113.0	122.4	109.1	71.37	82.15	101.0	95.06	91.37	89.20	23.83	26.72
44. Zandu	58.46	57.11	58.44	50.27	46.71	44.71	39.84	35.84	26.09	23.14	23.33	26.68	26.67	26.25	34.97	39.98	38.66	12.81	33.13
45. Zuari	33.51	40.95	48.62	45.17	33.24	32.22	41.91	47.63	32.36	34.05	24.16	21.29	31.71	33.73	39.75	55.03	37.21	9.01	24.20
Average	53.81	50.84	52.58	54.16	54.54	55.71	59.66	61.71	57.69	63.15	72.00	65.96	62.47	64.95	69.20	76.75	60.95	17.80	28.87
S.D.	27.49	22.31	23.05	24.18	25.50	24.89	26.04	29.76	28.63	28.91	44.19	36.51	28.56	31.12	32.55	46.00	22.75		
C.V.	51.09	43.89	43.83	44.65	46.76	44.67	43.65	48.23	49.63	45.79	61.36	56.34	45.72	47.91	47.04	59.94	37.32		

5.3.c FIXED ASSETS TURNOVER RATIO:

This ratio is derived as sales divided by average fixed assets.

Table V.11 presents the fixed assets turnover ratio for 45 companies for the period of 16 years from 1981-1996. It is very interesting to note from the Table that the minimum ratio is found to be 0.24 for the year 1981 for Ficom. The highest ratio is found to be 80.49 for the year 1994 for Fulford. Wide fluctuations are observed over a period of time for given companies. On examining yearwise average the lowest average is found to be 6.11 taking all companies together for the year 1987 and the same is found to be highest to the tune of 7.60 for the year 1994. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise. The highest S.D. is found to be 11.91 for the year 1994 and the lowest is 5.78 for the year 1987. The highest C.V. is found to be 166.1 for the year 1995 and 1996 and the lowest C.V. is found to be 92.90 for the year 1982. When the companywise ratio is examined over a period of time, minimum average ratio is found to be 0.81 for Aegies and the maximum is found to be 48.69 for Fulford. To have an idea about the variations between the companies S.D. and C.V. are also computed companywise. The highest S.D. is found to be 20.86 for Fulford and the lowest S.D. is found to be 0.15 for Aegies. The highest C.V. is found to be 71.96 for E.I.D and the same is found to be lowest at 10.41 for Park. The grand average for all companies taken together comes to be 6.74. This ratio indicates the efficiency of utilizing fixed assets in the firm.

TABLE - V.11

FIXED ASSETS TURNOVER RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	29.13	26.04	17.23	9.26	5.47	4.78	4.64	5.78	7.52	7.62	8.27	10.69	14.89	15.63	14.86	7.62	11.84	7.38	62.32
2. Aegies	0.73	0.81	0.87	0.72	0.63	0.67	0.72	0.71	0.82	0.97	0.85	0.76	0.68	0.78	1.03	1.20	0.81	0.15	18.42
3. Alembic	5.10	6.23	7.47	7.46	7.25	5.07	4.27	4.60	3.97	5.50	5.52	6.01	7.67	6.50	4.31	2.97	5.62	1.41	25.13
4. Atul	3.56	3.58	3.65	4.17	4.49	4.02	3.24	2.21	5.99	4.17	3.22	2.76	2.64	2.42	1.87	2.12	3.38	1.06	31.42
5. Basf	3.89	3.46	2.42	2.17	2.55	3.15	3.77	4.72	6.20	6.12	6.72	7.17	6.07	5.33	3.83	2.22	4.36	1.70	39.01
6. Bayer	5.53	5.47	7.50	8.10	8.74	9.02	8.03	7.62	7.80	5.52	4.94	4.99	5.38	4.63	4.09	3.61	6.31	1.75	27.80
7. Borax	15.97	18.16	22.64	29.03	32.66	9.75	7.41	8.13	8.92	10.81	6.34	5.15	7.88	10.62	5.82	4.14	12.71	8.66	68.13
8. Burroughs	8.15	8.67	7.77	6.95	6.96	6.53	5.93	7.69	10.13	7.51	8.03	9.20	11.02	12.98	13.16	9.22	8.74	2.14	24.48
9. Cipla	10.64	11.56	9.09	6.84	4.93	3.55	3.09	4.04	5.37	4.28	4.06	4.17	4.35	3.96	3.74	4.01	5.48	2.64	48.13
10. Citurgia	0.69	0.83	1.14	1.66	1.88	1.83	2.53	2.66	2.68	2.48	1.64	1.83	2.35	2.42	2.74	3.68	2.06	0.78	37.87
11. Colour	2.68	2.75	2.98	3.44	4.27	4.53	5.27	5.27	5.96	6.28	5.75	4.74	4.08	3.92	4.24	4.20	4.40	1.11	25.26
12. Cynamid	3.39	4.22	4.69	5.36	6.33	7.02	7.29	7.69	8.15	8.66	8.58	10.67	12.26	13.39	14.00	16.67	8.65	3.81	44.03
13. D.C.W.	5.22	4.66	4.60	3.61	2.78	2.18	2.29	3.03	3.51	2.72	2.10	1.98	1.54	1.59	1.84	1.80	2.84	1.17	41.23
14. Deepak	2.35	2.74	2.93	2.35	1.70	1.63	1.65	1.65	2.06	2.12	1.65	1.24	1.56	1.94	2.18	1.99	1.98	0.45	22.80
15. Duphar	7.40	7.18	6.80	5.66	4.91	4.31	4.09	4.67	5.44	5.73	6.30	6.99	7.15	7.71	7.02	7.36	6.17	1.20	19.50
16. E.I.D.	17.01	23.24	30.77	29.92	28.99	29.52	13.42	8.87	8.25	4.74	7.86	8.56	6.32	6.20	4.58	3.30	14.47	10.41	71.96
17. E. Merck	4.92	4.72	4.33	3.90	4.11	4.58	4.80	4.40	4.56	3.89	3.13	2.70	2.88	3.25	4.06	4.42	4.04	0.70	17.34
18. Excel	2.99	3.67	4.39	4.17	3.83	3.71	3.75	5.35	6.32	5.63	5.16	5.83	5.68	4.75	4.60	4.43	4.64	0.95	20.37
19. Ficom	0.24	0.99	1.47	2.10	2.79	3.74	4.41	4.75	4.48	3.64	2.63	2.52	1.91	1.56	1.25	1.83	2.52	1.35	53.61
20. Fulford	18.27	22.15	25.70	30.42	32.90	33.48	37.70	45.78	56.57	64.62	51.60	55.61	73.43	80.49	79.05	71.28	48.69	20.86	42.85
21. German	7.92	8.43	6.97	4.95	4.20	4.46	4.40	5.13	6.44	7.53	4.90	3.80	4.25	4.55	5.10	5.09	5.51	1.46	26.55
22. Glaxo	3.82	4.15	3.83	3.01	3.08	4.09	6.78	8.53	3.78	4.32	4.58	4.91	5.42	6.97	8.17	9.01	5.28	1.98	37.46

Cont.

TABLE - V.11 cont.

Name/Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.	
23. Guj-Alkaly	1.91	2.13	1.58	1.14	1.14	1.18	1.16	1.24	1.27	1.11	1.33	1.45	1.50	0.84	0.75	0.76	1.28	0.38	29.31	
24. Guj-State	2.09	2.59	2.76	3.21	3.76	4.12	3.08	2.66	3.17	2.65	1.58	1.26	1.07	1.04	1.28	1.29	2.35	1.00	42.42	
25. Hin-Ciba	4.20	4.31	4.82	4.77	5.33	6.44	7.29	9.39	12.50	12.54	11.57	8.15	7.43	6.68	6.14	6.17	7.36	2.79	37.88	
26. Hin-Lever	9.27	8.31	6.71	7.08	7.34	7.26	8.11	7.87	7.54	7.92	8.65	9.66	10.08	10.47	10.91	11.21	8.65	1.44	16.64	
27. Hochest	5.17	5.61	5.41	5.18	5.83	5.78	3.83	3.46	4.05	3.92	2.44	1.85	2.00	2.40	1.97	2.18	3.82	1.52	39.83	
28. I.C.I.	1.08	1.48	2.50	3.20	2.97	3.10	2.92	2.91	3.11	2.52	3.90	3.85	4.34	4.83	4.45	4.17	3.21	1.03	32.20	
29. Ind-Dye	2.83	3.18	3.99	4.60	2.50	1.61	2.26	2.55	2.82	3.31	4.30	4.95	5.47	4.94	4.93	4.71	3.68	1.19	32.25	
30. Ind-Oil	8.21	10.56	11.74	11.97	12.31	12.01	12.69	13.65	13.53	13.65	12.22	9.69	8.77	6.82	6.06	6.59	10.65	2.62	24.61	
31. Jayant	0.78	1.42	1.32	1.14	1.76	2.44	2.10	1.50	1.32	0.94	0.83	0.74	0.63	0.64	0.66	0.51	1.17	0.57	48.41	
32. Knoll	6.69	7.45	7.64	8.02	8.35	7.74	8.15	9.65	8.75	8.48	7.35	7.83	10.44	12.75	7.34	5.10	8.23	1.69	20.52	
33. Lakme	16.22	8.96	4.46	4.99	6.95	7.12	7.56	6.24	6.38	7.27	10.29	12.25	9.93	10.28	9.75	6.89	8.47	2.96	34.93	
34. National	3.46	3.83	2.84	2.58	2.92	3.41	3.85	4.05	4.78	4.97	5.12	5.70	5.83	4.81	3.31	2.95	4.03	1.05	26.05	
35. Parke	11.41	12.96	12.96	14.08	15.78	14.98	13.61	13.81	13.57	12.15	13.57	14.79	15.71	15.10	16.99	15.64	14.19	1.48	10.41	
36. Rallis	22.52	21.88	18.07	8.95	13.49	12.29	9.65	8.90	8.91	9.53	10.69	9.30	11.55	11.93	11.19	11.08	12.50	4.43	35.45	
37. Ranbaxy	5.32	6.04	5.20	4.12	4.32	4.77	4.06	3.93	4.76	5.71	5.80	4.64	4.14	3.96	3.32	2.80	4.56	0.90	19.79	
38. Searle	4.57	4.61	3.43	3.67	5.25	6.82	6.29	5.60	6.75	7.65	7.62	7.33	8.43	8.96	8.52	5.00	6.28	1.75	27.86	
39. Synthetics	4.07	3.96	4.63	5.63	6.48	5.11	3.35	3.03	3.27	3.14	3.07	3.07	2.14	1.16	1.25	1.22	3.41	1.55	45.47	
40. Tam-Dadha	4.76	4.29	4.77	5.15	6.55	10.47	12.58	11.01	5.53	8.09	7.86	12.79	5.78	12.41	10.93	10.67	8.35	3.14	37.63	
41. Tata	1.41	1.43	1.10	1.57	1.30	1.36	1.47	1.43	1.62	1.41	1.08	0.83	0.55	0.37	0.43	0.82	1.14	0.41	36.24	
42. Transpek	3.06	3.67	4.23	4.34	3.99	3.84	4.14	4.13	4.50	4.24	4.64	5.21	4.35	2.96	2.84	2.94	3.94	0.68	17.32	
43. United	1.64	2.38	3.59	3.74	4.12	5.19	6.04	5.86	5.43	4.74	5.26	5.17	3.50	2.34	1.78	1.86	3.91	1.54	39.28	
44. Zandu	5.44	6.21	6.24	6.47	6.06	5.09	4.95	5.22	6.42	5.56	4.23	3.83	3.59	4.40	5.45	5.47	5.29	0.90	17.11	
45. Zuari	2.28	3.08	4.22	4.19	4.17	5.26	6.38	6.74	9.49	7.51	7.18	9.94	9.83	10.30	5.46	3.58	6.23	2.62	42.13	
Average	6.40	6.76	6.74	6.56	6.85	6.42	6.11	6.40	6.99	6.97	6.54	6.81	7.25	7.60	7.05	6.35	6.74	2.46	33.76	
S.D.	6.17	6.28	6.53	6.85	7.35	6.28	5.78	6.75	8.15	9.30	7.56	8.24	10.79	11.91	11.71	10.57	7.30			
C.V.	96.42	92.90	96.91	104.4	107.4	97.79	94.62	105.4	116.7	133.4	115.5	120.9	148.7	156.7	166.1	166.4	108.3			

Higher ratio indicates efficient utilisation of assets.

5.3.d TOTAL ASSETS TURNOVER RATIO:

This ratio is derived as sales divided by average total assets.

Table V.12 presents the total assets turnover ratio for 45 companies for the period of 16 years from 1981-1996. It is very interesting to note from the Table that the minimum ratio is found to be 0.20 for the year 1981 for Ficom. The highest ratio is found to be 4.00 for the year 1983 for E.I.D. Wide fluctuations are observed over a period of time for given companies. On examining yearwise average the lowest average is found to be 1.31 taking all companies together for the year 1996 and the same is found to be highest to be tune of 1.65 for the year 1989. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise. The highest S.D. is found to be 0.69 for the year 1983 and the lowest is at 0.44 for the year 1990. The highest C.V. is found to be 44.85 for the year 1995 and the lowest C.V. is found to be 29.64 for the year 1990. When the companywise ratio is examined over a period of time, minimum average ratio is found to be 0.52 for Tata and the maximum average total assets turnover ratio is found to be 2.76 for Parke. To have an idea about the variations between the companies S.D. and C.V. are also computed companywise. The highest S.D. is found to be 0.90 for E.I.D and Indian Oil, and the lowest S.D. is found to be 0.08 for Aegies. The highest C.V. is found to be 44.03 for Ficom. The same is found to

TABLE - V.12

TOTAL ASSETS TURNOVER RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	2.40	2.39	2.06	1.95	1.69	1.57	1.45	1.63	1.82	1.64	1.69	1.97	2.28	2.41	2.53	2.00	1.97	0.35	17.67
2. Aegies	0.50	0.56	0.62	0.54	0.50	0.54	0.57	0.55	0.60	0.68	0.57	0.53	0.48	0.52	0.69	0.79	0.58	0.08	14.41
3. Alembic	1.54	1.76	1.85	1.75	1.83	1.57	1.42	1.55	1.34	1.73	1.70	1.89	2.44	2.16	1.65	1.31	1.72	0.29	16.91
4. Atul	1.27	1.18	1.14	1.30	1.40	1.31	1.11	0.85	2.40	1.55	1.25	1.09	1.04	0.98	0.80	0.87	1.22	0.37	30.64
5. Basf	1.52	1.50	1.24	1.12	1.16	1.22	1.30	1.46	1.71	1.49	1.45	1.55	1.50	1.54	1.42	1.11	1.39	0.18	12.76
6. Bayer	1.41	1.40	1.80	1.87	1.94	1.90	1.88	1.94	2.12	1.69	1.67	1.65	1.68	1.47	1.33	1.19	1.68	0.26	15.53
7. Borax	1.99	1.60	1.80	3.09	2.57	2.22	2.17	2.04	1.81	2.02	1.67	1.46	1.80	2.38	1.88	1.25	1.98	0.45	22.46
8. Burroughs	1.10	1.23	1.20	1.34	1.72	1.71	1.62	2.03	2.24	1.48	1.68	2.00	2.12	2.12	1.77	1.26	1.66	0.37	22.18
9. Cipla	1.66	1.80	1.72	1.70	1.59	1.38	1.26	1.57	1.90	1.55	1.37	1.30	1.37	1.33	1.27	1.12	1.49	0.22	14.88
10. Citurgia	0.52	0.60	0.73	1.02	0.82	0.72	1.18	1.19	1.13	1.00	0.80	0.97	1.10	0.95	0.92	1.15	0.93	0.21	22.67
11. Colour	1.23	1.23	1.23	1.24	1.37	1.35	1.47	1.43	1.47	1.40	1.37	1.37	1.42	1.47	1.50	1.49	1.38	0.10	7.05
12. Cynamid	1.13	1.38	1.50	1.66	1.82	1.79	1.71	1.80	1.89	1.81	1.74	1.99	1.99	2.10	1.96	1.94	1.76	0.25	14.21
13. D.C.W.	1.42	1.29	1.41	1.27	1.36	1.23	1.26	1.59	1.80	1.50	1.27	0.99	0.84	0.99	1.00	0.98	1.26	0.26	20.31
14. Deepak	1.05	1.14	1.13	1.07	0.79	0.66	0.79	0.90	1.00	0.93	0.70	0.57	0.68	0.75	0.77	0.76	0.86	0.18	20.78
15. Duphar	1.50	1.40	1.68	1.90	1.81	1.60	1.50	1.58	1.66	1.56	1.52	1.60	1.59	1.53	1.38	1.19	1.56	0.16	10.52
16. E.I.D.	3.02	3.62	4.00	3.55	3.19	3.07	2.37	2.22	2.29	1.27	1.91	2.04	1.71	1.78	1.29	1.13	2.41	0.90	37.48
17. E. Merck	1.43	1.42	1.46	1.36	1.35	1.46	1.57	1.43	1.45	1.32	1.17	1.08	1.16	1.31	1.56	1.59	1.38	0.15	10.78
18. Excel	1.29	1.56	1.76	1.53	1.34	1.28	1.25	1.71	2.00	1.72	1.57	1.72	1.62	1.33	1.22	1.22	1.51	0.24	15.83
19. Ficom	0.20	0.66	0.80	1.08	1.34	1.65	1.74	1.80	1.78	1.32	0.82	0.92	0.93	0.82	0.61	0.82	1.08	0.48	44.03
20. Fulford	1.34	1.36	1.60	1.92	1.80	1.89	1.93	1.94	2.10	1.94	1.64	2.03	2.85	3.16	3.04	2.95	2.09	0.58	27.92
21. German	1.67	1.81	1.73	1.52	1.26	1.18	1.16	1.37	1.69	1.88	1.47	1.27	1.40	1.47	1.44	1.34	1.48	0.22	14.98
22. Glaxo	1.58	1.74	1.64	1.36	1.47	1.95	2.07	1.83	1.17	1.61	1.77	1.84	1.99	2.40	2.31	1.96	1.79	0.33	18.25

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TABLE - V.12 cont.

Name	Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.	
23. Guj-Alkaly		1.04	1.21	1.05	0.80	0.80	0.85	0.86	0.89	0.92	0.83	0.94	1.03	1.04	0.62	0.58	0.58	0.88	0.18	20.32	
24. Guj-State		0.76	0.96	0.99	1.00	1.03	1.14	0.98	0.89	1.03	0.91	0.73	0.68	0.58	0.55	0.68	0.69	0.85	0.18	21.27	
25. Hin-Ciba		1.56	1.58	1.75	1.75	1.88	2.04	2.13	2.55	2.90	2.41	2.32	1.96	1.80	1.76	1.55	1.36	1.96	0.41	21.20	
26. Hin-Lever		2.25	2.30	2.07	2.14	2.07	1.97	2.18	2.04	1.99	2.16	2.29	2.39	2.41	2.41	2.31	2.42	2.21	0.16	7.09	
27. Hochest		1.66	1.82	1.85	1.83	1.91	1.93	1.61	1.61	1.76	1.52	1.15	1.08	1.20	1.36	1.08	1.20	1.54	0.31	20.34	
28. I.C.I.		0.70	0.98	1.50	1.65	1.45	1.45	1.28	1.20	1.28	1.02	1.47	1.34	1.38	1.40	1.24	1.24	1.29	0.23	18.14	
29. Ind-Dye		1.14	1.25	1.44	1.42	1.09	0.79	1.03	1.09	1.11	1.16	1.33	1.39	1.41	1.24	1.15	1.04	1.19	0.18	14.84	
30. Ind-Oil		2.30	3.22	3.84	3.72	3.68	3.25	3.03	2.88	2.39	1.86	1.48	1.41	1.55	1.36	1.54	2.03	2.47	0.90	36.50	
31. Jayant		0.44	0.80	0.78	0.63	0.87	1.12	0.99	0.82	0.78	0.57	0.55	0.53	0.46	0.46	0.45	0.35	0.66	0.22	33.52	
32. Knoll		2.08	2.27	2.35	2.43	2.60	2.74	2.39	2.31	1.92	1.83	1.76	1.87	2.14	2.08	1.87	1.75	2.15	0.31	14.20	
33. Lakme		1.87	2.11	1.38	1.42	2.06	2.52	2.43	1.75	1.78	1.82	2.14	2.42	1.99	2.06	2.11	0.72	1.91	0.45	23.69	
34. National		1.15	1.33	1.17	1.22	1.35	1.41	1.47	1.51	1.64	1.45	1.30	1.35	1.33	1.43	1.15	1.06	1.33	0.15	11.51	
35. Parke		2.28	2.68	2.66	2.85	3.22	3.14	3.08	3.20	3.09	2.49	2.44	2.58	2.80	2.71	2.56	2.41	2.76	0.30	11.03	
36. Rallis		2.86	2.85	2.60	1.37	2.22	2.35	2.13	2.10	1.96	1.95	2.23	1.90	1.74	1.93	2.43	2.42	2.19	0.39	18.03	
37. Ranbaxy		1.38	1.59	1.39	1.21	1.25	1.26	1.21	1.25	1.34	1.35	1.44	1.43	1.44	1.31	0.79	0.65	1.27	0.24	18.75	
38. Seale		1.52	1.60	1.35	1.61	2.01	2.07	1.63	1.31	1.35	1.21	1.29	1.55	1.78	1.81	1.82	1.53	1.59	0.26	16.11	
39. Synthetics		0.92	0.89	1.04	1.23	1.24	1.34	1.32	1.48	1.56	1.44	1.43	1.18	0.87	0.55	0.63	0.66	1.11	0.32	29.15	
40. Tam-Dadha		1.19	1.08	1.24	1.26	1.05	1.38	1.78	1.69	0.98	1.38	1.37	2.42	1.00	2.03	2.00	2.10	1.50	0.45	30.09	
41. Tata		0.86	0.86	0.64	0.85	0.61	0.58	0.52	0.45	0.48	0.40	0.33	0.33	0.30	0.24	0.30	0.51	0.52	0.21	39.79	
42. Transpek		1.40	1.72	2.06	2.08	1.82	1.64	1.72	1.75	1.91	1.74	1.76	1.69	1.45	1.14	1.15	1.19	1.64	0.30	18.13	
43. United		0.91	1.14	1.40	1.35	1.38	1.33	1.12	1.03	1.19	1.21	1.35	1.53	1.26	0.74	0.65	0.66	1.14	0.27	23.94	
44. Zandu		1.29	1.42	1.44	1.54	1.61	1.48	1.52	1.55	1.74	1.56	1.42	1.39	1.31	1.51	1.55	1.54	1.49	0.11	7.55	
45. Zuari		1.19	1.42	1.63	1.56	1.62	1.79	1.80	1.70	1.95	1.46	1.55	1.90	1.63	1.84	1.67	1.38	1.63	0.20	12.49	
Average		1.41	1.55	1.59	1.60	1.62	1.62	1.58	1.59	1.65	1.48	1.44	1.49	1.49	1.50	1.41	1.31	1.52	0.30	20.00	
S.D.		0.60	0.65	0.69	0.67	0.67	0.64	0.57	0.56	0.55	0.44	0.47	0.54	0.59	0.66	0.63	0.58	0.50			
C.V.		42.35	42.12	43.22	41.87	41.09	39.53	35.90	35.02	33.23	29.64	32.68	35.99	39.56	43.98	44.85	44.25	33.11			

be lowest to the tune of 7.05 for Colour. The grand average of total assets turnover ratio for all companies taken together comes to be 1.52. This ratio indicates firm's ability in generating sales from all financial resources committed to total assets. The grand average indicates that on an average sample companies generates a sale of 1.52 for one rupee investment in fixed plus current or total assets.

5.3.e WORKING CAPITAL TURNOVER RATIO:

This ratio is derived as sales divided by average working capital.

Table V.13 presents the working capital turnover ratio for 45 companies for the period of 16 years from 1981-1996. It is very interesting to note from the Table that the minimum ratio is found to be -381.10 for the year 1992 for Gujarat Alkaly. The ratio is negative on account of negative working capital of the companies for the respective years. The highest ratio is found to be 1059 for the year 1993 for Gujarat Alkaly. Wide fluctuations are observed over a period of time for given companies. On examining yearwise average the lowest average is found to be -2.27 taking all companies together for the year 1992 and the highest is 34.86 for the year 1993. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise and presented in the table. The highest S.D. is found to be 157.1 for the year 1993 and the lowest is 4.07 for the year 1994. The highest C.V. is found to be 450.5 for the year 1993 and the lowest is found to be -10139 for the year 1987. However, this indicates very high level of

TABLE - V.13

WORKING CAPITAL TURNOVER RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	4.54	4.36	3.81	4.30	6.73	15.14	41.39	164.1	52.87	14.67	8.62	8.49	8.92	6.93	5.91	6.79	22.35	40.31	180.35
2. Aegies	10.31	-4.31	-2.08	-1.85	-2.43	-3.87	-4.73	-4.95	-5.46	-5.62	-8.32	5.94	4.42	8.86	11.02	12.38	0.58	6.99	1200.1
3. Alembic	12.57	13.61	14.22	13.62	14.93	14.94	13.49	16.75	17.26	11.53	15.06	-299.00	117.70	18.45	9.70	7.78	0.79	84.08	10679
4. Atul	7.10	12.38	7.28	4.05	4.34	6.29	-23.02	-4.93	12.32	6.06	5.17	3.76	3.37	3.11	2.63	3.36	3.33	8.07	242.47
5. Basf	20.86	28.39	17.52	11.47	6.75	4.94	4.71	4.95	6.30	6.37	6.42	6.08	6.21	8.23	10.24	8.96	9.90	6.72	67.92
6. Bayer	7.01	6.37	7.54	7.57	7.51	7.34	6.88	5.91	6.40	9.27	10.93	8.80	9.50	8.38	8.15	6.21	7.74	1.37	17.75
7. Borax	5.51	5.15	4.90	6.07	6.49	7.50	8.15	7.24	6.42	7.94	7.53	6.68	8.65	12.83	10.76	7.13	7.43	2.04	27.39
8. Burroughs	10.97	11.49	10.49	7.69	5.08	4.34	4.80	6.71	8.14	5.95	6.65	7.93	9.01	6.92	5.28	4.04	7.22	2.35	32.53
9. Cipla	18.86	18.36	17.75	19.68	16.96	10.50	7.26	7.85	9.11	7.20	7.31	7.92	7.68	9.19	9.28	3.80	11.17	5.21	46.60
10. Citurgia	-15.85	29.87	4.27	4.44	4.15	2.99	4.58	6.77	8.59	15.32	15.99	11.04	9.41	7.58	7.37	9.26	7.86	9.16	116.47
11. Colour	15.57	16.07	13.94	9.32	8.56	6.21	5.34	5.58	8.09	11.03	18.02	13.56	8.45	7.42	6.60	7.21	10.06	4.10	40.71
12. Cynamid	3.89	4.69	4.22	3.76	3.89	4.34	4.85	5.06	6.17	7.28	5.99	5.57	5.32	5.25	4.04	3.54	4.87	1.03	21.21
13. D.C.W.	16.48	18.98	24.24	14.89	-65.97	-18.54	37.47	12.69	13.16	14.48	24.32	8.52	7.20	16.68	9.97	20.53	9.69	23.23	239.65
14. Deepak	6.89	5.76	4.82	5.49	5.54	5.48	5.98	6.48	7.71	7.13	8.23	3.20	2.17	2.47	3.06	3.58	5.25	1.88	35.74
15. Duphar	6.70	6.98	10.32	17.15	32.46	168.10	-354.0	71.78	32.96	26.08	13.66	13.21	12.95	10.73	8.85	5.35	5.20	104.0	2000.3
16. E.I.D.	129.0	39.14	24.61	19.94	17.21	17.42	16.47	18.57	18.90	8.90	13.17	14.88	17.26	13.31	5.71	4.39	23.68	29.19	123.26
17. E. Merck	-9.39	-6.15	-11.62	106.80	53.05	26.27	14.25	10.49	12.74	17.54	26.02	189.9	27.13	9.99	9.16	8.44	30.29	51.00	168.37
18. Excel	11.92	14.30	10.19	6.24	5.09	4.49	4.57	9.61	17.21	13.12	9.20	8.03	5.84	3.72	3.51	4.24	8.21	4.22	51.44
19. Ficom	1.37	4.62	6.89	12.42	14.50	11.84	7.62	6.34	5.95	4.05	2.50	3.63	10.58	7.23	2.90	4.48	6.68	3.86	57.70
20. Fulford	36.49	26.25	15.62	13.62	12.89	14.84	15.32	13.05	12.30	12.47	10.62	10.80	11.96	12.25	12.34	11.96	15.17	6.74	44.45
21. German	15.14	15.34	13.91	13.17	9.25	7.98	8.19	8.76	10.38	9.61	7.97	9.99	9.98	6.25	4.62	4.25	9.67	3.35	34.64
22. Glaxo	10.47	12.33	14.46	17.94	22.06	23.27	13.71	7.14	5.67	9.81	10.27	17.38	23.46	11.74	9.33	10.06	13.69	5.61	40.95

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TABLE - V.13 cont.

Name \Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	3.74	4.68	11.00	75.63	-112.5	-19.22	-17.45	-15.46	-11.49	-12.09	-80.10	-381.10	1059	11.61	22.75	10.48	34.34	291.5	848.84
24. Guj-State	4.96	4.51	3.62	3.17	3.11	3.94	4.10	4.03	3.89	2.99	3.35	7.95	7.21	4.90	6.73	10.50	4.94	2.11	42.71
25. Hir-Ciba	6.33	6.73	8.46	7.63	6.44	6.72	6.70	6.69	7.03	6.06	6.77	7.76	8.01	8.11	4.80	3.98	6.76	1.17	17.28
26. Hir-Lever	14.73	15.30	13.55	13.19	12.85	16.22	65.88	27.57	13.62	17.40	20.73	19.50	15.76	14.87	15.64	19.57	19.77	12.85	64.98
27. Hocheat	25.56	27.23	27.84	17.99	10.42	9.58	11.34	17.89	31.26	23.47	15.10	13.69	14.01	12.23	8.54	13.92	17.50	7.28	41.61
28. I.C.I.	-14.03	-15.16	-34.10	83.05	17.92	12.45	11.89	16.41	26.74	27.81	22.27	14.36	10.78	8.73	7.13	7.88	12.76	24.85	194.79
29. Ind-Dye	18.75	17.61	17.92	13.16	67.99	-28.43	-43.72	892.00	35.51	21.55	14.15	12.89	10.80	10.27	7.07	5.86	67.09	221.3	329.86
30. Ind-Oil	244.40	322.70	153.60	45.28	31.66	31.91	25.70	20.66	15.84	12.07	9.75	7.53	7.42	7.02	9.00	20.07	60.29	95.08	157.71
31. Jayant	-4.93	-7.75	-6.19	-4.76	-11.74	-60.61	-15.58	-5.57	-4.00	-3.54	-3.62	-2.54	-1.82	-1.73	-1.75	-1.87	-8.63	14.38	-166.7
32. Knoll	9.89	11.30	12.16	10.40	9.09	7.05	5.86	6.06	5.27	5.24	6.48	7.69	7.01	6.98	13.72	43.26	10.47	9.11	87.08
33. Lakme	26.22	210.0	22.00	9.01	13.45	18.16	11.41	6.10	6.87	7.80	9.16	12.54	8.09	6.84	7.14	1.17	23.50	50.13	213.36
34. National	12.98	20.35	73.84	122.2	15.58	7.66	6.46	7.24	7.83	5.96	4.78	4.74	4.70	6.94	6.18	8.61	19.75	32.09	162.45
35. Parke	4.90	5.66	5.53	6.07	7.14	7.85	8.91	9.61	10.05	8.39	8.66	9.54	10.98	10.12	8.76	8.00	8.13	1.82	22.43
36. Rallis	32.79	27.31	20.35	12.16	23.80	33.05	19.47	13.80	14.57	14.50	16.15	10.74	9.57	11.55	15.87	28.01	18.98	7.78	40.97
37. Ranbaxy	17.69	18.87	13.91	17.20	12.39	6.73	6.67	9.16	9.00	7.24	7.58	8.67	7.92	5.38	2.32	1.79	9.53	5.15	54.04
38. Searle	9.08	-1.95	-0.46	-0.92	9.40	5.23	3.81	3.38	3.86	3.91	3.66	4.07	4.66	4.27	4.84	5.95	3.92	3.07	78.29
39. Synthetics	7.26	8.32	16.42	33.54	26.74	25.08	25.63	26.84	19.88	10.79	10.59	6.68	4.60	3.24	3.84	5.49	14.68	10.11	68.85
40. Tam-Dadha	8.16	7.87	12.67	20.35	11.83	12.48	14.79	14.21	6.13	7.71	10.04	21.52	8.15	14.42	6.63	4.79	11.36	4.88	42.96
41. Tata	-14.33	-13.00	-16.53	11.15	9.08	5.68	4.92	3.20	1.94	1.37	1.07	1.11	1.33	2.91	3.11	2.83	0.36	7.98	2191.4
42. Transpek	-151.1	-233.70	-154.50	-114.10	-59.71	-38.91	-50.37	-63.40	-68.83	134.5	17.57	13.97	10.41	8.49	11.52	17.37	-45.06	88.49	-196.4
43. United	-14.63	-49.46	42.93	35.39	25.25	9.05	4.42	3.84	5.46	8.24	8.90	11.80	18.62	2.07	1.82	2.07	7.24	20.57	284.29
44. Zandu	10.00	11.05	25.54	23.95	15.44	17.35	16.19	10.32	8.41	6.54	6.14	6.98	6.86	7.18	6.43	6.79	11.57	6.32	54.60
45. Zuari	4.11	5.04	5.79	5.80	6.66	5.65	4.43	4.03	6.14	5.97	6.99	11.50	7.50	5.73	6.03	6.55	6.12	1.74	28.35
Average	13.09	15.28	10.95	16.99	7.59	9.70	-0.56	31.21	9.52	12.09	7.81	-2.27	34.86	8.22	7.52	8.68	11.92	29.43	447.39
S.D.	47.73	68.22	36.40	33.31	27.65	29.41	56.97	134.3	16.22	20.06	14.95	79.06	157.1	4.07	4.31	7.81	16.13		
C.V.	364.7	446.6	332.5	196.1	364.4	303.2	-10139	430.2	170.4	165.9	191.4	-3485	450.5	49.52	57.23	90.00	135.4		

variations in relation to average. When the companywise ratio is examined over a period of time, minimum average is found to be -45.06 for Transpek and the maximum average is found to be 67.09 for Indian Dyes. On examining the variations the highest S.D. is found to be 291.5 for Gujarat Alkaly and the lowest is found to be 1.03 for Cynamid. The highest C.V. is found to be 10679 for Alembic this very high variation is on account of high difference in the working capital for 1992 and the same is found to be lowest to the tune of $\frac{1}{167}$ for Jayant. The grand average of ratio for all companies to taken together comes to be 11.92. This ratio indicates that on an average the working capital has turned over for 12 times. This again indicates the efficient use of working capital turnover ratio.

5.4. PROFITABILITYs RATIOS (in %):

5.4.a GROSS PROFIT MARGIN RATIO or

OPERATING INCOME TO SALES RATIO:

This ratio is derived as gross profit divided by sales.

Table V.14 presents the gross profit margin ratios for 45 companies for the period of 16 years from 1981-1996. It is very interesting to note from the Table that the minimum ratio is found to be -16.52 for I.C.I. for the year 1990. The highest ratio is found to be 49.45 for Ficom for the year 1981. When average is computed taking all companies the lowest average is found to be 10.32 for the year 1989 the highest is 12.76 for the year 1981. To have an idea

TABLE - V.14

GROSS PROFIT MARGIN RATIO OR OPI/Sale RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	4.66	3.36	4.38	5.16	4.43	4.36	2.15	5.04	5.83	5.78	6.92	5.45	5.51	9.19	9.47	0.05	5.11	2.30	45.03
2. Aegies	15.29	11.15	7.45	9.11	14.05	16.66	18.96	18.30	12.66	9.94	11.48	5.65	-0.66	12.05	20.91	22.13	12.82	5.95	46.43
3. Alembic	6.06	11.34	11.83	9.50	6.39	7.98	8.28	8.20	7.67	7.24	7.70	6.88	5.62	6.74	8.22	9.43	8.07	1.75	21.66
4. Atul	9.77	6.98	5.74	4.34	3.35	3.05	3.09	3.06	3.59	8.55	7.66	5.18	3.62	6.43	5.51	11.32	5.70	2.58	45.17
5. Basf	13.96	14.26	13.73	14.73	14.80	13.41	13.34	14.85	14.67	15.74	16.03	18.78	16.47	16.91	15.30	14.87	15.12	1.42	9.41
6. Bayer	10.82	10.78	13.31	12.13	12.54	13.21	13.52	13.21	12.82	10.31	13.11	13.94	12.99	13.65	7.79	5.83	11.87	2.28	19.21
7. Borax	14.19	15.25	11.50	7.65	8.67	9.36	8.93	8.47	6.98	7.64	7.41	9.98	7.61	6.62	8.23	7.41	9.12	2.51	27.53
8. Buirroughs	16.77	17.43	15.49	12.61	10.86	4.82	4.72	9.45	11.29	8.71	7.09	6.60	6.43	7.64	8.50	2.11	9.41	4.43	47.07
9. Cipla	10.13	9.71	9.67	9.93	10.56	11.52	11.66	12.19	12.73	13.29	12.40	12.83	11.94	12.10	15.17	15.41	11.95	1.74	14.59
10. Citurgia	35.11	39.12	37.88	28.07	25.38	20.44	26.63	26.41	22.92	21.91	22.40	20.67	21.24	16.35	6.54	11.18	23.89	8.73	36.53
11. Colour	15.97	12.40	10.79	10.60	10.98	12.03	13.42	11.12	9.69	8.99	10.55	10.35	13.25	12.95	11.36	11.47	11.62	1.70	14.60
12. Cynamid	3.50	3.86	6.47	10.46	11.77	9.28	7.48	7.38	8.11	13.07	14.24	14.20	13.85	15.05	17.33	16.09	10.76	4.32	40.16
13. D.C.W.	11.74	9.08	4.57	6.97	6.02	9.31	10.14	7.16	6.41	10.23	12.17	15.49	11.77	11.40	8.37	10.83	9.48	2.81	29.69
14. Deepak	22.86	21.89	19.01	17.14	17.84	17.52	13.99	13.73	16.05	19.34	15.80	18.53	17.49	15.97	12.22	10.76	16.88	3.23	19.10
15. Duphar	11.87	9.14	10.80	10.54	11.17	11.19	9.58	9.49	8.66	8.23	8.98	7.57	8.27	7.42	9.71	-6.06	8.54	4.11	48.15
16. E.I.D.	2.52	2.38	2.44	1.49	0.72	1.33	-2.47	0.91	3.81	-12.33	3.90	4.37	0.53	4.66	4.17	4.32	1.42	4.13	290.50
17. E. Merck	11.27	13.19	12.96	12.88	11.58	10.62	9.85	9.20	9.42	9.65	9.21	8.79	12.24	12.85	14.72	15.52	11.50	2.08	18.10
18. Excel	10.43	11.98	13.64	13.11	10.71	9.36	9.08	11.69	12.79	16.80	18.71	20.99	19.27	17.03	16.05	15.47	14.19	3.68	25.90
19. Ficom	49.45	20.34	10.91	12.05	16.28	19.90	22.99	20.76	18.98	18.16	17.27	19.78	19.21	15.18	11.84	13.04	19.13	8.85	46.26
20. Fulford	11.78	12.72	12.90	11.38	10.69	9.48	8.84	9.01	7.83	6.09	5.95	5.15	4.31	3.69	3.22	3.88	7.93	3.38	42.59
21. German	15.91	16.98	16.78	15.27	14.20	12.42	9.27	10.93	8.53	9.19	6.02	3.64	7.03	14.00	14.46	13.30	11.74	4.07	34.64
22. Glaxo	11.04	9.49	10.22	11.32	10.89	8.16	9.62	10.52	8.70	8.30	10.13	7.31	7.96	8.21	7.96	8.38	9.26	1.29	13.93

Cont.

TABLE - V.14 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	39.29	27.84	25.70	18.48	20.15	24.04	18.95	20.54	20.04	26.43	26.34	25.44	29.15	24.96	25.02	30.35	25.17	5.23	20.78
24. Guj-State	16.69	13.47	15.25	14.75	13.26	12.64	8.84	11.85	14.05	14.51	16.38	15.20	14.95	14.78	13.96	20.71	14.46	2.50	17.31
25. Hin-Ciba	10.39	10.97	11.13	10.74	10.49	9.56	8.68	10.27	11.48	12.33	11.14	12.83	13.99	11.91	9.12	10.85	10.99	1.35	12.30
26. Hin-Lever	8.58	9.98	10.56	10.57	10.83	12.46	11.51	11.85	10.95	9.97	9.76	9.67	9.90	9.75	9.25	8.93	10.28	1.05	10.26
27. Hoechst	10.74	10.69	10.54	10.78	8.71	5.46	3.25	2.52	3.39	7.16	7.58	7.24	8.94	10.87	11.72	11.63	8.20	3.13	38.12
28. I.C.I.	9.81	10.84	9.99	10.22	6.68	6.36	8.62	9.72	11.35	-16.52	7.64	-11.29	-15.63	-12.76	7.46	8.18	3.17	10.42	329.00
29. Ind-Dye	6.02	6.82	4.50	4.33	3.24	1.82	2.42	4.44	2.59	5.74	6.94	8.65	8.18	9.14	9.24	7.27	5.71	2.46	43.15
30. Ind-Oil	3.05	3.20	3.05	3.46	3.48	3.53	4.36	4.79	4.60	5.27	4.82	4.20	4.03	5.36	5.53	-0.38	3.90	1.41	36.21
31. Jayant	1.75	1.07	4.67	18.94	23.17	22.66	21.63	20.01	20.02	12.55	19.66	21.84	15.97	11.91	13.57	15.54	15.31	7.29	47.63
32. Knoll	11.31	10.77	11.05	13.82	15.78	16.55	15.16	15.31	12.84	11.76	12.63	11.44	8.72	7.97	8.03	8.17	11.96	2.84	23.74
33. Lakme	1.03	8.21	2.81	0.66	7.58	5.80	5.49	5.47	6.58	6.04	4.00	3.76	2.14	8.50	9.37	7.87	5.33	2.70	50.70
34. National	8.22	8.51	7.23	12.88	16.43	16.30	14.46	13.82	15.94	16.86	14.94	12.40	9.73	6.53	11.42	14.12	12.48	3.48	27.86
35. Parke	6.89	7.08	6.92	9.36	8.33	6.94	5.84	6.36	6.37	7.86	8.45	6.89	11.89	12.61	11.93	1.87	7.85	2.67	33.98
36. Rallis	4.64	4.16	4.38	0.44	5.02	6.05	6.81	5.14	5.89	4.38	3.55	6.32	5.82	5.70	5.57	5.45	4.96	1.49	29.97
37. Ranbaxy	9.12	11.87	11.27	10.23	11.53	9.92	8.85	9.55	10.08	10.42	10.43	11.37	14.83	17.29	0.18	0.16	9.82	4.33	44.10
38. Searle	18.44	18.07	17.94	26.59	28.28	22.13	16.17	15.23	12.26	13.34	10.63	10.50	10.05	11.26	12.91	11.77	15.97	5.66	35.43
39. Synthetics	4.75	2.27	0.91	4.07	5.38	4.31	4.37	7.80	8.70	6.58	7.77	11.23	9.24	9.25	6.32	13.12	6.63	3.24	48.93
40. Tam-Dadha	12.02	17.14	17.11	19.38	19.94	10.72	9.33	9.28	10.20	8.30	5.34	8.49	9.35	7.21	7.31	7.36	11.15	4.63	41.53
41. Tata	27.84	26.69	23.70	9.50	9.80	15.68	32.10	30.95	26.78	31.24	28.41	28.90	28.01	32.41	35.80	47.31	27.19	9.40	34.58
42. Transpek	5.75	5.31	10.74	11.86	9.20	10.29	11.71	11.48	11.92	12.36	12.15	17.39	16.67	13.84	12.37	10.21	11.45	3.16	27.56
43. United	14.60	15.76	15.82	14.85	13.74	14.77	8.99	1.49	3.42	8.31	16.91	18.80	24.31	21.54	14.76	16.29	14.02	5.97	42.58
44. Zandu	9.86	7.84	10.16	7.54	12.38	11.21	14.89	14.93	11.36	15.34	13.36	12.96	9.88	13.01	11.88	8.87	11.59	2.45	21.11
45. Zuari	18.52	11.29	16.46	14.26	15.02	12.89	11.37	10.57	9.84	9.20	9.90	8.61	10.64	9.25	15.53	13.04	12.27	2.95	24.02
Average	12.76	11.84	11.43	11.20	11.61	11.06	10.82	10.99	10.68	10.32	11.42	11.22	10.82	11.30	11.23	11.01	11.23	0.55	4.91
S.D.	9.58	7.25	6.75	5.73	5.81	5.58	6.57	6.12	5.28	7.71	5.64	7.02	7.66	6.55	5.94	8.46	6.73		
C.V.	75.04	61.24	59.09	51.18	50.08	50.45	60.69	55.72	49.45	74.75	49.40	62.51	70.86	57.97	52.85	76.81	59.91		

about the variations between the companies S.D. and C.V. are also computed yearwise. Lowest S.D. is found to be 5.28 for the year 1989 and the highest S.D. is also found to be 9.58 for the year 1981. The lowest C.V. is found to be 49.40 for the year 1991 and the highest of 76.81 is for the year 1996. On examining company wise gross profit margin ratio over a period of time, minimum average is found to be 1.42 for E.I.D. and the maximum ratio is found to be 27.19 for Tata. The gross profit margin ratio has fluctuated widely for I.C.I. which is reflected in its highest S.D. of 10.42 for I.C.I. and the lowest of 1.05 is observed for Hindustan Lever. Similarly the highest C.V. is found for I.C.I. to the tune of 329 and it is found to be lowest of 9.41 for Basf. The grand average of gross profit margin ratio for all companies taken together and all years taken together comes to 11.23. This indicates that on an average the gross profit margin is 11.2% for sample companies for period under consideration and is reasonably good.

5.4.b. NET PROFIT MARGIN RATIO:

This ratio is derived as net profit divided by sales.

Table V.15 presents the net profit margin ratios for 45 companies for the period of 16 years from 1981-1996. It can be observed from the Table, that the minimum ratio is found to be -3.29 for the year 1990 for Aegies. And the highest ratio is found to be 55.50 for Tata. for the year 1994. This indicates wide fluctuations over a period of time for given companies. On examining yearwise average the lowest

TABLE - V.15

NET PROFIT MARGIN RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	2.11	1.57	2.27	2.44	2.14	2.99	2.92	1.50	2.47	0.21	1.62	1.08	2.62	6.42	5.02	0.17	2.35	1.58	67.34
2. Aegies	10.04	3.60	0.84	0.04	1.61	1.82	2.26	3.48	-0.49	-3.29	3.19	10.22	6.56	6.98	14.50	5.71	4.19	4.59	109.60
3. Alembic	1.99	4.64	3.06	2.10	2.40	2.68	1.28	2.08	2.01	1.29	0.84	0.93	0.48	2.14	2.61	2.17	2.04	1.00	48.85
4. Atul	5.39	3.92	3.10	2.24	3.71	3.74	-2.99	5.17	2.16	3.41	6.55	3.98	3.22	5.81	6.60	2.69	3.67	2.27	61.83
5. Basf	4.61	4.09	5.45	4.13	3.26	2.53	2.84	3.60	3.84	6.29	4.94	6.62	5.92	5.60	6.19	8.32	4.89	1.57	32.02
6. Bayer	2.13	2.41	3.64	3.17	4.25	4.67	4.94	4.43	5.44	3.59	4.64	6.27	4.14	4.19	0.52	1.45	3.74	1.50	40.15
7. Borax	3.82	3.53	3.95	2.53	2.50	3.18	2.68	3.73	3.95	3.26	4.18	2.65	3.12	1.73	5.26	4.40	3.40	0.88	25.81
8. Burroughs	4.64	4.29	3.95	5.44	4.73	2.69	1.80	3.74	5.22	2.86	2.31	1.88	2.13	3.23	4.97	-0.23	3.35	1.55	46.27
9. Cipla	2.92	2.98	2.65	2.46	2.52	5.32	6.12	4.01	4.61	4.64	5.16	5.45	5.24	5.95	9.55	7.99	4.85	1.99	41.13
10. Citurgia	2.78	12.19	23.82	12.56	12.64	7.39	10.84	11.91	10.16	11.24	10.42	5.76	5.73	6.12	3.66	3.77	9.44	5.16	54.68
11. Colour	4.64	4.02	1.33	2.13	2.10	2.63	4.11	3.21	3.00	2.10	3.31	3.36	4.83	7.22	6.05	5.80	3.74	1.64	43.71
12. Cynamid	2.69	1.15	2.51	4.85	5.59	3.80	2.77	2.66	1.36	6.05	6.92	6.05	6.02	7.38	9.86	8.02	4.86	2.54	52.33
13. D.C.W.	3.24	4.53	2.11	5.42	3.60	6.18	6.85	3.79	2.88	1.35	4.60	6.12	4.85	4.60	4.60	4.82	4.35	1.48	34.07
14. Deepak	6.43	4.77	4.57	4.12	4.23	3.70	3.24	4.73	5.29	8.90	7.50	10.34	3.80	5.13	3.33	2.49	5.16	2.14	41.50
15. Duphar	3.85	2.25	2.91	3.14	4.03	3.20	1.81	2.41	3.65	3.13	2.95	2.22	1.93	1.37	2.12	4.98	2.87	0.95	32.97
16. E.I.D.	1.73	1.50	0.69	0.70	0.41	0.55	1.02	1.38	3.52	2.61	2.57	2.25	2.75	3.53	4.44	3.73	2.09	1.28	61.23
17. E. Merck	2.93	4.91	5.26	3.75	3.09	3.90	3.66	3.59	4.18	4.27	1.26	-0.61	2.03	4.40	6.25	7.62	3.78	1.92	50.70
18. Excel	2.76	4.74	6.45	4.83	2.75	2.70	2.14	4.13	5.37	8.54	7.91	10.49	9.84	9.90	9.73	7.95	6.26	2.95	47.12
19. Ficom	23.38	5.13	6.23	8.85	8.65	12.43	15.11	14.29	13.55	9.75	9.68	11.11	10.18	10.98	12.23	3.65	10.95	4.59	41.95
20. Fulford	2.09	2.95	3.53	2.99	2.72	2.48	2.34	2.51	2.71	2.83	1.24	0.80	1.27	1.36	1.51	1.89	2.20	0.78	35.44
21. German	3.66	4.02	3.87	3.38	2.49	2.00	2.50	2.36	1.85	6.30	3.43	1.52	0.87	5.97	8.23	7.01	3.72	2.12	57.05
22. Glaxo	4.82	3.83	4.00	4.38	4.45	3.53	3.65	4.33	7.83	5.16	2.91	1.15	2.01	3.07	11.37	15.90	5.15	3.71	72.06

Cont.

TABLE - V.15 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	30.29	12.68	11.48	10.24	6.21	7.59	5.67	3.05	5.66	6.71	9.91	8.46	11.06	11.32	11.08	20.32	10.73	6.54	60.98
24. Guj-State	7.73	7.37	10.33	10.03	6.38	6.71	7.31	8.99	7.50	7.52	8.74	7.27	5.84	3.46	7.28	11.32	7.74	1.88	24.29
25. Hin-Ciba	5.19	5.52	5.60	5.04	5.22	4.32	3.47	4.20	5.07	5.55	5.03	4.74	3.62	3.37	26.02	-0.10	5.74	5.59	97.29
26. Hin-Lever	3.81	4.17	4.39	3.54	4.00	5.07	4.57	4.66	5.06	4.61	4.74	4.98	4.97	5.45	5.88	6.13	4.75	0.70	14.78
27. Hocheat	3.69	3.49	5.69	8.19	4.40	3.83	2.62	1.01	1.58	3.23	2.45	1.75	1.04	2.68	6.04	5.27	3.56	1.98	55.67
28. I.C.I.	5.44	6.35	3.62	3.21	4.02	3.88	2.69	2.07	2.62	-2.40	2.76	1.92	0.29	4.84	5.73	5.85	3.30	2.25	68.02
29. Ind-Dye	2.86	2.70	2.97	2.34	1.62	0.72	1.02	-2.37	-2.07	-0.03	2.40	1.81	1.77	1.66	2.10	1.23	1.29	1.59	122.80
30. Ind-Oil	1.41	1.33	1.19	0.80	0.75	1.14	3.41	2.85	3.39	3.85	3.73	3.79	2.78	3.25	3.57	2.84	2.51	1.18	46.91
31. Jayant	27.83	8.31	13.42	10.92	13.02	9.97	4.83	5.65	7.61	6.10	4.15	2.96	2.15	2.51	2.19	40.42	10.13	10.32	101.90
32. Knoll	3.57	3.52	3.42	3.89	5.57	6.92	6.29	5.42	6.31	6.57	6.74	5.66	4.54	5.24	5.47	6.20	5.33	1.20	22.50
33. Lakme	2.40	9.88	5.12	0.68	5.18	3.25	1.98	2.56	2.63	2.71	3.91	2.65	3.10	4.89	7.47	12.50	4.43	3.12	70.36
34. National	3.35	2.92	1.97	2.72	6.81	7.58	6.25	6.88	8.65	9.48	7.18	5.33	5.06	4.78	6.81	7.54	5.83	2.21	37.92
35. Parke	2.98	3.46	2.36	2.91	3.79	4.61	4.77	5.15	3.83	6.31	3.56	3.21	5.18	5.16	6.45	4.88	4.29	1.21	28.16
36. Rallis	1.11	0.89	1.00	0.48	1.53	2.00	2.52	2.17	2.74	0.51	0.26	2.00	2.68	2.53	2.11	2.20	1.67	0.84	50.60
37. Ranbaxy	3.91	5.40	6.49	5.40	4.73	4.09	2.67	2.09	1.53	2.27	4.68	4.78	7.62	10.69	15.44	15.98	6.11	4.38	71.61
38. Searle	7.85	6.22	6.29	12.87	15.58	13.43	8.49	6.01	5.48	7.04	6.31	5.81	4.28	5.25	7.45	7.48	7.87	3.24	41.20
39. Synthetics	0.98	3.20	3.85	2.77	2.14	0.82	1.10	-0.60	4.97	3.61	2.98	5.25	5.67	3.75	3.43	4.74	3.04	1.77	58.32
40. Tam-Dadha	1.91	2.34	2.96	5.21	3.46	1.41	1.18	6.20	0.37	1.37	-2.40	0.36	3.14	1.25	1.28	1.23	1.95	2.00	102.50
41. Tata	10.92	10.23	11.49	7.76	16.57	13.98	12.39	13.17	13.94	15.31	14.94	16.89	18.07	55.50	37.22	25.89	18.39	12.11	65.86
42. Transpek	3.07	3.66	5.78	6.06	3.98	3.49	4.63	3.82	4.24	4.06	2.81	6.11	6.22	5.23	6.05	3.11	4.52	1.21	26.87
43. United	2.77	5.80	8.14	5.76	4.81	6.95	4.68	0.78	1.00	1.68	10.26	14.00	16.05	13.77	12.60	11.24	7.52	4.95	65.86
44. Zandu	3.61	2.45	3.31	2.33	5.12	5.91	6.63	4.54	7.56	9.88	7.77	6.35	3.69	5.03	4.93	3.39	5.16	2.10	40.64
45. Zuari	8.89	0.32	6.60	4.62	6.03	3.65	5.79	2.33	3.00	3.18	3.93	3.16	3.73	4.14	8.25	8.08	4.73	2.36	49.89
Average	5.52	4.43	4.97	4.52	4.77	4.57	4.15	4.08	4.38	4.52	4.78	4.86	4.71	6.20	7.41	7.07	5.06	0.99	19.67
S.D.	6.30	2.73	4.05	3.12	3.51	3.13	3.16	3.13	3.16	3.55	3.20	3.67	3.62	8.01	6.43	7.31	4.26		
C.V.	114.2	61.66	81.41	68.91	73.59	68.50	76.20	76.58	72.16	78.47	67.03	75.56	76.83	129.3	86.80	103.5	84.13		

average is found to be 4.08 for the year 1988 taking all companies together and the highest is 7.41 for the year 1995. On examining variation the highest S.D. and C.V. are found to be 8.01 and 129.3 for the year 1994 and the lowest S.D. and C.V. are found to be 2.73 and 61.66 for the year 1982. When the companywise net profit margin ratio is examined over a period of time, minimum average net profit margin ratio is found for Indian Dyes to the tune of 1.29 and the maximum average net profit margin ratio is found for Tata to the tune of 18.39. Net profit margin ratio has widely fluctuated for Tata, which is reflected in its highest S.D. of 12.11. The highest C.V. is found to be 122.80 for Indian Dyes and it is found to be lowest to the tune of 14.78 for Hindustan Lever. The grand average of net profit margin ratio for all companies taken together comes to be 5.06. This ratio indicates that on an average companies are generating profit. This enables them to distribute their profit to equity holders.

5.4.c COST OF GOODS SOLD RATIO:

This ratio is derived as cost of goods sold divided by sales.

Table V.16 presents the cost of goods sold ratio for 45 companies for the period of 16 years from 1981 - 1996. It is interesting to note from the Table that the minimum ratio is found to be 32.36 for the year 1981 for Fulford. The highest ratio is found to be 110.9 for the year 1995 for E.I.D. Wide fluctuations are observed over a period of time for given companies. On examining the average ratio for various

TABLE - V.16

COST OF GOODS SOLD RATIO

Name \Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	81.26	81.93	79.28	78.57	78.57	81.83	86.43	85.00	84.08	82.75	81.16	84.22	84.15	78.92	79.02	84.64	81.99	2.59	3.16
2. Aegies	84.18	80.50	84.14	83.39	79.97	76.41	71.66	70.09	74.39	76.99	72.68	80.97	86.34	74.50	60.47	62.74	76.21	7.49	9.83
3. Alembic	74.74	70.58	70.62	75.09	78.36	76.56	77.54	78.87	84.80	84.10	79.53	78.50	79.47	79.64	78.29	76.61	77.71	3.86	4.97
4. Atul	83.81	86.18	87.01	89.16	89.77	89.02	88.53	89.07	88.41	83.35	83.70	85.96	87.84	85.88	86.58	81.58	86.62	2.45	2.83
5. Basf	70.78	71.30	72.05	71.60	70.52	72.67	73.13	72.48	72.49	71.52	70.16	68.07	70.05	74.48	76.69	77.18	72.20	2.36	3.27
6. Bayer	70.45	77.84	76.11	78.09	76.26	75.81	76.56	76.62	77.54	77.68	73.97	72.52	73.01	68.42	73.14	75.62	74.98	2.81	3.75
7. Borax	76.08	80.66	80.86	87.05	87.09	80.89	82.03	84.76	85.30	84.81	85.56	84.70	87.17	89.01	86.84	87.80	84.41	3.43	4.07
8. Burroughs	72.20	72.31	74.80	81.31	82.21	85.67	84.05	79.71	78.79	80.83	82.02	83.30	84.29	83.19	80.71	87.04	80.78	4.38	5.43
9. Cipla	74.93	76.07	76.85	77.37	76.77	76.25	76.59	77.10	77.26	75.11	76.51	72.70	75.60	74.22	73.09	73.30	75.61	1.55	2.05
10. Cikturgia	58.12	52.64	50.23	65.19	68.19	71.91	66.30	66.37	68.09	70.53	70.96	72.95	73.91	78.01	87.19	82.50	68.94	9.72	14.10
11. Colour	80.07	83.19	84.89	85.46	85.54	84.57	82.69	84.91	86.03	86.15	83.41	83.17	80.14	79.91	80.55	79.94	83.16	2.35	2.83
12. Cynamid	78.59	79.27	77.84	73.68	71.72	73.38	75.01	76.12	76.44	73.16	71.36	72.50	73.27	71.23	68.73	69.75	73.88	3.10	4.20
13. D.C.W.	72.16	77.42	82.51	83.56	87.23	82.97	80.86	84.25	85.15	82.57	80.96	75.55	82.63	82.72	86.12	82.81	81.84	3.88	4.75
14. Deepak	70.31	72.15	75.11	76.20	74.73	74.74	78.26	78.91	76.82	75.44	77.41	71.69	72.73	75.63	76.79	80.99	75.49	2.81	3.73
15. Duphar	75.44	78.86	78.19	77.34	75.22	76.15	76.83	76.95	77.48	79.60	76.65	78.26	77.77	77.88	77.72	92.86	78.33	4.05	5.17
16. E.I.D.	93.17	93.27	92.84	93.06	92.70	91.52	93.48	89.14	86.37	98.00	85.54	85.87	87.78	84.88	110.9	90.07	91.79	6.29	6.85
17. E. Merck	78.89	82.03	74.81	74.92	75.94	76.42	75.92	75.73	75.00	74.36	77.33	77.29	75.42	76.12	75.57	75.85	76.35	1.89	2.47
18. Excel	76.35	74.26	72.73	72.61	74.03	74.63	74.55	72.53	71.61	68.63	66.27	64.13	66.13	66.84	70.88	72.30	71.16	3.65	5.13
19. Ficom	92.72	75.93	80.15	79.58	75.54	72.39	69.51	71.81	73.77	75.19	73.30	72.72	72.11	75.96	78.27	74.21	75.82	5.35	7.06
20. Fulford	32.36	72.36	73.95	76.45	77.88	79.23	80.73	81.55	82.79	82.65	85.13	85.15	84.56	80.68	81.35	80.60	77.34	12.55	16.23
21. German	76.29	74.56	74.28	76.30	77.69	78.66	80.91	79.34	81.37	80.65	82.43	85.09	83.00	76.51	76.49	77.73	78.83	3.15	4.00
22. Glaxo	71.01	67.74	65.89	73.87	77.05	71.69	75.66	78.90	78.05	78.72	77.81	81.46	81.40	81.25	82.54	81.09	76.51	5.13	6.70

Cont.

TABLE - V.16 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	56.81	67.88	70.43	77.67	76.05	71.61	77.12	77.24	77.58	67.73	69.45	67.97	64.00	68.86	68.85	61.27	70.03	6.12	8.74
24. Guj-State	74.05	78.94	79.34	77.35	79.15	82.72	85.39	81.46	80.41	80.56	78.01	79.51	79.98	79.27	75.96	71.60	78.98	3.25	4.12
25. Hin-Ciba	95.69	72.88	71.23	71.17	72.60	73.45	73.25	70.36	68.98	68.13	67.87	73.34	76.15	76.79	78.44	78.33	74.29	6.59	8.87
26. Hin-Lever	85.13	85.15	83.68	83.58	83.04	80.36	81.17	81.58	82.00	82.47	81.67	80.38	79.43	81.50	87.72	83.92	82.67	2.14	2.59
27. Hochest	76.68	77.06	77.03	76.58	78.62	83.22	86.44	87.46	85.95	82.69	78.95	80.13	79.26	76.63	77.61	78.74	80.19	3.76	4.69
28. I.C.I.	83.23	82.96	82.08	80.92	86.68	86.19	85.75	95.67	97.70	101.90	81.39	98.45	102.40	99.08	81.69	81.88	89.25	8.27	9.26
29. Ind-Dye	89.68	88.90	91.94	91.87	92.39	93.22	92.60	90.46	90.82	88.80	88.19	86.51	85.89	84.57	84.32	86.34	89.16	2.94	3.30
30. Ind-Oil	94.72	94.11	94.22	93.19	92.90	92.60	91.66	91.28	94.52	93.73	91.69	81.55	85.88	83.83	80.65	99.37	90.99	5.23	5.74
31. Jayant	87.01	94.84	88.49	72.49	68.08	65.43	69.88	69.97	69.52	75.14	63.94	59.72	66.33	74.08	75.59	102.40	75.18	11.91	15.84
32. Knoll	68.66	69.16	68.65	66.07	66.45	70.36	72.32	71.76	73.60	74.23	74.28	74.13	76.68	74.73	75.40	73.67	71.88	3.27	4.54
33. Lakme	82.94	75.85	81.73	85.61	76.83	81.57	82.27	81.88	81.62	78.27	76.56	82.48	81.37	72.50	69.73	67.81	78.69	5.10	6.48
34. National	86.78	86.39	87.31	82.06	77.88	77.50	79.69	80.25	78.72	78.25	79.26	82.00	83.96	86.53	82.08	78.78	81.72	3.48	4.26
35. Parke	78.79	76.16	74.49	77.71	78.98	80.18	80.31	78.79	78.24	71.48	71.43	71.99	66.03	69.92	68.49	80.05	75.19	4.67	6.21
36. Rallis	88.72	88.26	87.93	91.63	86.08	80.73	83.15	88.72	86.88	87.32	91.33	88.96	84.54	87.46	88.89	89.26	87.49	2.81	3.21
37. Ranbaxy	73.25	68.35	67.94	67.98	67.51	69.92	72.65	71.91	70.94	71.87	73.34	71.13	67.58	65.92	65.72	67.60	69.60	2.57	3.70
38. Searle	66.20	66.90	65.35	58.03	59.55	65.21	69.94	69.92	71.94	70.93	73.05	72.12	72.55	71.75	71.86	75.56	68.80	4.90	7.13
39. Synthetics	89.43	92.31	94.68	91.38	90.15	90.69	90.73	87.35	86.81	88.14	87.30	83.54	83.92	82.40	86.90	80.85	87.91	3.82	4.34
40. Tam-Dadha	80.18	110.20	101.90	106.90	121.00	89.47	82.35	83.48	76.05	80.03	82.98	79.44	79.80	80.66	80.72	79.92	88.44	13.64	15.42
41. Tata	79.85	80.93	80.44	86.14	85.33	77.61	62.66	63.45	72.79	62.26	67.10	64.86	67.04	72.02	63.62	44.91	70.69	10.81	15.30
42. Transpek	82.55	83.15	77.82	76.02	77.12	75.10	73.81	73.00	72.43	80.03	79.81	74.41	73.55	75.66	77.04	80.83	77.02	3.40	4.41
43. United	66.69	63.52	63.08	63.76	64.31	62.44	67.50	77.27	73.58	75.29	64.76	71.45	57.03	67.21	74.11	74.21	67.89	5.76	8.49
44. Zandu	75.64	73.05	77.85	76.59	77.23	69.40	65.13	62.38	62.87	61.79	66.04	64.32	67.70	66.68	70.53	70.59	69.24	5.50	7.95
45. Zuari	70.99	79.81	74.51	76.96	76.36	77.21	78.84	83.75	80.67	79.72	80.93	83.54	79.94	81.70	72.93	74.35	78.26	3.72	4.75
Average	77.28	78.62	78.38	79.14	79.27	78.21	78.49	78.88	79.04	78.75	77.40	77.53	77.77	77.68	77.93	78.43	78.30	4.86	6.26
S.D.	11.15	9.77	9.40	8.96	9.92	7.34	7.38	7.56	7.21	8.17	7.02	7.68	8.31	6.80	8.35	9.66	6.50		
C.V.	14.43	12.43	11.99	11.33	12.51	9.38	9.40	9.58	9.13	10.38	9.07	9.91	10.68	8.75	10.71	12.32	8.30		

years the yearwise average indicates that lowest average is found to be 77.28 for the year 1981 and the highest is 79.27 for the year 1985. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise. The highest S.D. is found to be 11.15 for the year 1981 and the lowest is 6.80 for the year 1994. The highest C.V. is found to be 14.43 for the year 1981 and the lowest is 8.75 for the year 1994. When the companywise cost of goods sold ratio is examined over a period of time, minimum average cost of goods sold ratio is found to be 67.89 for United and the maximum average cost of goods sold ratio is found to be 91.79 for E.I.D. To have an idea about the variation between the company S.D. and C.V. are computed companywise. The highest S.D. is found to be 13.64 for Tam-Dadha and the lowest S.D. is found to be 1.55 for Cipla. The highest C.V. is found to be 16.23 for Fulford and the lowest is 2.05 for Cipla. The grand average of cost of goods sold ratio for all companies taken together comes to be 78.30. This indicates that cost of goods sold constitutes a substantial part of sales.

5.4.d OPERATING INCOME TO TOTAL GROSS ASSETS RATIO:

This ratio is derived as operating income divided by total gross assets.

Table V.17 presents the operating income to total gross assets ratio for 45 companies for the period of 16 years from 1981-1996. It is very interesting to note from the Table that the minimum ratio is found to be -15.24 for the year 1994 for I.C.I. The highest ratio is found to be 41.07 for the year 1985 for

TABLE - V.17

OPERATING INCOME TO TOTAL GROSS ASSETS RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	9.17	5.98	7.10	8.14	5.86	5.69	2.75	6.98	8.95	8.28	10.63	9.00	10.29	19.68	18.44	0.07	8.56	4.91	57.38
2. Aegies	6.99	4.92	3.87	4.33	6.03	7.56	8.98	7.97	5.81	5.21	4.74	1.90	-0.25	4.91	11.50	14.64	6.19	3.54	57.21
3. Alembic	6.53	13.43	14.56	11.43	7.74	7.58	8.00	8.76	6.90	8.64	9.15	9.27	9.45	10.46	9.36	8.92	9.39	2.19	23.31
4. Atul	8.47	5.23	4.49	3.72	2.91	2.68	3.63	2.84	3.91	7.90	6.10	3.82	2.62	4.39	3.20	5.88	4.49	1.80	40.02
5. Basf	16.54	14.88	11.82	12.15	12.97	12.01	12.15	15.98	18.25	16.33	16.79	21.31	18.58	20.32	15.47	12.05	15.48	3.10	20.06
6. Bayer	11.90	11.38	16.88	16.27	16.53	17.28	17.68	17.43	19.03	11.90	15.83	16.77	16.68	15.26	7.68	5.50	14.62	3.85	26.35
7. Borax	23.25	17.18	22.83	18.20	15.03	15.29	14.58	13.86	9.23	12.73	8.59	12.49	10.29	14.09	11.56	7.05	14.14	4.60	32.55
8. Burroughs	17.45	19.19	16.79	16.74	17.33	6.77	6.70	15.95	20.54	11.26	11.28	11.11	11.44	13.47	12.47	2.61	13.19	4.96	37.61
9. Cipla	13.67	12.87	12.35	12.38	11.61	11.38	11.69	15.10	18.71	13.87	12.31	12.89	12.54	12.46	15.14	12.99	13.25	1.82	13.78
10. Citurgia	14.71	17.71	19.02	16.00	12.62	12.28	19.27	18.28	15.17	13.41	11.11	13.74	15.14	10.14	4.11	9.07	13.86	4.02	29.01
11. Colour	14.53	10.83	9.04	10.23	9.71	10.37	12.56	10.32	9.20	8.55	9.61	10.24	13.28	13.57	12.17	13.03	11.08	1.84	16.61
12. Cynamid	3.32	4.21	7.84	13.26	15.68	11.75	9.29	9.40	11.02	16.79	18.40	20.33	21.17	23.52	25.27	22.97	14.64	6.92	47.28
13. D.C.W.	10.92	7.39	4.36	6.41	4.94	7.85	9.40	8.22	8.37	10.23	9.80	9.86	7.54	8.65	6.08	8.30	8.02	1.87	23.28
14. Deepak	17.58	16.72	14.20	11.40	9.53	9.25	8.53	8.88	11.71	12.78	7.26	7.91	9.46	9.73	7.48	6.41	10.55	3.30	31.30
15. Duphar	14.35	9.59	14.63	14.70	14.36	12.75	10.80	10.74	10.82	9.40	10.23	9.37	10.13	8.76	10.96	-5.38	10.39	4.68	45.05
16. E.I.D.	5.86	6.38	7.47	4.03	1.76	2.91	-3.87	1.54	6.73	-12.03	5.65	6.81	0.66	6.29	3.63	3.82	2.98	4.97	166.90
17. E. Merck	14.43	14.95	15.23	14.64	13.00	12.88	12.55	10.42	10.69	9.65	8.53	7.89	12.58	15.39	18.26	20.05	13.20	3.32	25.19
18. Excel	9.84	13.09	15.37	13.38	10.53	8.85	8.23	14.10	18.35	19.08	22.13	26.13	23.27	17.30	15.64	14.87	15.63	5.21	33.35
19. Ficom	10.08	11.12	7.82	11.42	16.32	24.91	28.28	26.78	27.55	18.03	11.38	13.67	13.88	9.18	6.04	8.66	15.32	7.55	49.26
20. Fulford	14.93	13.73	20.97	17.24	16.07	14.88	15.02	16.06	14.60	9.60	9.16	10.93	12.59	10.24	8.86	10.34	13.45	3.41	25.34
21. German	23.19	24.82	22.85	18.05	13.65	12.38	9.00	12.56	11.49	12.77	6.87	3.53	8.26	18.33	16.34	14.26	14.27	6.06	42.44
22. Glaxo	15.59	14.09	13.87	13.53	15.00	14.71	17.77	15.02	8.80	12.74	15.66	12.82	14.71	17.71	15.46	14.12	14.47	2.08	14.39

Cont.

TABLE - V.17 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	29.26	21.23	16.74	9.54	11.52	13.68	12.23	14.01	13.12	15.89	17.86	18.08	19.85	10.17	10.88	12.49	15.41	5.08	32.96
24. Guj-State	8.53	8.33	9.72	9.43	8.81	9.59	5.78	7.25	10.50	9.49	8.48	7.56	6.94	6.38	7.86	11.21	8.49	1.49	17.51
25. Hin-Ciba	12.09	11.95	13.18	13.21	13.65	13.12	12.74	16.94	20.44	18.47	16.72	16.43	17.40	15.09	9.81	10.81	14.50	2.96	20.42
26. Hin-Lever	16.78	18.57	18.21	18.56	17.77	19.27	19.54	18.48	17.88	17.07	17.70	18.26	19.16	18.37	16.15	17.34	18.07	0.92	5.11
27. Hocheist	14.21	14.56	14.65	14.98	12.80	8.17	3.99	3.36	4.76	8.25	7.14	7.06	8.80	11.44	10.57	11.04	9.74	3.90	40.02
28. I.C.I.	4.67	6.77	8.75	9.94	6.21	5.93	6.81	7.29	9.64	-10.75	7.22	-9.21	-13.19	-15.24	6.88	7.44	2.45	8.85	361.80
29. Ind-Dye	5.32	6.30	4.66	4.31	1.96	0.99	1.70	3.24	1.89	4.26	5.85	7.58	7.36	7.51	6.93	5.27	4.69	2.21	47.14
30. Ind-Oil	6.21	8.96	9.52	10.02	9.71	8.17	9.63	9.87	7.94	6.83	5.61	5.20	5.14	6.12	7.16	-0.60	7.22	2.72	37.70
31. Jayant	0.65	0.70	2.58	9.05	16.09	20.35	16.71	12.65	12.41	5.56	8.79	9.19	5.78	4.55	4.93	4.80	8.42	5.86	69.52
32. Knoll	19.78	19.21	20.18	25.45	30.48	31.97	22.44	25.83	17.46	15.15	16.24	16.29	14.27	12.01	11.80	12.59	19.45	6.30	32.39
33. Lakme	1.80	12.64	3.37	0.77	13.44	11.89	10.26	8.15	8.51	9.98	7.03	7.47	3.57	14.30	15.69	3.90	8.30	4.64	55.92
34. National	6.34	7.23	5.57	10.35	14.59	15.19	13.75	13.10	16.75	16.09	12.95	12.04	9.22	6.22	9.67	12.59	11.35	3.65	32.19
35. Parke	11.22	13.40	13.62	19.54	18.00	14.89	11.74	13.25	15.41	14.82	15.77	14.52	24.59	28.01	22.49	3.85	15.95	5.72	35.86
36. Rallis	12.54	11.14	10.43	0.55	10.19	11.93	12.22	9.18	9.32	7.46	7.10	11.16	7.50	11.01	10.83	10.12	9.54	2.92	30.60
37. Ranbaxy	11.73	15.62	12.19	9.98	12.12	10.03	9.15	10.16	11.39	11.95	12.63	12.62	17.07	17.19	9.70	9.20	12.05	2.58	21.40
38. Searle	23.38	21.17	19.46	31.37	41.07	34.40	20.15	15.70	12.67	12.37	12.38	12.81	14.42	16.72	17.52	12.76	19.90	8.69	43.70
39. Synthetics	2.89	1.29	0.62	3.17	4.15	2.50	2.21	3.89	4.86	3.75	4.90	6.39	4.60	3.21	2.62	5.88	3.56	1.57	43.98
40. Tam-Dadha	12.89	14.95	16.72	18.01	14.27	12.85	14.08	11.70	7.55	8.71	5.94	17.33	7.08	11.68	11.41	11.96	12.32	3.62	29.41
41. Tata	16.94	14.94	9.86	5.16	3.75	6.66	11.47	10.73	9.85	9.22	6.95	7.91	6.16	6.15	8.95	20.27	9.69	4.45	46.00
42. Transpek	6.88	7.50	16.25	17.40	12.24	12.32	15.19	15.12	17.63	15.84	17.39	21.70	19.34	12.99	12.08	10.38	14.39	4.08	28.34
43. United	10.87	13.73	17.61	13.96	13.61	13.91	7.36	1.26	3.36	7.49	19.04	20.03	21.82	10.77	8.26	8.84	1.68	5.85	349.30
44. Zandu	11.26	9.40	12.23	9.48	16.08	13.09	18.56	17.51	14.95	17.29	14.49	13.41	10.07	15.19	13.45	9.79	13.52	2.99	22.10
45. Zuari	15.19	10.28	17.24	14.31	14.93	14.28	13.33	11.82	12.25	9.28	10.18	10.34	12.79	11.52	17.38	14.40	13.09	2.47	18.86
Average	12.10	11.99	12.37	12.14	12.59	12.16	11.42	11.73	11.92	10.48	11.10	11.47	11.20	11.67	11.29	9.70	11.35	3.99	50.66
S.D.	6.13	5.36	5.70	6.11	6.83	6.59	6.00	5.58	5.39	6.21	4.55	6.14	7.03	6.71	5.03	5.51	4.44		
C.V.	50.62	44.72	46.06	50.37	54.26	54.15	52.54	47.60	45.18	59.25	41.01	53.53	62.78	57.48	44.58	56.82	39.10		

Searle. Wide fluctuations are observed over a period of time for given companies. On taking yearwise average, the lowest average is found to be 9.70 for the year 1996 and the highest is 12.59 for the year 1985 taking all companies together. To have an idea about the variation between the companies S.D. and C.V. are also computed yearwise. The highest S.D. and C.V. are found to be 7.03 and 62.78 respectively for the year 1993 and the lowest S.D. and C.V. are found to be 4.55 and 41.01 respectively for the year 1981. When the company wise OPI/TGA ratio is examined over a period of time, minimum average OPI/TGA ratio is found for E.I.D. to the tune of 2.98 and is found to be maximum at 19.90 for Searle. The OPI/TGA has widely fluctuated for I.C.I. Which is reflected in its highest S.D. of 8.85, and the lowest S.D. is found to be 0.92 for Hindustan Lever. The highest C.V. is found to be 361.80 for I.C.I. and the lowest is 13.78 for Cipla. The grand average of OPI/TGA ratio for all companies taken together and all years taken together comes to 11.35. This ratio indicates that on an average companies have a positive operating income on their total gross assets.

5.4.e PROFIT BEFORE TAX TO TOTAL NET ASSETS RATIO:

This ratio is derived as profit before tax divided by total net assets.

Table V.18 presents the PBT/TNA ratios for 45 companies for the period of 16 years from 1981-1996. It can be observed from the Table that the minimum PBT/TNA ratio is found to be -3.80 for the year 1990 for Indian Dyes. The highest ratio is found to be

TABLE - V.18

PROFIT BEFORE TAX TO TOTAL NET ASSETS RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	9.72	5.80	8.47	7.21	3.80	4.32	4.15	2.47	4.56	0.39	2.87	2.05	5.76	25.32	19.95	0.28	6.70	6.81	101.8
2. Aegies	5.07	1.75	0.80	0.24	0.75	0.94	0.97	1.61	-0.24	-2.21	1.78	4.08	3.03	3.42	9.70	5.67	2.33	2.82	120.70
3. Alembic	3.39	10.64	10.89	5.87	5.08	3.59	1.96	3.59	2.99	2.53	2.33	2.75	1.39	5.49	4.32	2.62	4.34	2.80	64.59
4. Atul	11.14	7.77	7.05	3.99	6.08	6.65	-1.36	7.28	3.78	5.33	7.26	4.01	3.16	5.18	5.06	1.75	5.26	2.84	53.96
5. Basf	10.81	8.74	5.76	4.28	3.95	3.57	5.27	10.59	13.20	13.64	12.91	18.90	15.04	16.48	12.91	8.60	10.29	4.77	46.35
6. Bayer	6.34	7.64	15.51	14.70	16.21	16.39	14.76	11.53	13.21	8.36	11.76	14.72	12.42	10.27	0.61	2.29	11.05	4.83	43.75
7. Borax	19.29	12.21	25.76	18.38	12.68	14.74	9.46	12.54	10.80	10.88	5.50	6.88	6.90	8.80	8.87	4.66	11.77	5.59	47.48
8. Burroughs	15.49	16.33	13.26	13.87	15.21	6.01	2.53	10.29	16.11	5.71	7.41	6.02	5.55	9.67	12.23	1.51	9.82	4.96	50.51
9. Cipla	10.93	10.05	8.06	6.07	5.14	7.58	8.38	8.13	11.84	8.76	10.61	10.25	9.41	9.37	13.10	9.73	9.21	2.03	22.00
10. Citurgia	1.43	5.14	16.89	10.92	9.92	8.29	15.82	19.91	15.90	13.06	7.70	8.27	11.70	8.36	3.79	6.55	10.23	5.09	49.72
11. Colour	12.04	6.90	2.40	3.84	4.37	4.16	8.36	6.32	5.40	4.03	6.42	6.96	8.98	13.18	10.95	10.89	7.20	3.24	45.05
12. Cynamid	3.94	1.51	4.07	10.22	14.77	10.11	6.48	6.18	5.08	16.58	19.24	19.97	22.76	28.41	31.99	26.98	14.27	9.76	68.39
13. D.C.W.	10.60	0.63	2.79	6.96	3.92	6.80	9.05	6.81	5.76	3.17	6.11	4.77	3.83	4.27	4.01	4.34	5.24	2.46	47.01
14. Deepak	12.25	11.77	9.47	6.23	4.66	4.26	3.71	5.30	7.10	9.68	4.62	5.18	2.42	4.16	3.07	1.77	5.98	3.21	53.77
15. Duphar	12.46	5.78	11.22	12.13	10.61	6.58	3.70	4.46	6.68	5.87	6.65	5.99	5.07	4.10	5.12	47.56	9.62	10.52	109.30
16. E.I.D.	5.22	5.42	4.17	4.43	1.93	3.41	4.84	5.43	10.19	8.08	7.14	7.46	4.34	5.82	5.08	3.66	5.41	2.01	37.14
17. E. Merck	9.59	11.66	10.25	8.47	8.23	8.34	8.00	6.25	7.54	5.57	1.59	-0.59	2.62	8.74	15.84	19.27	8.21	4.92	59.88
18. Excel	3.74	7.32	10.65	7.17	3.97	3.70	2.92	8.62	13.28	15.98	17.74	23.84	20.15	16.22	14.97	12.43	11.42	6.43	56.34
19. Ficom	4.74	2.91	4.67	9.36	10.12	20.65	26.22	25.24	26.13	14.49	9.18	11.05	8.55	7.31	6.91	2.68	11.89	8.22	69.12
20. Fulford	9.95	9.85	15.74	12.41	9.78	8.53	8.49	8.53	8.98	7.94	3.96	4.38	8.84	9.43	9.27	9.94	9.13	2.69	29.51
21. German	16.92	18.89	15.68	8.76	5.32	4.26	2.54	3.93	3.67	15.03	5.86	1.72	1.27	13.44	16.92	13.83	9.25	6.33	68.39
22. Glaxo	13.55	11.41	11.76	11.50	12.47	-4.64	6.12	10.76	8.69	10.63	7.36	4.27	7.59	14.63	61.68	18.77	12.91	13.99	138.40

Cont.

TABLE - V.18 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.	
23. Guj-Alkaly	31.39	20.19	13.47	6.76	4.80	5.82	4.36	3.09	5.57	-5.99	8.74	8.95	11.99	5.57	6.27	10.18	9.57	7.22	75.39	
24. Guj-State	11.06	7.85	9.79	10.77	11.89	13.43	7.88	8.39	8.37	7.36	5.80	5.06	3.20	1.76	4.83	7.15	7.79	3.17	40.76	
25. Hin-Ciba	8.53	9.09	10.99	10.59	11.91	12.18	12.11	18.24	22.81	22.63	19.27	16.15	12.04	14.48	39.37	11.85	15.77	7.71	48.88	
26. Hin-Lever	16.71	17.48	17.45	15.66	14.83	15.94	15.99	14.72	15.69	15.53	16.91	18.11	18.90	19.97	18.54	20.57	17.06	1.77	10.37	
27. Hochest	12.64	15.16	15.15	17.29	10.20	7.33	3.95	1.69	2.99	4.94	3.07	2.00	2.18	8.27	10.86	9.83	7.97	5.24	65.76	
28. I.C.I.	2.87	5.80	4.71	4.69	6.34	7.09	4.52	3.00	3.72	-2.35	4.11	4.82	0.95	15.61	12.59	12.61	5.69	4.54	79.73	
29. Ind-Dye	3.32	3.27	4.06	5.11	1.30	0.55	1.02	-2.54	-2.28	-3.80	3.66	4.89	4.28	3.28	3.08	1.28	1.91	2.74	144.00	
30. Ind-Oil	4.37	4.63	5.67	4.98	5.18	5.05	10.63	10.29	9.45	7.19	6.15	7.43	5.59	5.31	7.21	7.28	6.65	1.99	29.93	
31. Jayant	12.10	6.65	8.76	6.06	10.47	11.29	4.90	4.72	5.66	3.50	2.35	1.46	0.91	1.13	0.94	15.05	6.00	4.42	73.75	
32. Knoll	19.24	18.92	19.47	25.07	37.66	40.39	23.55	24.70	19.70	18.52	18.06	18.48	17.23	16.49	6.40	13.06	21.06	8.30	39.42	
33. Lakme	13.78	18.97	6.66	0.88	10.28	7.56	4.23	4.57	4.58	5.84	7.70	7.23	7.42	15.67	20.51	79.03	13.43	18.34	136.50	
34. National	4.52	5.05	2.34	3.69	9.89	13.44	13.48	13.46	19.03	20.36	14.06	14.39	10.86	6.04	9.99	12.52	10.82	5.33	49.23	
35. Parke	14.57	15.30	15.72	24.09	25.58	21.46	16.15	18.09	17.65	21.63	15.66	17.57	26.87	30.31	25.81	16.96	20.21	4.95	24.47	
36. Rallis	6.66	5.33	5.12	0.67	6.16	3.51	6.56	5.77	5.38	1.15	0.83	3.97	4.40	6.47	5.64	4.87	4.53	2.02	44.49	
37. Ranbaxy	9.17	10.09	8.11	6.38	6.25	5.07	3.29	2.84	2.25	3.29	6.23	5.81	9.80	11.98	10.40	11.19	7.01	3.18	45.30	
38. Searle	22.77	17.18	12.75	26.19	40.35	33.67	16.46	10.41	9.28	9.88	11.50	11.59	12.00	16.00	18.72	10.82	17.47	9.08	51.95	
39. Synthetics	0.90	2.74	4.09	3.37	2.52	1.08	1.54	2.51	8.41	6.10	5.26	6.36	4.47	1.93	2.06	3.02	3.52	2.12	60.07	
40. Tam-Dadha	2.37	2.38	3.37	6.84	5.82	3.65	13.62	6.32	2.32	-3.32	0.84	3.38	3.89	3.94	3.96	5.69	4.07	3.51	86.28	
41. Tata	13.75	11.59	6.96	10.78	8.82	9.72	7.49	7.19	9.03	7.45	5.16	8.11	6.79	11.73	10.19	13.08	9.24	2.45	26.52	
42. Transpek	3.31	4.29	16.31	17.50	9.65	8.81	10.50	7.18	9.25	7.24	7.13	14.31	11.62	6.99	7.32	3.72	9.07	4.19	46.14	
43. United	2.51	5.98	11.06	8.96	9.09	12.12	6.21	0.89	1.22	1.89	15.57	20.72	18.21	7.26	7.69	6.71	8.51	5.90	69.31	
44. Zandu	7.26	4.67	7.32	4.75	10.70	9.68	14.44	9.59	13.85	15.97	11.70	9.65	4.57	7.31	8.13	4.56	9.01	3.64	40.40	
45. Zuari	10.58	5.53	24.31	9.71	13.47	10.88	14.31	7.46	9.87	8.15	10.76	11.12	12.16	12.74	19.05	15.41	12.22	4.57	37.37	
Average	9.84	8.85	9.98	9.28	9.83	9.07	8.21	8.19	8.99	8.19	8.14	8.77	8.47	10.27	11.91	11.38	9.34	5.17	59.54	
S.D.	6.23	5.33	5.80	6.12	7.93	8.01	5.98	5.93	6.13	6.52	5.15	6.03	6.18	6.73	11.01	13.21	4.36			
C.V.	63.31	60.25	58.13	65.88	80.67	88.31	72.87	72.50	68.19	79.55	63.29	68.82	72.92	65.50	92.46	116.1	46.75			

40.39 for the year 1986 for Knoll. Wide fluctuations are observed over a period of time for given companies. Lowest average is found to be 8.14 taking all companies together for the year 1991 and the highest is 11.91 for the year 1995. To have an idea about the variations between the companies S.D. and C.V. are computed. The highest S.D. and C.V. are found to be 13.21 and 116.1 for the year 1996 and the lowest S.D. and C.V. are found to be 5.15 and 58.13 respectively for the year 1991 and 1983. When the companywise PBT/TNA ratio is examined over a period of time, minimum average PBT/TNA ratio is found to be 1.91 for Indian Dyes and the maximum is found to be 21.06 for Knoll. The PBT/TNA ratio has widely fluctuated for Lakme, which is reflected in its highest S.D. of 18.34, and the lowest is 1.77 for Hindustan Lever. The C.V. is also computed company wise and presented in the Table. The highest C.V. is found to be 144.00 for Indian Dyes and it the lowest at 10.37 for Hindustan Lever. The grand average of PBT/TNA ratio for all companies and all years taken together comes to 9.34. This ratio indicates that on an average companies earn 9.3% of their Total Net Assets as Profit Before Tax.

5.4.f.i RETURN ON TOTAL ASSETS RATIO (ROTA):

As mentioned in Chapter IV, ROTA is computed in three manners by taking three different numerators, viz, Net Profit, Net Profit + Interest and Gross Profit with same denominators of Total Assets.

Table V.19 presents the ROTA ratio for the 45 companies for the period of 16 years from 1981-1996.

TABLE - V.19

RETURN ON TOTAL ASSETS RATIO-I

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	5.07	3.32	4.27	4.43	3.18	4.32	4.15	2.31	4.16	0.33	2.83	2.05	5.64	16.45	11.52	0.28	4.64	4.05	87.13
2. Aegies	5.07	1.75	0.47	0.02	0.75	0.94	1.28	1.88	-0.29	-2.23	1.78	4.08	3.03	3.42	9.70	4.55	2.26	2.76	122.00
3. Alembic	3.06	7.79	5.23	3.63	4.31	3.59	1.74	3.12	2.50	2.10	1.35	1.71	1.07	4.41	3.79	2.54	3.25	1.69	52.12
4. Atul	6.84	4.14	3.57	2.94	4.94	4.51	-3.72	6.99	3.41	4.65	7.26	4.01	3.15	5.17	4.96	1.74	4.04	2.56	63.50
5. Basf	7.01	5.40	5.76	4.19	3.57	2.93	3.33	5.08	6.23	8.39	6.57	9.35	8.20	8.33	7.42	7.72	6.22	2.00	32.11
6. Bayer	3.01	3.39	6.19	5.87	7.71	8.34	8.89	8.00	10.86	5.35	7.19	9.18	6.46	5.69	0.61	1.64	6.15	2.83	46.03
7. Borax	7.59	4.54	9.97	7.89	5.24	6.00	5.40	7.82	6.25	6.58	5.50	3.86	4.81	4.50	8.49	4.66	6.19	1.72	27.82
8. Burroughs	5.10	5.04	4.62	7.89	8.19	4.10	2.81	6.93	10.31	4.02	4.07	3.51	4.18	6.24	7.91	-0.32	5.29	2.55	48.31
9. Cipla	4.85	4.76	4.08	3.76	3.38	6.19	7.16	6.03	8.26	5.80	6.06	6.46	6.45	7.05	10.90	7.52	6.17	1.87	30.29
10. Citurgia	1.43	7.37	16.89	10.21	8.11	6.84	12.69	13.32	10.38	10.20	7.16	5.54	5.97	5.38	3.21	4.31	8.06	4.03	49.98
11. Colour	5.73	4.83	1.60	2.60	2.78	3.42	5.71	4.39	4.05	2.81	4.01	4.45	6.39	9.99	8.22	8.15	4.95	2.31	46.74
12. Cynamid	3.04	1.51	3.80	7.94	9.74	6.26	4.54	4.48	2.42	9.95	11.42	10.86	11.72	14.72	18.39	14.52	8.46	5.01	59.19
13. D.C.W.	4.61	5.41	2.79	6.96	3.91	6.80	8.42	5.81	5.00	1.91	4.94	4.77	3.83	4.27	3.95	4.34	4.86	1.60	33.01
14. Deepak	6.74	5.03	4.73	3.58	2.83	2.42	2.48	3.99	5.01	7.68	4.14	5.18	2.42	3.75	2.45	1.77	4.01	1.66	41.40
15. Duphar	5.77	2.86	4.90	5.53	6.50	4.52	2.59	3.47	5.71	4.42	4.10	3.34	2.85	1.96	2.95	4.76	4.14	1.34	32.27
16. E.I.D.	5.22	5.13	2.74	2.50	1.38	1.67	2.05	2.87	7.58	3.11	4.45	4.19	4.20	5.71	4.35	3.66	3.80	1.64	43.17
17. E. Merck	4.19	6.16	6.84	4.79	3.95	5.45	5.37	4.67	5.38	4.73	1.28	-0.61	2.35	6.12	9.02	11.59	5.08	2.83	55.73
18. Excel	3.55	7.31	9.85	6.35	3.51	3.39	2.60	6.65	10.15	11.94	11.47	15.73	14.17	11.77	11.04	8.81	8.64	4.05	46.87
19. Ficom	4.74	2.91	4.81	9.49	9.98	18.02	22.00	21.48	22.51	11.09	7.39	8.78	8.38	7.31	6.91	2.68	10.53	6.73	63.92
20. Fulford	2.80	3.32	6.10	4.75	4.27	4.03	4.10	4.63	5.24	4.58	1.97	1.76	3.89	3.96	4.37	5.32	4.07	1.16	28.52
21. German	6.10	6.71	6.01	4.63	2.76	2.34	2.86	3.30	3.04	10.45	4.63	1.72	1.22	8.23	11.00	8.86	5.24	3.10	59.10
22. Glaxo	7.61	6.23	5.95	5.71	6.74	6.91	7.39	6.68	8.11	8.15	4.73	2.02	3.80	7.01	23.59	28.99	8.73	7.11	81.47

Cont.

TABLE - V.19 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	31.39	13.78	10.26	6.76	4.80	5.82	4.36	2.60	4.68	5.02	8.74	8.12	10.29	5.57	5.81	9.73	8.61	6.72	78.10
24. Guj-State	5.91	6.78	9.79	9.37	6.05	7.08	6.36	7.06	7.05	6.06	5.44	4.24	3.20	1.76	4.83	7.15	6.13	2.02	33.01
25. Hin-Ciba	8.12	8.10	8.81	8.42	9.45	8.30	7.47	10.67	13.54	11.95	10.51	7.98	5.96	5.69	35.55	-0.12	10.02	7.45	74.30
26. Hin-Lever	8.55	8.87	8.81	7.33	7.76	9.35	9.32	8.60	9.80	9.36	10.13	10.97	11.18	11.79	11.63	13.38	9.80	1.62	16.51
27. Hochest	6.13	6.05	9.85	13.32	7.52	6.62	3.69	1.55	2.55	4.18	2.58	2.00	1.23	3.42	6.64	6.02	5.21	3.26	62.51
28. I.C.I.	3.80	5.81	4.72	4.64	5.59	5.57	3.23	2.30	3.26	-2.35	4.11	2.47	0.38	7.57	7.06	7.12	4.08	2.59	63.53
29. Ind-Dye	3.27	3.27	4.06	3.02	1.30	0.56	1.02	-2.54	-2.28	-0.04	3.07	2.37	2.32	1.98	2.17	1.21	1.55	1.90	122.50
30. Ind-Oil	3.23	4.33	4.42	2.86	2.66	3.36	9.66	7.38	7.19	5.78	4.95	5.39	4.05	4.26	5.36	5.15	5.00	1.85	36.96
31. Jayant	12.11	6.65	8.76	6.06	10.47	10.01	4.29	4.13	5.49	3.10	2.16	1.46	0.91	1.13	0.94	15.05	5.79	4.38	75.66
32. Knoll	7.44	7.60	7.65	8.83	14.51	18.89	11.86	12.02	11.21	10.69	10.81	10.16	9.35	9.56	8.89	10.61	10.63	2.88	27.10
33. Lakme	4.50	16.24	6.66	0.88	10.28	7.56	4.23	4.46	4.02	5.01	7.70	5.91	5.87	9.32	14.73	6.49	7.12	3.96	55.68
34. National	3.87	3.63	2.16	3.11	8.88	10.42	8.88	9.61	12.89	12.60	8.34	6.95	6.41	5.56	6.80	7.73	7.37	3.20	43.50
35. Parke	6.80	8.63	6.32	8.82	11.75	13.03	12.02	13.39	11.74	14.65	8.09	8.38	12.92	14.10	14.44	12.26	11.08	2.79	25.21
36. Rallis	3.17	2.53	2.56	0.64	3.36	4.26	4.92	4.23	4.71	0.95	0.57	3.97	3.73	5.43	4.50	4.40	3.37	1.54	45.55
37. Ranbaxy	5.42	7.64	7.46	5.58	5.29	4.35	2.90	2.37	1.86	2.84	6.23	5.81	9.66	11.63	8.80	9.59	6.09	2.88	47.24
38. Searle	11.92	8.44	8.03	18.07	26.60	24.45	12.35	7.33	6.57	7.48	8.74	8.34	7.28	9.39	11.81	9.06	11.62	6.14	52.82
39. Synthetics	0.90	2.74	4.09	3.37	2.52	0.97	1.34	-0.84	7.10	4.63	3.85	5.19	4.45	1.92	2.04	3.01	2.95	1.94	65.81
40. Tam-Dadha	2.28	2.31	3.37	5.77	2.86	2.05	2.19	9.35	0.33	1.69	-3.24	0.92	2.91	2.54	2.52	2.56	2.53	2.58	102.20
41. Tata	9.36	8.00	6.68	5.90	8.18	7.67	5.40	5.56	6.20	5.35	4.21	5.40	4.48	11.52	10.19	12.38	7.28	2.49	34.15
42. Transpek	4.29	6.28	10.69	10.64	6.29	4.91	7.04	5.86	7.24	5.84	4.51	8.41	8.00	5.50	6.64	3.62	6.61	2.05	30.96
43. United	2.51	5.79	9.94	6.75	5.90	7.84	4.48	0.78	1.15	1.72	13.10	16.16	15.28	7.14	7.36	6.37	7.02	4.69	66.80
44. Zandu	4.65	3.30	4.46	3.27	7.43	7.66	9.32	6.32	12.15	13.31	10.06	7.79	4.54	7.31	6.96	4.56	7.07	2.99	42.34
45. Zuari	10.58	0.42	10.14	7.00	9.07	6.05	9.95	3.88	5.31	4.68	5.89	5.14	6.23	6.80	11.13	10.84	7.07	3.00	42.41
Average	5.98	5.60	6.24	5.91	6.36	6.44	5.78	5.78	6.44	5.79	5.66	5.68	5.66	6.72	8.26	6.81	6.19	0.68	10.93
S.D.	4.61	2.95	3.11	3.35	4.35	4.68	4.29	4.11	4.36	4.07	3.34	3.63	3.58	3.59	6.17	5.21	4.09		
C.V.	77.11	52.65	49.80	56.68	68.45	72.67	74.18	71.18	67.63	70.24	58.98	63.87	63.24	53.42	74.78	76.49	65.98		

It can be observed from the Table that the minimum ratio is found to be -3.72 for the year 1987 for Atul. The highest ratio is found to be 35.55 for Hindustan Ciba for the year 1995. Wide fluctuations are observed over a period of time for given companies. Lowest average is found to be 5.60 for the year 1982 and the highest is 8.26 for the year 1995. On examining variations the highest S.D. is found to be 6.17 for the year 1995 and the lowest S.D. is 2.95 for the year 1982. The highest C.V. is found to be 77.11 for the year 1981 and the lowest is found to be 49.80 for the year 1983. When the company wise ROTA ratio is examined over a period of time, minimum average ROTA ratio is found for Indian Dyes viz. is 1.55 and the maximum is 11.62 for the Searle. The lowest S.D. is found to be 1.16 for Fulford. The ROTA ratio has widely fluctuated for Hindustan Ciba, which is reflected in its highest S.D. of 7.45. The minimum C.V. is found to be 16.51 for Hindustan Lever and the same is found to be maximum at 122.50 for Indian Dyes. The grand average of ROTA ratio for all companies taken together comes to 6.19. This indicates that on an average 6.19% return is earned on assets.

5.4.f.ii RETURN ON TOTAL ASSETS RATIO:

Table V.20 presents the ROTA ratio for 45 companies for the period of 16 years from 1981-1996, using the second method. It can be observed from the Table that the minimum ratio is found to be 2.03 for the year 1996 for Abbot and the maximum ratio is found to be 38.16 for Hindustan Ciba for the year 1995. Thus the range is quite high. Lowest average is found to be 10.83 taking all companies together for the year 1981

TABLE - V.20

RETURN ON TOTAL ASSETS RATIO-II

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	8.40	7.54	6.95	8.19	7.38	10.17	11.71	9.92	11.96	8.40	10.27	8.76	10.49	19.79	13.16	2.03	9.70	3.72	38.32
2. Aegies	6.85	7.58	7.26	6.10	4.96	4.46	5.17	6.13	4.94	3.91	6.91	6.70	4.57	5.94	12.12	11.28	6.56	2.28	34.82
3. Alembic	11.63	15.62	12.45	12.17	14.08	11.09	9.28	11.06	8.39	11.56	10.06	9.70	10.99	12.81	11.38	10.74	11.44	1.78	15.60
4. Atul	10.40	7.35	7.12	7.68	9.64	9.01	1.41	15.67	10.88	10.29	11.80	11.04	9.37	10.38	11.19	8.03	9.45	2.99	31.63
5. Basf	12.99	11.64	11.13	10.37	11.07	10.73	10.09	11.76	13.01	14.77	12.71	15.63	15.78	15.20	11.96	11.80	12.54	1.88	14.99
6. Bayer	9.96	9.55	11.96	11.98	13.57	14.86	15.91	14.35	17.28	11.28	14.08	16.75	14.15	12.53	6.28	9.26	12.73	2.98	23.42
7. Borax	13.76	10.72	11.94	9.65	10.57	9.19	10.05	13.79	10.69	11.75	9.54	9.63	10.74	10.99	11.29	7.48	10.74	1.60	14.94
8. Burroughs	7.69	8.32	7.97	12.23	12.04	8.13	8.54	14.10	18.10	11.55	11.58	11.11	12.24	13.29	12.64	4.70	10.89	3.20	29.41
9. Cipla	8.67	8.62	7.31	7.44	7.74	11.41	12.98	11.75	14.09	8.22	8.99	11.47	13.44	12.77	15.56	12.00	10.78	2.64	24.47
10. Citorgia	10.23	15.23	22.93	14.94	10.87	11.09	16.76	16.78	15.03	13.90	11.94	11.61	10.99	9.87	7.96	9.45	13.10	3.75	28.65
11. Colour	12.29	10.87	8.60	9.90	10.21	11.56	12.22	10.72	10.51	9.25	10.85	14.00	16.15	16.82	13.16	13.00	11.88	2.31	19.46
12. Cynamid	4.37	4.66	8.07	11.92	13.19	9.65	8.63	8.33	6.55	14.38	15.42	14.55	16.16	17.39	20.09	15.99	11.84	4.76	40.25
13. D.C.W.	8.01	8.89	7.58	11.58	6.98	9.32	11.11	9.57	9.39	5.95	8.28	9.17	7.02	8.21	5.45	8.93	8.46	1.66	19.58
14. Deepak	11.25	9.57	9.06	7.95	7.01	6.72	7.88	9.88	11.17	14.08	7.66	8.43	10.26	11.70	9.53	8.73	9.43	1.94	20.59
15. Duphar	10.56	8.28	11.09	9.84	12.06	10.89	9.71	10.25	13.53	10.42	9.95	9.44	10.06	8.73	10.27	9.23	10.27	1.26	12.24
16. E.I.D.	10.54	10.99	10.89	8.89	5.97	5.52	6.63	6.34	11.02	5.48	8.26	8.65	10.26	11.67	5.95	5.53	8.29	2.35	28.38
17. E. Merck	10.34	11.32	13.05	11.29	10.04	11.94	11.66	10.29	10.78	10.34	8.80	8.55	14.00	15.62	14.88	17.35	11.89	2.48	20.82
18. Excel	10.56	15.54	16.48	13.34	11.92	12.14	11.31	15.46	19.00	18.92	18.86	22.20	21.25	18.40	16.10	14.52	16.00	3.57	22.28
19. Ficom	9.11	9.17	12.64	17.28	15.77	23.87	27.39	26.54	27.79	15.96	11.74	14.29	13.34	10.72	10.64	8.14	15.90	6.81	42.81
20. Fulford	9.86	8.60	12.98	10.28	10.76	10.37	10.68	12.23	12.90	11.38	8.56	10.27	10.89	8.52	9.46	9.24	10.44	1.42	13.63
21. German	13.39	14.00	13.81	11.95	9.86	10.06	10.52	11.41	11.27	16.31	10.22	8.31	10.46	14.42	14.12	11.83	12.00	2.14	17.85
22. Glaxo	10.80	9.43	8.92	8.15	8.84	9.12	11.74	10.48	12.09	14.02	11.74	9.65	12.28	14.59	28.69	32.25	13.30	6.98	52.50

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TABLE - V.20 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	34.04	16.25	13.54	12.73	11.21	12.58	12.30	10.36	9.26	11.62	14.98	15.19	16.64	10.05	9.39	12.58	13.92	5.83	41.91
24. Guj-State	7.51	9.56	12.65	11.52	7.88	8.73	9.13	11.73	12.83	8.56	8.29	7.49	7.76	7.47	10.66	11.87	9.60	1.96	20.43
25. Hin-Ciba	10.99	10.76	11.42	10.93	11.35	10.20	9.40	11.98	14.75	14.19	13.01	12.18	11.00	10.30	38.16	1.68	12.64	7.38	58.34
26. Hin-Lever	10.71	11.25	11.45	10.48	11.65	13.05	13.35	12.98	13.67	12.23	12.79	13.77	14.39	14.07	13.23	14.77	12.74	1.31	10.31
27. Hocheat	11.29	11.92	15.36	18.35	12.32	11.15	7.58	6.09	7.52	9.89	8.49	8.16	7.87	9.05	8.89	9.53	10.22	3.16	30.91
28. I.C.I.	5.66	10.77	11.73	10.42	10.14	9.98	8.00	8.31	10.30	4.47	10.82	9.37	8.64	14.83	8.68	8.45	9.41	2.38	25.29
29. Ind-Dye	9.54	9.35	8.99	7.44	4.92	5.87	6.43	3.97	4.93	6.98	10.30	9.92	9.98	10.28	9.21	7.72	7.86	2.13	27.08
30. Ind-Oil	6.76	8.61	7.36	5.63	5.38	5.28	10.92	8.97	9.18	8.97	9.46	9.80	6.30	6.45	7.99	7.54	7.79	1.72	22.03
31. Jayant	23.45	15.45	16.59	13.35	16.35	17.82	12.77	10.85	11.78	8.51	9.07	8.43	6.58	6.29	5.03	17.87	12.51	5.13	41.02
32. Knoll	10.22	10.19	10.19	11.69	17.98	22.07	13.86	14.78	13.77	13.80	14.24	14.82	12.88	12.79	11.06	12.89	13.58	3.06	22.56
33. Lakme	9.35	21.41	11.35	8.46	15.79	14.92	10.88	10.44	8.83	10.63	13.88	14.77	12.97	13.14	19.05	7.41	12.71	3.86	30.36
34. National	7.60	9.56	9.80	11.90	16.58	17.03	14.53	14.26	17.56	17.01	12.33	11.89	11.65	11.34	11.34	13.90	13.02	2.97	22.79
35. Parke	8.47	12.89	10.52	12.76	13.96	15.84	15.44	16.44	14.68	16.22	10.52	12.05	15.91	17.43	17.21	16.46	14.17	2.70	19.06
36. Rallis	10.07	9.35	8.99	4.59	9.37	9.53	10.03	8.42	8.78	6.91	7.06	11.75	8.37	10.79	10.03	10.00	9.00	1.71	19.02
37. Ranbaxy	12.36	14.47	12.96	10.48	11.31	9.70	8.71	8.46	8.23	8.30	12.15	11.74	16.14	16.17	8.95	9.85	11.25	2.66	23.63
38. Searle	16.34	15.10	15.90	24.34	30.48	28.30	16.07	10.87	9.75	10.59	12.82	12.99	12.27	14.02	15.36	13.44	16.16	6.16	38.12
39. Synthetics	4.31	7.04	8.97	7.67	6.15	5.70	6.59	3.29	10.70	8.07	7.95	9.56	8.09	5.67	5.06	6.28	6.94	1.96	28.19
40. Tam-Dadha	10.26	12.52	14.31	14.04	10.08	10.34	10.72	15.91	5.01	8.25	5.03	17.33	7.90	12.15	11.71	13.11	11.16	3.49	31.30
41. Tata	13.63	13.12	10.68	10.09	11.11	13.08	11.36	12.79	12.37	11.72	9.24	9.88	7.40	14.07	13.63	19.83	12.12	2.75	22.71
42. Transpek	9.01	11.11	14.23	13.96	11.18	10.56	13.10	12.28	14.50	12.94	13.74	15.04	15.41	11.36	13.29	10.27	12.62	1.87	14.81
43. United	8.95	12.57	16.18	11.62	11.24	13.22	10.56	8.62	9.12	7.93	19.20	19.81	19.99	10.41	8.78	8.06	12.27	4.26	34.69
44. Zandu	10.34	9.28	10.75	8.51	13.38	12.24	13.09	9.74	15.70	17.22	14.17	12.45	10.10	13.27	12.01	9.37	11.98	2.45	20.47
45. Zuari	15.00	6.23	15.76	11.59	13.69	12.18	16.25	10.87	11.44	10.09	10.42	8.67	13.18	11.75	14.47	16.08	13.35	2.81	22.75
Average	10.83	10.94	11.55	11.01	11.29	11.57	11.17	11.32	11.89	11.05	11.07	11.71	11.70	12.08	12.33	11.12	11.41	0.44	3.83
S.D.	4.76	3.17	3.27	3.44	4.29	4.64	3.96	3.86	4.12	3.53	2.93	3.34	3.60	3.35	5.82	5.05	3.95		
C.V.	43.91	28.99	28.31	31.24	38.03	40.08	35.49	34.13	34.69	31.94	26.43	28.51	30.80	27.77	47.20	45.44	34.58		

and the highest is 12.33 for the year 1995. Thus on account of average the range reduces. To have an idea about the variations between the companies, S.D. and C.V. are also computed. The highest S.D. and C.V. are found to be 5.82 and 47.20 for the year 1995 and the lowest is 2.93 and 26.43 for the year 1991. When the companywise ROTA ratio is examined over a period of time minimum average ratio is found to be 6.56 for Aegies and the maximum ratio is found to be 16.16 for Searle. It has widely fluctuated over a period of time for Hindustan Ciba, which is reflected in its highest S.D. of 7.38. To have an idea about the variations between companies C.V. are also computed company wise. The highest C.V. is found to be 58.34 for Hindustan Ciba and the lowest is 10.31 for Hindustan Lever. The grand average of ROTA ratio for all companies taken together and all years taken together comes to 11.41. Thus on an average companies have earned 11.4% as their total assets before accounting for interest as expenditure.

5.4.f.iii RETURN ON TOTAL ASSETS RATIO:

Table V.21 presents the operating power (ROTA) ratio for 45 companies for the period of 16 years from 1981-1996 by the third method. It can be observed from the Table that the minimum ratio is found to be -21.10 for the year 1993 for I.C.I. and the maximum ratio is found to be 48.28 for the year 1985 for Searle. Wide fluctuations are observed over a period of time for given companies. The average of 45 companies for each of the year is computed and presented in the Table. Lowest average is found to be 11.42 for the year 1993 and 1995 and the highest is 15.71 for the year 1985.

TABLE - V.21

RETURN ON TOTAL ASSETS RATIO-III

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	11.20	7.09	8.26	9.35	6.57	6.31	3.06	7.75	9.80	9.13	12.04	10.32	11.84	23.51	21.73	0.08	9.88	5.88	59.56
2. Aegies	7.72	5.43	4.18	4.65	6.58	8.56	10.74	9.89	7.40	6.74	6.39	2.26	-0.31	5.90	14.00	17.65	7.36	4.32	58.63
3. Alembic	9.31	19.03	20.21	16.40	11.48	10.66	11.28	12.30	9.55	11.77	12.33	12.67	12.65	13.91	11.93	11.03	12.91	3.10	24.05
4. Atul	12.39	7.38	6.60	5.71	4.46	3.68	3.83	4.14	5.67	11.66	8.50	5.22	3.54	5.72	4.15	7.35	6.25	2.69	43.02
5. Basf	21.25	18.79	14.50	14.93	16.21	15.57	15.63	20.93	23.84	20.99	21.35	26.53	22.82	25.16	18.33	13.79	19.41	4.03	20.75
6. Bayer	15.31	15.19	22.61	22.48	22.78	23.62	24.31	23.85	25.59	15.37	20.29	20.43	20.27	18.53	9.14	6.59	19.15	5.50	28.71
7. Borax	28.21	19.62	29.05	23.90	18.15	17.66	17.98	17.76	11.03	15.45	9.73	14.53	11.72	17.27	13.29	7.84	17.07	6.06	35.51
8. Burroughs	18.44	20.47	18.11	18.29	18.83	7.35	7.40	17.53	22.27	12.22	12.50	12.29	12.62	14.74	13.53	2.90	14.34	5.30	36.95
9. Cipla	16.80	15.51	14.90	15.19	14.17	13.40	13.65	18.30	22.84	16.60	14.54	15.20	14.70	14.33	17.32	14.50	15.75	2.32	14.76
10. Citurgia	18.11	23.67	26.86	22.82	16.28	18.92	31.16	29.52	23.41	19.88	15.39	19.90	22.11	14.38	5.73	12.80	20.06	6.46	32.22
11. Colour	19.71	14.88	12.99	12.93	14.54	15.67	18.63	15.21	13.09	12.02	12.78	13.69	17.53	17.90	15.44	16.09	15.19	2.30	15.12
12. Cynamid	3.95	5.07	9.81	17.12	20.52	15.26	12.25	12.41	14.40	21.49	23.50	25.49	26.95	30.02	32.33	29.14	18.73	8.82	47.09
13. D.C.W.	16.71	10.85	6.05	8.95	6.54	10.24	12.46	10.97	11.11	14.46	13.07	12.07	9.29	10.57	7.18	9.76	10.64	2.81	26.41
14. Deepak	23.96	23.09	19.69	14.88	11.94	11.43	10.72	11.59	15.20	16.69	8.71	9.28	11.17	11.67	9.00	7.65	13.54	5.01	37.01
15. Duphar	17.80	11.65	18.22	18.58	18.03	15.80	13.68	13.65	13.55	11.63	12.46	11.37	12.26	10.56	13.48	-5.78	12.93	5.67	43.82
16. E.I.D.	7.59	8.17	9.69	5.36	2.42	3.99	-4.95	1.89	8.20	-14.69	6.77	8.11	0.80	7.54	4.08	4.24	3.70	6.14	165.70
17. E. Merck	16.13	16.56	16.86	16.45	14.80	14.84	14.45	11.96	12.13	10.68	9.36	8.69	14.17	17.89	21.24	23.60	14.99	3.99	26.66
18. Excel	13.42	18.47	20.83	17.26	13.69	11.74	11.04	18.83	24.18	23.49	27.15	31.47	27.75	20.25	18.22	17.16	19.69	5.92	30.07
19. Ficom	10.03	11.55	8.42	12.92	18.79	28.86	33.46	31.21	31.52	20.66	13.19	15.63	15.81	10.11	6.69	9.58	17.40	9.07	52.11
20. Fulford	15.75	14.34	22.27	18.10	16.75	15.37	15.53	16.66	15.10	9.86	9.44	11.33	13.22	10.74	9.31	10.91	14.04	3.62	25.76
21. German	26.52	28.31	26.04	20.90	15.71	14.58	10.60	15.30	14.01	15.24	8.13	4.13	9.83	19.31	19.32	16.82	16.55	6.74	40.76
22. Glaxo	17.45	15.45	15.20	14.74	16.49	15.96	19.43	16.22	9.01	13.12	16.46	12.91	15.06	18.78	16.52	15.28	15.50	2.44	15.72

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TABLE - V.21 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	40.71	30.25	22.98	12.20	15.56	18.44	14.58	17.53	16.57	19.79	23.22	24.43	27.12	12.28	13.12	14.53	20.21	7.70	38.12
24. Guj-State	12.75	12.40	14.45	13.78	12.57	13.34	7.69	9.31	13.21	11.70	10.19	8.86	8.20	7.51	9.27	13.08	11.14	2.37	21.25
25. Hin-Ciba	16.23	16.10	17.49	17.95	19.00	18.37	18.68	26.05	30.66	26.57	23.31	21.61	23.03	20.09	12.46	13.65	20.08	4.89	24.35
26. Hin-Lever	19.27	21.22	21.17	21.90	21.01	22.99	23.45	21.86	21.23	20.24	20.86	21.32	22.28	21.09	18.30	19.50	21.11	1.32	6.28
27. Hocheat	17.84	18.54	18.24	17.52	14.89	9.43	4.57	3.89	5.46	9.26	8.02	8.25	10.50	13.88	12.88	13.29	11.65	4.96	42.55
28. I.C.I.	6.84	9.91	13.03	14.76	9.29	9.13	10.38	10.78	14.12	-16.15	11.38	-14.51	-21.10	-19.97	9.19	9.95	3.56	13.04	365.80
29. Ind-Dye	6.88	8.27	6.15	5.58	2.61	1.40	2.43	4.75	2.85	6.50	8.91	11.34	10.74	10.88	9.55	7.13	6.62	3.20	48.39
30. Ind-Oil	7.01	10.39	11.30	12.35	12.30	10.40	12.33	12.41	9.75	7.91	6.40	5.96	5.86	7.01	8.31	-0.68	8.69	3.48	40.11
31. Jayant	0.76	0.85	3.05	10.52	18.63	22.75	19.21	14.64	14.44	6.38	10.25	10.80	6.77	5.36	5.80	5.79	9.75	6.64	68.09
32. Knoll	23.56	23.26	24.68	31.35	41.13	45.16	28.59	33.96	22.82	19.13	20.26	20.54	17.97	14.54	13.06	13.98	24.62	9.34	37.92
33. Lakme	1.93	13.49	3.65	0.84	15.06	13.48	11.73	9.54	10.09	11.19	7.89	8.40	4.05	16.20	18.48	4.09	9.38	5.33	56.78
34. National	9.47	10.56	7.90	14.76	21.42	22.40	20.53	19.30	23.74	22.42	17.36	16.18	12.32	7.61	11.41	14.48	15.74	5.48	34.80
35. Parke	15.74	17.68	18.53	28.36	25.82	19.63	14.72	16.56	19.51	18.26	19.17	17.98	29.65	34.46	26.72	4.71	20.47	7.09	34.66
36. Rallis	13.24	11.86	11.21	0.59	11.03	12.93	13.32	10.02	10.13	8.16	7.92	12.51	8.11	12.27	11.91	10.88	10.38	3.16	30.42
37. Ranbaxy	12.62	16.78	12.95	10.56	12.88	10.56	9.63	10.83	12.24	13.04	13.91	13.82	18.81	18.80	10.24	9.78	12.97	2.94	22.70
38. Searle	27.99	24.53	22.90	37.33	48.28	40.29	23.51	18.58	14.71	14.18	14.72	15.07	17.10	20.14	20.48	14.25	23.38	10.30	44.07
39. Synthetics	4.38	1.95	0.97	4.95	6.34	5.08	5.36	10.88	12.43	8.43	10.03	11.09	7.26	4.72	3.76	8.33	6.62	3.34	50.46
40. Tam-Dadha	14.29	16.97	19.50	21.45	16.47	15.58	-17.35	14.00	9.11	10.28	7.21	21.56	8.69	14.60	14.40	15.28	14.79	4.29	28.98
41. Tata	23.84	20.86	13.78	7.23	4.84	8.61	13.99	13.06	11.92	10.91	8.01	9.24	6.94	6.73	9.80	22.62	12.02	5.82	48.42
42. Transpek	8.03	9.12	19.85	20.83	14.54	14.46	17.80	17.61	20.37	17.78	19.53	23.93	21.43	14.56	13.59	11.89	16.58	4.51	27.23
43. United	13.25	15.75	19.31	17.40	16.86	16.67	8.60	1.50	3.93	8.48	21.60	21.70	23.15	11.17	8.62	9.23	13.57	6.50	47.88
44. Zandu	12.70	10.56	13.69	10.57	17.96	14.53	20.93	20.80	18.26	20.65	17.28	15.89	12.14	18.90	16.75	11.91	15.85	3.63	22.89
45. Zuari	22.03	14.88	25.28	21.62	22.62	21.34	19.53	17.66	17.42	13.55	14.86	13.99	17.79	15.18	20.94	17.48	18.51	3.52	19.02
Average	15.09	14.82	15.41	15.25	15.71	15.25	14.34	14.96	15.06	12.96	13.70	13.86	13.44	13.93	13.36	11.42	14.28	1.14	7.95
S.D.	7.76	6.50	7.04	7.55	8.42	8.31	7.57	7.12	6.83	8.00	5.56	7.73	8.96	8.22	6.03	6.47	7.38		
C.V.	51.38	43.89	45.66	49.48	53.59	54.47	52.82	47.57	45.33	61.75	40.62	55.81	66.71	59.03	45.14	56.63	51.66		

To have an idea about the variations between the companies S.D. and C.V. are also computed year wise. The highest S.D. is found to be 8.96 for the year 1993 and the lowest S.D. is found to be 5.56 for the year 1991. The highest C.V. is found to be 66.71 for the year 1993 and the lowest C.V. is found to be 40.62 for the year 1991 taking all companies together. When the company wise ROTA ratio is examined over a period of time, minimum average ratio is found to be 3.56 for the I.C.I. India and the maximum ratio is found to be 24.62 for the Knoll. The ratio has widely fluctuated for I.C.I. Which is reflected in its highest S.D. of 13.04 and C.V. of 365.80. ROTA ratio of Hindustan Lever Limited has remained steady, which is reflected in its lowest S.D. and C.V. of 1.32 and 6.28 respectively. The grand average of ROTA ratio for all companies taken together and all years taken together comes to 14.28. It shows that all the companies have a good profitability position taking Gross Profit as a measure of ROTA. It also indicates that due to the better ROTA they can finance more funds in total assets.

5.4.g.i RETURN ON TOTAL SHAREHOLDERS' EQUITY RATIO:

This ratio can be derived in two ways.

- i. For all shareholders, equity and preference, and
- ii. Taking only equity shareholders. Here both are taken.

Table V.22 presents the ROSE ratio for 45 companies for the period of 16 years from 1981-1996 taking equity and preference share capital together.

It is very interesting to note from the Table that the minimum ratio is found to be -18.44 for the year 1991 for Tam-Dadha. The highest ratio is found to be 85.05 for the year 1985 for Jayant. Wide fluctuations are observed over a period of time for given companies. On examining yearwise average lowest average is found to be 15.50 taking all companies together for the year 1987 and the highest is 19.32 for the year 1995. To have an idea about the variations between the companies S.D. and C.V. are computed yearwise. The highest S.D. is found to be 13.19 for 1985 and C.V. is found to be highest at 73.86 for the year 1984. The lowest S.D. and C.V. are 7.75 and 45.25 respectively for the year 1994. When the companywise ROSE ratio is examined over a period of time, minimum average ROSE ratio is found to be 5.41 for Indian Dyes and the maximum average ROSE ratio is found to be 34.16 for Jayant. To have an idea about the variations between the years for a given company, S.D. and C.V. are computed companywise. The highest S.D. is found to be 30.06 for Jayant and the lowest is 3.58 for Knoll. The highest coefficient is 133.55 for Indian Dyes and the lowest is 14.93 for Knoll. The grand average of ROSE ratio for all companies taken together comes to be 17.11. This ratio indicates the capability of companies to generate returns on resources of owners. This ratio provides one of the most important information for financial analysis. Higher ratio indicates the efficiency of the management to use the shareholders' equity in the business. This ratio also indicates the performance and strength of the company.

TABLE - V.22

RETURN ON TOTAL SHAREHOLDERS' EQUITY RATIO-I

Name \Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	8.26	4.93	6.93	8.15	7.56	12.67	14.57	8.88	16.76	1.34	9.75	7.10	18.72	33.82	23.23	0.79	11.47	8.47	73.83
2. Aegies	23.03	11.87	3.65	0.15	3.01	3.10	4.20	6.15	-1.06	-9.06	7.04	6.92	5.01	5.94	15.29	8.04	5.83	7.09	121.65
3. Alembic	10.56	24.30	17.21	11.43	12.84	10.38	5.19	9.45	8.24	7.67	5.47	7.07	5.22	19.87	17.20	11.08	11.45	5.59	48.79
4. Atul	12.16	8.73	7.05	5.59	9.31	7.95	-6.50	15.04	9.64	13.14	21.42	12.78	7.99	12.62	9.71	5.13	9.48	5.86	61.80
5. Basf	18.79	14.08	13.14	10.94	9.80	8.02	9.13	13.53	16.92	22.94	18.52	25.47	22.17	20.39	16.69	21.22	16.36	5.35	32.68
6. Bayer	7.07	7.39	14.18	13.03	17.56	19.14	19.75	19.10	26.81	15.71	21.56	28.28	20.09	18.42	2.60	7.50	16.14	7.19	44.53
7. Borax	18.74	16.71	18.12	13.19	13.22	9.75	10.56	14.11	14.50	14.63	14.74	10.37	16.74	12.69	27.12	16.65	15.12	4.17	27.59
8. Burroughs	24.06	21.93	19.50	17.95	13.41	8.39	6.23	16.56	27.88	11.61	10.13	9.62	12.37	13.35	18.19	-0.57	14.41	7.17	49.76
9. Cipla	25.21	24.86	21.75	20.46	12.33	17.68	20.23	16.54	22.97	13.03	16.23	17.63	18.44	21.06	29.81	13.66	19.49	4.78	24.54
10. Citurgia	5.54	21.65	34.78	19.49	24.11	12.50	21.09	34.83	28.37	27.94	23.27	16.59	18.12	17.13	10.81	13.61	20.61	8.21	39.83
11. Colour	14.24	12.03	4.21	6.95	7.81	10.80	18.04	14.19	14.65	10.93	18.04	18.94	19.01	22.00	19.20	18.61	14.35	5.17	35.99
12. Cynamid	4.96	2.68	6.50	13.12	16.46	12.09	8.60	8.51	5.33	22.84	24.21	23.77	22.50	25.34	27.41	20.98	15.33	8.52	55.60
13. D.C.W.	11.84	14.54	8.20	16.56	8.83	14.66	16.72	11.57	10.45	5.27	17.30	24.43	8.69	10.79	7.93	9.75	12.35	4.79	38.77
14. Deepak	14.34	11.76	12.47	7.57	7.05	7.21	4.70	8.34	11.41	17.71	15.10	13.67	7.15	10.84	7.57	6.08	10.19	3.76	36.90
15. Duphar	13.82	8.06	12.60	14.66	19.03	15.32	9.30	13.89	22.56	17.94	17.00	12.42	11.28	8.50	11.55	7.32	13.45	4.25	31.58
16. E.I.D.	44.33	33.92	16.92	13.23	6.68	8.29	7.32	9.82	24.10	9.42	15.33	15.54	15.37	16.07	9.64	8.44	15.90	10.33	64.94
17. E. Merck	16.24	19.97	24.01	17.32	14.77	19.70	17.80	13.90	18.70	21.68	7.95	-4.97	12.90	15.64	23.14	26.52	16.58	7.37	44.45
18. Excel	8.49	16.07	24.54	19.20	11.14	10.60	8.20	20.92	32.25	39.14	34.13	42.62	36.13	28.87	25.24	20.68	23.64	11.13	47.09
19. Ficom	11.87	9.66	18.78	34.69	35.47	48.71	50.48	48.78	49.79	24.22	16.71	22.58	23.00	12.63	12.18	5.69	26.58	15.86	59.66
20. Fulford	25.45	28.86	27.41	24.72	21.71	23.11	23.05	23.04	24.69	27.36	9.67	7.07	12.49	13.80	15.40	18.21	20.38	6.75	33.12
21. German	13.90	21.21	20.84	17.89	13.14	10.64	11.89	12.22	11.51	35.62	16.56	7.56	5.24	20.61	25.49	19.78	16.51	7.49	45.35
22. Glaxo	15.02	13.25	12.47	11.91	13.94	13.86	14.44	17.25	21.36	20.21	13.04	5.99	11.80	13.80	44.53	53.80	18.54	12.56	67.76

Cont.

TABLE - V.22 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	51.28	24.30	22.16	19.91	13.62	19.03	11.62	7.67	11.72	14.58	24.38	22.11	27.64	11.03	12.90	20.71	19.67	10.25	52.10
24. Guj-State	10.91	12.44	16.85	16.07	11.36	14.31	14.71	18.49	20.15	13.50	14.66	14.54	11.49	5.86	14.81	21.63	14.49	3.82	26.34
25. Hin-Ciba	13.07	14.01	16.32	13.93	15.40	14.24	11.94	15.88	21.78	20.87	19.99	18.76	15.45	14.92	57.29	-0.22	17.73	11.66	65.78
26. Hin-Lever	20.20	21.26	20.16	17.64	19.17	22.86	22.92	23.43	25.07	24.52	27.15	30.57	31.18	33.91	35.21	38.88	25.88	6.32	24.40
27. Hochtst	16.87	16.69	25.78	31.78	17.84	14.78	7.19	3.33	6.50	13.79	5.74	3.94	2.55	6.91	13.62	13.33	12.54	8.25	65.76
28. I.C.I.	11.06	17.65	15.75	12.94	12.76	12.25	7.83	6.51	9.67	-8.05	12.31	7.85	1.32	19.23	16.42	15.90	10.71	6.81	63.55
29. Ind-Dye	9.41	9.58	12.41	10.75	3.44	1.64	3.38	-9.99	-9.56	-0.16	13.25	10.95	11.65	10.20	6.10	3.51	5.41	7.23	133.55
30. Ind-Oil	15.94	17.90	16.81	10.86	10.11	13.75	31.80	23.63	23.13	23.47	20.41	18.20	13.68	13.61	15.47	15.86	17.79	5.59	31.45
31. Jayant	69.88	38.00	74.46	84.85	85.05	54.87	21.74	20.69	27.21	15.35	8.50	5.32	3.17	4.02	3.50	29.89	34.16	30.06	88.02
32. Knoll	19.34	19.85	19.91	23.85	33.09	29.57	23.85	24.21	22.90	24.70	25.91	23.23	20.76	24.05	22.64	26.22	24.01	3.58	14.93
33. Lakme	25.53	65.89	18.41	2.94	28.51	21.12	14.27	12.98	11.39	13.65	22.21	19.19	12.08	19.99	30.53	7.82	20.41	14.20	69.59
34. National	9.19	9.69	6.61	10.44	25.84	25.90	20.70	22.77	32.03	28.96	21.38	17.38	16.05	14.90	20.50	21.44	18.99	7.45	39.23
35. Parke	11.05	15.65	11.13	13.42	18.12	22.54	23.69	27.96	24.41	29.64	18.62	18.41	31.12	29.41	33.52	24.34	22.06	7.17	32.48
36. Rallis	15.99	11.69	11.35	2.84	14.01	18.10	21.60	14.64	17.79	4.05	2.42	16.63	22.63	23.19	21.88	26.38	15.33	7.38	48.14
37. Ranbaxy	23.27	32.48	34.98	25.74	24.37	22.55	16.36	12.25	7.69	11.54	23.96	25.73	28.22	31.68	17.12	17.32	22.20	7.90	35.58
38. Searle	25.10	21.70	17.38	29.63	43.77	37.54	20.15	12.74	13.72	17.63	15.83	15.73	13.72	16.28	23.08	18.91	21.43	8.82	41.13
39. Synthetics	2.77	9.88	16.60	14.39	10.79	2.55	2.67	-1.45	14.07	9.83	9.49	17.38	18.09	6.49	6.10	8.76	9.27	5.85	63.08
40. Tam-Dadha	11.23	12.61	18.95	31.48	17.22	10.26	9.62	35.28	1.21	7.81	-18.44	4.79	15.39	12.42	11.79	11.51	12.07	11.92	98.75
41. Tata	22.34	19.81	15.48	14.59	24.18	18.99	17.48	14.58	13.99	13.21	13.29	16.06	14.64	33.53	27.58	29.85	19.35	6.39	33.00
42. Transpek	10.13	13.30	23.37	26.64	18.65	17.93	26.69	24.37	31.63	25.27	20.16	40.55	22.27	16.08	18.25	9.67	21.56	7.93	36.80
43. United	8.82	20.91	31.36	22.63	20.53	30.12	19.78	3.40	4.47	8.77	45.61	56.28	54.69	10.61	12.31	12.87	22.70	16.86	74.29
44. Zandu	15.65	10.95	15.18	12.89	27.77	29.05	30.82	21.68	34.03	35.24	25.27	21.28	12.92	19.14	19.43	15.56	21.68	7.84	36.15
45. Zuari	19.91	0.93	21.98	14.78	19.42	14.09	21.49	8.49	13.60	10.99	13.57	15.12	15.81	19.10	29.54	24.48	16.46	6.74	40.93
Average	17.49	17.46	18.41	17.40	18.09	17.17	15.50	15.56	17.70	16.23	16.42	17.14	16.60	17.13	19.32	16.17	17.11	8.26	51.14
S.D.	12.10	10.77	11.21	12.85	13.19	10.70	9.63	9.92	10.72	10.44	9.48	10.95	9.74	7.75	10.65	10.42	5.64		
C.V.	69.22	61.68	60.88	73.86	72.91	62.33	62.13	63.77	60.58	64.32	57.73	63.85	58.69	45.25	55.12	64.48	32.97		

5.4.g.ii RETURN ON TOTAL SHAREHOLDERS' EQUITY RATIO:

This is the second method for derivation of ROSE, excluding preference share capital.

Table V.23 presents the ROSE ratio for 45 companies for the period of 16 years from 1981-1996. It is very interesting to note from the Table that the minimum ratio is found to be -18.44 for the year 1991 for Tam-Dadha. The highest ratio is found to be 84.85 for the year 1984 for Jayant. Wide fluctuations are observed over a period of time for given companies. Lowest average is found to be 15.45 taking all companies together for the year 1987 and the highest is 19.32 for the year 1995. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise. The highest S.D. and C.V. are found to be 13.12 and 74.40 respectively for the year 1985 and 1984 and the lowest is 7.76 and 45.36 respectively for the year 1994. When the companywise ROSE ratio is examined over a period of time, minimum average ROSE ratio is found to be 5.35 for Indian Dyes and the maximum average ROSE ratio is found to be 33.97 for Jayant. To have an idea about the variation between the companies S.D. and C.V. are also computed companywise. The highest S.D. is found to be 30.08 for Jayant and the lowest S.D. is found to be 3.58 for Knoll. The highest C.V. is found to be 134.70 for Indian Dyes and the lowest is 14.93 for Knoll. The grand average of ROSE ratio for all companies taken together comes to be 17.05. This ratio indicates firm's efficiency in using resources of owners. This ratio is one of the most important relationships in financial analysis. Higher ratio indicates that on an

TABLE - V.23

RETURN ON TOTAL SHAREHOLDERS' EQUITY RATIO-II

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	8.26	4.93	6.93	8.15	7.56	12.67	14.57	8.88	16.76	1.34	9.75	7.10	18.72	33.82	23.23	0.79	11.47	8.47	73.83
2. Aegles	23.03	11.87	3.65	0.15	3.01	3.10	4.20	6.15	-1.06	-9.06	7.04	6.92	5.01	5.94	15.29	8.04	5.83	7.09	121.65
3. Alembic	10.52	24.19	17.17	11.40	12.83	10.35	5.18	9.45	8.24	7.67	5.47	7.07	5.22	19.87	17.20	11.08	11.43	5.57	48.69
4. Atul	12.16	8.73	7.05	5.59	9.31	7.95	-6.50	14.97	9.53	10.88	21.41	12.78	7.99	12.62	9.71	4.96	9.32	5.80	62.19
5. Basf	18.42	13.81	12.97	10.78	9.65	7.89	9.03	13.42	16.81	22.88	18.52	25.47	22.17	20.39	16.69	21.22	16.26	5.39	33.18
6. Bayer	7.07	7.39	14.18	13.03	17.56	19.14	19.75	19.10	26.81	15.71	21.55	28.28	20.09	18.42	2.60	7.50	16.14	7.19	44.53
7. Botax	18.74	16.71	18.12	13.19	13.22	9.75	10.56	14.11	14.50	14.63	14.74	10.37	16.74	12.69	27.12	16.65	15.12	4.17	27.59
8. Burroughs	24.06	21.93	19.50	17.95	13.41	8.39	6.23	16.56	27.88	11.61	10.13	9.62	12.37	13.35	18.19	-0.57	14.41	7.17	49.76
9. Cipla	24.73	24.49	21.45	20.21	12.22	17.62	20.18	16.49	22.91	13.01	16.21	17.62	18.44	21.06	29.81	13.66	19.38	4.72	24.36
10. Citurgia	5.54	21.65	34.78	19.49	24.11	12.50	21.09	34.83	28.37	27.94	23.27	16.59	18.12	17.13	10.81	13.61	20.61	8.21	39.83
11. Colour	13.31	11.15	3.32	6.08	6.95	10.80	18.04	14.19	14.65	10.93	18.04	18.94	19.01	22.00	19.20	18.61	14.08	5.48	38.90
12. Cynamid	4.96	2.68	6.50	13.12	16.46	12.09	8.60	8.51	5.33	22.84	24.21	23.77	22.50	25.34	27.41	20.98	15.33	8.52	55.60
13. D.C.W.	11.22	14.02	7.95	16.56	8.80	14.64	16.72	11.57	10.45	5.27	17.30	24.43	8.69	10.79	7.93	9.74	12.25	4.80	39.14
14. Deepak	13.98	11.42	12.19	7.50	7.05	7.21	4.70	8.34	11.41	17.71	15.10	13.67	7.15	10.84	7.57	6.08	10.12	3.72	36.72
15. Duphar	13.82	8.06	12.60	14.66	19.03	15.32	9.30	13.89	22.56	17.94	17.00	12.42	11.28	8.50	11.55	7.32	13.45	4.25	31.58
16. E.I.D.	44.33	33.66	15.76	12.61	6.27	7.89	7.12	9.67	24.07	9.42	15.33	15.54	14.90	16.01	9.64	8.07	15.64	10.38	66.37
17. E. Merck	16.24	19.97	24.01	17.32	14.77	19.70	17.80	13.90	18.70	21.68	7.95	-4.97	12.90	15.64	23.14	26.52	16.58	7.37	44.45
18. Excel	8.49	16.07	24.54	19.20	11.14	10.60	8.20	20.92	32.25	39.14	34.13	42.62	36.13	28.87	25.24	20.68	23.64	11.13	47.09
19. Ficom	11.87	9.66	18.78	34.69	35.47	48.71	50.48	48.78	49.79	24.22	16.71	22.58	23.00	12.63	12.18	5.69	26.58	15.86	59.66
20. Fulford	25.45	28.86	27.41	24.72	21.71	23.11	23.05	23.04	24.69	27.36	9.67	7.07	12.49	13.80	15.40	18.21	20.38	6.75	33.12
21. German	13.90	21.21	20.84	17.89	13.14	10.64	11.89	12.22	11.51	35.62	16.56	7.56	5.24	20.61	25.49	19.78	16.51	7.49	45.35
22. Glaxo	14.79	13.03	12.33	11.88	13.94	13.86	14.44	17.25	21.36	20.21	13.04	5.99	11.80	13.80	44.53	53.80	18.50	12.58	67.98

Cont.

TABLE - V.23 cont.

Name	Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23.	Guj-Alkaly	51.28	24.30	22.16	19.91	13.62	19.03	11.62	7.67	11.72	14.58	24.38	22.11	27.64	11.03	12.90	20.71	19.67	10.25	52.10
24.	Guj-State	10.86	12.44	16.84	16.04	11.34	14.28	14.69	18.47	20.13	13.49	14.65	14.53	11.49	5.86	14.81	21.63	14.47	3.82	26.38
25.	Hin-Ciba	13.07	14.01	16.32	13.93	15.40	14.24	11.94	15.88	21.78	20.87	19.99	18.76	15.45	14.92	57.29	-0.22	17.73	11.66	65.78
26.	Hin-Lever	20.20	21.26	20.16	17.64	19.17	22.86	22.92	23.43	25.07	24.52	27.15	30.57	31.18	33.91	35.21	38.88	25.88	6.32	24.40
27.	Hochest	16.87	16.69	25.78	31.78	17.84	14.78	7.19	3.33	6.50	13.79	5.74	3.94	2.55	6.91	13.62	13.33	12.54	8.25	65.76
28.	I.C.I.	11.06	17.65	15.73	12.91	12.74	12.23	7.82	6.51	9.67	-8.05	12.31	7.85	1.32	19.23	16.42	15.90	10.71	6.81	63.57
29.	Ind-Dye	9.23	9.41	12.24	10.60	3.38	1.58	3.32	-10.06	-9.56	-0.16	13.25	10.95	11.65	10.20	6.10	3.51	5.35	7.21	134.70
30.	Ind-Oil	15.94	17.90	16.81	10.86	10.11	13.75	31.80	23.63	23.13	23.47	20.41	18.20	13.68	13.61	15.47	15.86	17.79	5.59	31.45
31.	Jayant	69.88	38.00	74.46	84.85	84.48	54.46	21.44	20.46	27.06	14.90	8.34	5.17	2.85	3.71	3.50	29.89	33.97	30.08	88.56
32.	Knoll	19.34	19.85	19.91	23.85	33.09	29.57	23.85	24.21	22.90	24.70	25.91	23.23	20.76	24.05	22.64	26.22	24.01	3.58	14.93
33.	Lakme	25.53	66.89	18.41	2.94	28.51	21.12	14.27	12.98	11.39	13.65	22.21	19.19	12.08	19.99	30.53	7.82	20.41	14.20	69.59
34.	National	9.19	9.69	6.61	10.44	25.84	25.90	20.70	22.77	32.03	28.96	21.38	17.38	16.05	14.90	20.50	21.44	18.99	7.45	39.23
35.	Parke	11.05	15.65	11.13	13.42	18.12	22.54	23.69	27.96	24.41	29.64	18.62	18.41	31.12	29.41	33.52	24.34	22.06	7.17	32.48
36.	Rallis	15.72	11.45	11.13	2.70	13.83	17.94	21.58	14.64	17.79	4.05	2.42	16.63	22.63	23.19	21.88	26.38	15.25	7.41	48.56
37.	Ranbaxy	22.51	31.90	34.56	25.45	24.15	22.38	16.23	12.20	7.66	11.52	23.95	25.73	28.22	31.68	17.12	17.32	22.04	7.80	35.41
38.	Searle	25.10	21.70	17.38	29.63	43.77	37.54	20.15	12.74	13.72	17.63	15.83	15.73	13.72	16.28	23.08	18.91	21.43	8.82	41.13
39.	Synthetics	2.77	9.88	16.60	14.39	10.79	2.55	2.67	-1.45	14.07	9.83	9.49	17.38	18.09	6.49	6.10	8.76	9.27	5.85	63.08
40.	Tam-Dadha	11.23	12.61	18.95	31.48	17.22	10.26	9.62	35.28	1.21	7.81	-18.44	4.79	15.39	12.42	11.79	11.51	12.07	11.92	98.75
41.	Tata	22.22	19.71	15.43	14.52	20.25	18.95	17.45	14.58	13.99	13.21	13.29	16.06	14.64	33.53	27.58	29.85	19.08	6.26	32.83
42.	Transpek	10.13	13.30	23.37	26.64	18.65	17.93	26.69	24.37	31.63	25.27	20.16	40.55	22.27	16.08	18.25	9.67	21.56	7.93	36.80
43.	United	8.82	20.91	31.36	22.63	20.53	30.12	19.78	3.40	4.47	8.77	45.61	56.28	54.69	10.61	12.31	12.83	22.70	16.86	74.30
44.	Zandu	15.29	10.64	15.18	12.76	27.77	29.05	30.82	21.68	34.03	35.24	25.27	21.28	12.92	19.14	19.43	15.56	21.63	7.89	36.49
45.	Zuari	19.08	0.23	19.93	13.89	18.60	13.13	20.56	7.53	12.56	10.18	12.83	14.45	15.20	18.57	29.23	24.48	15.65	6.81	43.51
	Average	17.36	17.35	18.28	17.32	17.93	17.11	15.45	15.52	17.66	16.15	16.40	17.12	16.57	17.11	19.32	16.16	17.05	8.27	51.36
	S.D.	12.11	10.79	11.23	12.89	13.12	10.69	9.62	9.94	10.73	10.47	9.49	10.95	9.76	7.76	10.64	10.44	5.64		
	C.V.	69.73	62.21	61.46	74.40	73.20	62.44	62.23	64.06	60.75	64.83	57.85	63.97	58.88	45.36	55.11	64.60	33.09		

average companies have an earnings to distribute dividends to the shareholders. In the first and second method of ROSE no major differences are observed as the proportion of preference share capital is very low.

5.5 ASSETS STRUCTURE RATIOS:

5.5.a GROSS FIXED ASSETS TO TOTAL GROSS ASSETS RATIO:

This ratio is derived as gross fixed assets divided by total gross assets.

Table V.24 presents the gross fixed assets to total gross assets ratio for 45 companies for the period of 16 years from 1981-1996. It is very interesting to note from the Table that the minimum ratio is found to be 0.05 for the year 1990 for Fulford and the maximum is 0.83 for Aegies for the year 1986. The gross fixed assets to total gross assets ratio of Bayer and Ranbaxy has remained steady over a period of time. The lowest average is found to be 0.44 for the year 1990,1995,1996 and the highest is 0.49 for the year 1984 and 1987 taking all companies together. On examining variations between companies the highest S.D. is found to be 0.17 for the year 1981,1996 and the lowest is 0.14 for the year 1984,1985,1986,1988,1989. The highest C.V. is found to be 38.61 for the year 1996 and the lowest is 28.87 for the year 1984 and 1986. When the companywise GFA/TGA ratio is examined over a period of time, minimum average GFA/TGA ratio is found to be 0.09 for Fullford India and the maximum ratio is found to be 0.77 for Gujarat Alkalies. The GFA/TGA ratio has widely fluctuated for Synthetics and Tata, which are

TABLE - V.24

GROSS FIXED ASSETS TO TOTAL GROSS ASSETS RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	0.25	0.25	0.28	0.37	0.41	0.39	0.37	0.34	0.29	0.28	0.29	0.27	0.25	0.31	0.30	0.40	0.32	0.06	17.49
2. Aegies	0.73	0.72	0.76	0.79	0.82	0.83	0.82	0.80	0.78	0.77	0.74	0.76	0.73	0.72	0.74	0.70	0.76	0.04	5.34
3. Alembic	0.51	0.48	0.45	0.47	0.51	0.53	0.52	0.54	0.51	0.49	0.49	0.50	0.49	0.51	0.54	0.57	0.51	0.03	5.82
4. Atul	0.56	0.51	0.53	0.55	0.55	0.60	0.79	0.63	0.57	0.57	0.58	0.55	0.56	0.55	0.57	0.52	0.57	0.06	11.21
5. Basf	0.53	0.58	0.63	0.60	0.55	0.51	0.48	0.46	0.44	0.40	0.38	0.38	0.40	0.44	0.51	0.61	0.49	0.08	17.03
6. Bayer	0.42	0.44	0.42	0.45	0.43	0.42	0.46	0.46	0.47	0.47	0.49	0.44	0.43	0.44	0.43	0.44	0.45	0.02	4.61
7. Borax	0.28	0.18	0.30	0.32	0.22	0.43	0.39	0.42	0.30	0.35	0.38	0.38	0.29	0.36	0.45	0.03	0.32	0.11	33.28
8. Burroughs	0.20	0.20	0.22	0.30	0.34	0.33	0.35	0.32	0.26	0.26	0.30	0.29	0.25	0.22	0.19	0.24	0.27	0.05	19.72
9. Cipla	0.31	0.30	0.35	0.41	0.47	0.50	0.49	0.48	0.45	0.48	0.42	0.42	0.42	0.44	0.41	0.32	0.42	0.07	15.62
10. Citurgia	0.80	0.77	0.71	0.74	0.48	0.67	0.66	0.66	0.61	0.60	0.67	0.67	0.61	0.55	0.51	0.51	0.64	0.09	14.53
11. Colour	0.60	0.60	0.57	0.64	0.54	0.53	0.51	0.51	0.45	0.45	0.44	0.49	0.52	0.53	0.48	0.52	0.52	0.06	11.24
12. Cynamid	0.44	0.44	0.46	0.48	0.45	0.41	0.42	0.43	0.41	0.37	0.38	0.33	0.34	0.34	0.32	0.30	0.39	0.05	13.60
13. D.C.W.	0.52	0.51	0.52	0.55	0.67	0.67	0.65	0.64	0.63	0.71	0.71	0.54	0.71	0.67	0.58	0.64	0.62	0.07	11.67
14. Deepak	0.59	0.56	0.55	0.62	0.54	0.50	0.69	0.63	0.58	0.56	0.52	0.56	0.49	0.48	0.45	0.51	0.55	0.06	11.25
15. Duphar	0.36	0.33	0.44	0.49	0.50	0.49	0.50	0.46	0.44	0.40	0.37	0.37	0.35	0.32	0.36	0.19	0.40	0.08	21.09
16. E.I.D.	0.37	0.33	0.32	0.33	0.35	0.34	0.40	0.41	0.41	0.39	0.36	0.36	0.42	0.40	0.36	0.45	0.38	0.04	9.70
17. E. Merck	0.37	0.38	0.42	0.41	0.40	0.41	0.42	0.41	0.45	0.53	0.44	0.47	0.46	0.50	0.45	0.46	0.44	0.04	9.63
18. Excel	0.58	0.59	0.55	0.50	0.50	0.50	0.50	0.49	0.48	0.43	0.44	0.41	0.40	0.38	0.36	0.38	0.47	0.07	15.12
19. Ficom	0.79	0.57	0.55	0.57	0.53	0.51	0.44	0.44	0.47	0.42	0.39	0.49	0.60	0.56	0.52	0.48	0.52	0.09	18.01
20. Fulford	0.12	0.09	0.13	0.10	0.09	0.09	0.08	0.07	0.07	0.05	0.07	0.07	0.09	0.08	0.09	0.09	0.09	0.02	22.85
21. German	0.31	0.31	0.36	0.43	0.37	0.37	0.38	0.40	0.39	0.37	0.45	0.42	0.44	0.47	0.37	0.38	0.39	0.05	11.67
22. Glaxo	0.50	0.51	0.51	0.55	0.58	0.59	0.58	0.47	0.47	0.52	0.50	0.51	0.50	0.48	0.40	0.34	0.50	0.07	13.09

Cont.

TABLE - V.24 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	0.67	0.71	0.79	0.76	0.79	0.80	0.79	0.75	0.80	0.79	0.76	0.80	0.76	0.81	0.81	0.79	0.77	0.04	4.91
24. Guj-State	0.58	0.58	0.56	0.51	0.48	0.49	0.50	0.48	0.46	0.48	0.61	0.62	0.61	0.59	0.61	0.60	0.55	0.06	10.63
25. Hin-Ciba	0.53	0.53	0.52	0.53	0.53	0.50	0.51	0.52	0.47	0.43	0.44	0.43	0.42	0.47	0.39	0.38	0.48	0.05	11.20
26. Hin-Lever	0.41	0.40	0.41	0.40	0.38	0.39	0.39	0.37	0.39	0.39	0.37	0.35	0.35	0.32	0.30	0.31	0.37	0.03	9.34
27. Hocheat	0.46	0.47	0.49	0.45	0.41	0.44	0.54	0.54	0.49	0.44	0.60	0.67	0.65	0.63	0.63	0.62	0.53	0.09	16.82
28. I.C.I.	0.76	0.78	0.70	0.66	0.66	0.65	0.62	0.60	0.60	0.59	0.60	0.58	0.56	0.45	0.46	0.49	0.61	0.09	15.38
29. Ind-Dye	0.54	0.53	0.50	0.44	0.67	0.63	0.61	0.60	0.59	0.56	0.54	0.51	0.48	0.48	0.43	0.43	0.53	0.07	13.53
30. Ind-Oil	0.36	0.42	0.43	0.43	0.45	0.41	0.40	0.36	0.32	0.24	0.23	0.28	0.28	0.32	0.39	0.41	0.36	0.07	19.96
31. Jayant	0.62	0.65	0.66	0.58	0.55	0.50	0.57	0.64	0.65	0.67	0.75	0.78	0.76	0.76	0.72	0.78	0.66	0.09	13.10
32. Knoll	0.42	0.42	0.45	0.46	0.50	0.56	0.41	0.42	0.39	0.38	0.40	0.39	0.35	0.29	0.41	0.41	0.42	0.06	14.10
33. Lakme	0.18	0.35	0.37	0.33	0.40	0.45	0.37	0.38	0.39	0.30	0.29	0.29	0.30	0.29	0.35	0.09	0.32	0.09	27.36
34. National	0.55	0.56	0.62	0.64	0.60	0.59	0.58	0.57	0.52	0.48	0.44	0.43	0.42	0.46	0.45	0.45	0.52	0.08	14.38
35. Parke	0.43	0.40	0.41	0.45	0.44	0.41	0.40	0.40	0.39	0.34	0.32	0.33	0.32	0.33	0.27	0.33	0.37	0.05	14.21
36. Rallis	0.17	0.19	0.21	0.21	0.24	0.26	0.30	0.30	0.27	0.27	0.29	0.28	0.19	0.29	0.29	0.27	0.25	0.04	17.46
37. Ranbaxy	0.31	0.32	0.31	0.35	0.32	0.30	0.36	0.35	0.31	0.28	0.34	0.39	0.42	0.37	0.25	0.30	0.33	0.04	12.97
38. Searle	0.44	0.45	0.51	0.53	0.44	0.38	0.35	0.34	0.29	0.25	0.33	0.34	0.33	0.34	0.33	0.42	0.38	0.08	20.59
39. Synthetics	0.49	0.48	0.50	0.49	0.46	0.67	0.77	0.83	0.78	0.77	0.73	0.62	0.66	0.65	0.66	0.69	0.64	0.12	18.98
40. Tam-Dadha	0.32	0.34	0.37	0.35	0.24	0.29	0.34	0.30	0.29	0.27	0.30	0.34	0.30	0.32	0.35	0.35	0.32	0.04	11.22
41. Tata	0.72	0.71	0.70	0.65	0.57	0.54	0.45	0.44	0.41	0.39	0.41	0.54	0.63	0.74	0.68	0.63	0.58	0.12	21.58
42. Transpek	0.53	0.57	0.58	0.56	0.53	0.50	0.50	0.51	0.50	0.47	0.43	0.37	0.42	0.47	0.47	0.48	0.49	0.06	11.63
43. United	0.63	0.56	0.57	0.49	0.45	0.34	0.28	0.32	0.36	0.34	0.34	0.37	0.42	0.31	0.45	0.34	0.41	0.10	25.39
44. Zandu	0.31	0.31	0.32	0.32	0.36	0.36	0.40	0.39	0.40	0.41	0.47	0.46	0.48	0.45	0.40	0.42	0.39	0.06	14.76
45. Zuari	0.67	0.61	0.57	0.59	0.60	0.53	0.50	0.49	0.43	0.46	0.47	0.38	0.40	0.38	0.48	0.50	0.50	0.09	17.08
Average	0.47	0.47	0.48	0.49	0.47	0.48	0.49	0.47	0.45	0.44	0.45	0.45	0.45	0.45	0.44	0.44	0.46	0.07	14.89
S.D.	0.17	0.16	0.15	0.14	0.14	0.14	0.15	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.17	0.13		
C.V.	36.18	34.55	30.73	28.87	29.44	28.87	30.58	30.15	31.61	34.53	33.30	32.66	34.02	33.47	32.88	38.61	29.18		

reflected in its highest S.D. of 0.12. The GFA/TGA ratio of Bayer has remained steady over a period of time, which is reflected, in its lowest S.D. of 0.02. The highest C.V. is found to be 33.28 for Borax and it is the lowest at 4.61 for Bayer. The grand average of GFA/TGA ratio for all companies taken together and all years taken together comes to 0.46. This indicates that on an average the Gross Fixed Assets constitutes about 46% of total gross assets.

5.5.b NET FIXED ASSETS TO TOTAL NET ASSETS RATIO:

This ratio is derived as net fixed assets divided by total net assets.

Table V.25 presents the net fixed assets to total net assets ratio for 45 companies for the period of 16 years from 1981-1996. It is observed from the Table that the minimum ratio is found to be 0.03 for the year 1989 for Fulford. The highest ratio is found to be 0.83 for Ficom for the year 1981. Wide fluctuations are observed over a period of time for given companies. The NFA/TNA ratio of Hindustan Lever has remained steady over a period of time. Lowest average is found to be 0.31 for the year 1990 and the same is found to be highest at 0.35 for the year 1996 taking all companies together. To have an idea about the variations between the companies S.D. and C.V. are also computed year wise. The highest S.D. and C.V. are found to be 0.18 and 51.82 for the year 1981 and the lowest S.D. and C.V. are found to be 0.14 and 39.85 respectively for the year 1986. When the company wise NFA/TNA ratio is examined over a period of time, maximum average NFA/TNA ratio has found to be 0.72 for

TABLE - V.25

NET FIXED ASSETS TO TOTAL NET ASSETS RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
1. Abbot	0.08	0.10	0.14	0.27	0.34	0.32	0.30	0.26	0.22	0.21	0.20	0.17	0.14	0.17	0.17	0.33	0.21	0.08	38.56
2. Aegies	0.70	0.69	0.74	0.77	0.80	0.80	0.78	0.76	0.71	0.70	0.65	0.71	0.68	0.66	0.68	0.64	0.72	0.05	7.40
3. Alembic	0.30	0.26	0.23	0.24	0.27	0.34	0.33	0.35	0.33	0.30	0.31	0.32	0.32	0.35	0.41	0.47	0.32	0.06	18.44
4. Atul	0.36	0.31	0.32	0.31	0.32	0.34	0.35	0.46	0.38	0.36	0.41	0.38	0.40	0.41	0.44	0.39	0.37	0.05	12.77
5. Basf	0.39	0.46	0.54	0.50	0.42	0.36	0.33	0.29	0.26	0.23	0.21	0.23	0.27	0.31	0.42	0.55	0.36	0.11	31.59
6. Bayer	0.26	0.25	0.23	0.24	0.21	0.21	0.25	0.26	0.29	0.32	0.35	0.31	0.31	0.32	0.33	0.33	0.28	0.05	16.67
7. Borax	0.12	0.07	0.10	0.11	0.06	0.35	0.25	0.25	0.16	0.21	0.29	0.27	0.20	0.26	0.37	0.26	0.21	0.10	45.92
8. Burroughs	0.13	0.15	0.16	0.23	0.26	0.26	0.28	0.25	0.20	0.19	0.23	0.21	0.18	0.15	0.12	0.15	0.20	0.05	25.61
9. Cipla	0.16	0.16	0.22	0.27	0.36	0.41	0.40	0.38	0.33	0.38	0.31	0.32	0.32	0.35	0.33	0.25	0.31	0.08	25.86
10. Citurgia	0.75	0.69	0.60	0.63	0.33	0.49	0.45	0.45	0.40	0.41	0.55	0.52	0.43	0.36	0.31	0.31	0.48	0.13	27.82
11. Colour	0.46	0.44	0.39	0.33	0.31	0.29	0.27	0.27	0.22	0.22	0.25	0.32	0.37	0.38	0.33	0.37	0.33	0.07	21.68
12. Cynamid	0.33	0.32	0.32	0.30	0.28	0.24	0.23	0.24	0.23	0.19	0.21	0.17	0.16	0.15	0.13	0.11	0.23	0.07	31.62
13. D.C.W.	0.27	0.28	0.33	0.37	0.56	0.57	0.53	0.52	0.51	0.59	0.61	0.44	0.65	0.60	0.50	0.58	0.49	0.12	24.34
14. Deepak	0.45	0.39	0.38	0.50	0.44	0.37	0.58	0.52	0.46	0.42	0.43	0.48	0.40	0.37	0.34	0.42	0.43	0.06	14.33
15. Duphar	0.20	0.19	0.30	0.36	0.37	0.37	0.37	0.32	0.30	0.25	0.23	0.23	0.22	0.18	0.21	0.13	0.26	0.08	29.13
16. E.I.D.	0.18	0.14	0.12	0.11	0.11	0.10	0.23	0.27	0.28	0.26	0.23	0.24	0.29	0.28	0.28	0.39	0.22	0.08	38.31
17. E. Merck	0.29	0.31	0.36	0.34	0.32	0.32	0.33	0.32	0.32	0.36	0.38	0.41	0.39	0.41	0.36	0.36	0.35	0.04	10.71
18. Excel	0.43	0.42	0.39	0.35	0.35	0.34	0.32	0.32	0.31	0.30	0.31	0.28	0.29	0.28	0.26	0.29	0.33	0.05	15.38
19. Ficom	0.83	0.56	0.52	0.51	0.46	0.43	0.37	0.38	0.41	0.33	0.30	0.41	0.54	0.51	0.47	0.43	0.47	0.12	26.23
20. Fulford	0.07	0.05	0.07	0.06	0.05	0.06	0.05	0.04	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.01	28.58
21. German	0.21	0.22	0.27	0.34	0.27	0.26	0.27	0.27	0.26	0.24	0.35	0.32	0.34	0.31	0.26	0.27	0.28	0.04	14.91
22. Glaxo	0.41	0.42	0.43	0.47	0.48	0.47	0.15	0.26	0.34	0.40	0.37	0.38	0.36	0.33	0.25	0.19	0.36	0.10	28.01

Cont.

TABLE - V.25 cont.

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Avg	S.D.	C.V.
23. Guj-Alkaly	0.54	0.59	0.72	0.69	0.71	0.73	0.75	0.69	0.75	0.74	0.69	0.73	0.67	0.77	0.77	0.75	0.71	0.06	8.94
24. Guj-State	0.37	0.37	0.34	0.28	0.26	0.29	0.34	0.33	0.32	0.36	0.53	0.55	0.54	0.51	0.54	0.53	0.41	0.11	26.72
25. Hin-Ciba	0.37	0.36	0.37	0.37	0.34	0.30	0.29	0.26	0.21	0.18	0.22	0.26	0.23	0.30	0.22	0.22	0.28	0.07	23.30
26. Hin-Lever	0.24	0.31	0.31	0.29	0.27	0.27	0.27	0.25	0.27	0.27	0.26	0.24	0.24	0.22	0.20	0.23	0.26	0.03	11.59
27. Hocheat	0.32	0.33	0.36	0.35	0.31	0.35	0.47	0.46	0.41	0.37	0.55	0.62	0.59	0.55	0.55	0.55	0.45	0.11	24.15
28. I.C.I.	0.65	0.67	0.55	0.49	0.48	0.45	0.42	0.41	0.42	0.39	0.36	0.34	0.30	0.28	0.28	0.31	0.43	0.12	28.32
29. Ind-Dye	0.40	0.38	0.34	0.28	0.51	0.47	0.45	0.41	0.38	0.33	0.29	0.27	0.25	0.25	0.22	0.22	0.34	0.09	26.72
30. Ind-Oil	0.28	0.33	0.32	0.30	0.30	0.25	0.23	0.20	0.16	0.12	0.12	0.17	0.18	0.22	0.29	0.32	0.24	0.07	30.48
31. Jayant	0.56	0.57	0.60	0.51	0.48	0.44	0.50	0.59	0.59	0.62	0.70	0.74	0.72	0.71	0.67	0.73	0.61	0.10	15.89
32. Knoll	0.31	0.30	0.31	0.29	0.33	0.38	0.24	0.23	0.21	0.22	0.25	0.23	0.19	0.15	0.33	0.35	0.27	0.07	24.13
33. Lakme	0.12	0.30	0.31	0.26	0.33	0.37	0.28	0.28	0.28	0.22	0.20	0.20	0.20	0.20	0.23	0.05	0.24	0.08	34.07
34. National	0.33	0.36	0.46	0.49	0.44	0.39	0.37	0.37	0.32	0.27	0.24	0.23	0.22	0.34	0.35	0.37	0.35	0.08	22.37
35. Parke	0.20	0.21	0.20	0.21	0.20	0.22	0.23	0.23	0.22	0.19	0.17	0.18	0.18	0.18	0.13	0.18	0.20	0.03	13.47
36. Rallis	0.13	0.13	0.15	0.15	0.18	0.20	0.24	0.24	0.21	0.20	0.21	0.19	0.12	0.21	0.22	0.21	0.19	0.04	20.27
37. Ranbaxy	0.26	0.27	0.27	0.31	0.27	0.26	0.33	0.31	0.26	0.22	0.28	0.33	0.36	0.31	0.21	0.25	0.28	0.04	14.83
38. Searle	0.33	0.36	0.43	0.44	0.34	0.28	0.24	0.22	0.18	0.14	0.20	0.22	0.20	0.20	0.22	0.36	0.27	0.09	33.39
39. Synthetics	0.23	0.22	0.23	0.21	0.18	0.33	0.45	0.52	0.44	0.48	0.45	0.34	0.46	0.49	0.52	0.55	0.38	0.13	34.43
40. Tam-Dadha	0.25	0.25	0.26	0.23	0.12	0.14	0.14	0.16	0.19	0.16	0.19	0.19	0.16	0.17	0.20	0.20	0.19	0.04	22.69
41. Tata	0.61	0.59	0.57	0.51	0.45	0.40	0.32	0.31	0.28	0.28	0.32	0.46	0.59	0.71	0.65	0.59	0.48	0.14	29.98
42. Transpek	0.46	0.48	0.49	0.47	0.44	0.41	0.42	0.43	0.42	0.41	0.36	0.30	0.36	0.41	0.40	0.41	0.42	0.05	11.70
43. United	0.55	0.43	0.36	0.36	0.32	0.21	0.16	0.19	0.25	0.26	0.25	0.32	0.38	0.29	0.43	0.31	0.32	0.10	31.75
44. Zandu	0.24	0.22	0.24	0.24	0.29	0.29	0.32	0.28	0.26	0.29	0.37	0.36	0.37	0.32	0.26	0.30	0.29	0.05	16.45
45. Zuari	0.52	0.41	0.36	0.38	0.40	0.29	0.27	0.23	0.18	0.20	0.23	0.17	0.17	0.19	0.38	0.39	0.30	0.11	36.37
Average	0.35	0.34	0.35	0.35	0.34	0.34	0.34	0.33	0.32	0.31	0.33	0.33	0.33	0.34	0.34	0.35	0.34	0.08	22.57
S.D.	0.18	0.16	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.15	0.15	0.16	0.17	0.17	0.16	0.17	0.13		
C.V.	51.82	47.34	44.20	42.37	43.27	39.85	41.89	41.03	43.62	47.27	45.92	47.62	49.88	49.62	47.40	47.75	39.23		

the Aegies and the minimum average ratio is found to be 0.05 for the Fulford. The NFA/TNA ratio is widely fluctuated for Tata, which is reflected in its highest S.D. of 0.14, and it is the lowest at 0.01 for Fulford. Minimum C.V. is found to be 7.40 for Aegies and the maximum is 45.92 for Borax. The grand average of NFA/TNA ratio for all companies taken together and all years taken together comes to 0.34. This indicates that after accounting for depreciation, on an average Net Fixed Assets constitutes about 34% of Total Net Assets.

SECTION - II

In the preceding section ratio calculation for 45 companies for a period of 16 years is discussed. In this section the same exercise is carried out for a long period of 19 years, for 28 companies.

5.6 LIQUIDITY RATIOS:

5.6.a CURRENT RATIO:

This ratio is derived as current assets divided by current liabilities.

Table V.26 presents the current ratio for 28 companies for the period of 19 years from 1981-1999. It is very interesting to note from the Table that the minimum ratio is found to be 0.54 for the year 1982 for E. Merck. The highest ratio is found to be 4.31 for the year 1998 for Duphar. Wide fluctuations are observed over a period of time for given companies. Lowest average is found to be 1.28 for the year 1981 and the highest is 1.68 for the year 1998 and 1999. To

TABLE - V.26

CURRENT RATIO

Name/Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg	S.D.	C.V.	
1. Abbot	2.37	2.78	2.68	2.17	1.28	1.11	1.00	1.02	1.07	1.27	1.39	1.40	1.46	2.11	2.04	1.43	0.96	1.11	0.97	1.56	0.60	38.43	
2. Alembic	1.21	1.23	1.20	1.21	1.19	1.18	1.20	1.13	1.14	1.45	1.04	0.95	1.11	1.33	1.43	1.45	1.53	1.58	1.36	1.26	0.17	13.50	
3. Basf	1.14	1.08	1.26	1.25	1.67	1.69	1.76	1.73	1.50	1.41	1.40	1.56	1.40	1.31	1.26	1.39	1.37	1.24	1.50	1.42	0.20	14.01	
4. Bayer	1.37	1.47	1.45	1.50	1.49	1.48	1.63	1.96	1.73	1.15	1.46	1.34	1.35	1.34	1.33	1.51	1.33	1.34	1.41	1.46	0.17	12.00	
5. Burroughs	1.13	1.15	1.16	1.48	2.57	2.03	1.83	1.66	1.50	1.42	1.54	1.43	1.39	1.77	1.55	1.69	2.14	2.73	3.34	1.76	0.58	32.86	
6. Cipla	1.12	1.14	1.13	1.13	1.19	1.35	1.48	1.50	1.46	1.54	1.32	1.31	1.39	1.21	1.31	2.08	2.02	1.95	2.20	1.46	0.35	23.60	
7. Colour	1.17	1.15	1.20	1.33	1.29	1.64	1.60	1.50	1.21	1.19	1.06	1.31	1.41	1.55	1.60	1.42	1.38	1.55	2.46	1.42	0.31	21.47	
8. Duphar	1.39	1.29	1.26	1.15	1.06	0.99	1.00	1.06	1.10	1.09	1.26	1.14	1.24	1.21	1.29	1.80	4.03	4.31	3.59	1.64	1.06	64.39	
9. E.I.D.	1.03	1.23	1.25	1.27	1.27	1.24	1.20	1.19	1.22	1.27	1.22	1.23	1.11	1.38	1.58	1.97	1.76	1.34	1.89	1.35	0.26	19.17	
10. E. Merck	0.78	0.54	1.01	1.03	1.05	1.13	1.26	1.26	1.17	1.11	1.06	0.97	1.21	1.40	1.38	1.46	1.55	1.81	1.89	1.21	0.32	26.76	
11. Excel	1.23	1.23	1.56	1.69	1.68	1.89	1.55	1.23	1.19	1.26	1.39	1.47	1.79	2.18	1.73	1.62	1.68	1.54	1.81	1.56	0.27	17.00	
12. Fulford	1.04	1.07	1.19	1.17	1.18	1.14	1.16	1.20	1.23	1.17	1.21	1.28	1.39	1.35	1.34	1.35	1.41	1.73	1.94	1.29	0.22	17.06	
13. German	1.16	1.19	1.20	1.19	1.27	1.23	1.24	1.30	1.27	1.43	1.30	1.20	1.35	1.74	1.81	1.72	1.44	1.19	1.34	1.35	0.20	14.77	
14. Glaxo	1.37	1.32	1.22	1.12	1.18	1.21	1.62	1.76	1.32	1.45	1.35	1.10	1.21	1.77	1.53	1.41	1.84	1.92	1.96	1.45	0.28	19.02	
15. Guj-State	1.39	1.74	1.73	1.97	1.80	1.60	1.49	1.51	1.80	1.95	1.49	1.10	1.35	1.29	1.26	1.11	1.28	1.24	1.15	1.49	0.28	18.83	
16. Hin-Lever	1.28	1.27	1.30	1.31	1.27	1.14	0.98	1.25	1.25	1.17	1.18	1.21	1.30	1.25	1.23	1.18	1.11	1.09	1.13	1.21	0.09	7.21	
17. Hoechst	1.11	1.12	1.11	1.26	1.49	1.40	1.27	1.15	1.08	1.14	1.20	1.29	1.28	1.42	1.38	1.14	1.08	1.14	1.00	1.21	0.13	11.06	
18. I.C.I.	0.88	0.83	0.96	1.11	1.27	1.29	1.19	1.11	1.07	1.06	1.19	1.15	1.31	1.27	1.38	1.23	1.17	1.40	1.28	1.17	0.16	13.41	
19. Ind-Oil	1.01	1.02	1.06	1.21	1.19	1.14	1.22	1.21	1.23	1.21	1.21	1.38	1.32	1.32	1.27	1.10	1.62	1.86	0.85	1.23	0.22	17.94	
20. Knoll	1.44	1.38	1.39	1.62	1.61	1.89	1.97	2.04	1.77	1.83	1.37	1.57	1.68	1.48	1.06	1.08	1.29	1.64	1.39	1.55	0.27	17.61	
21. National	1.15	1.08	0.98	1.06	1.34	1.59	1.58	1.43	1.49	1.54	1.60	1.59	1.57	1.33	1.50	1.10	1.05	0.99	0.90	1.31	0.25	19.36	
22. Parke	2.39	2.56	2.52	2.33	2.28	1.86	1.78	1.76	1.58	1.61	1.46	1.51	1.40	1.58	1.50	1.64	1.21	1.16	1.25	1.76	0.45	25.51	
23. Rallis	1.11	1.17	1.19	1.13	1.14	1.07	1.27	1.25	1.19	1.23	1.21	1.40	1.36	1.31	1.21	1.08	1.19	1.34	1.24	1.22	0.09	7.53	
24. Ranbaxy	1.12	1.14	1.17	1.07	1.26	1.42	1.31	1.22	1.31	1.35	1.34	1.30	1.47	1.69	2.32	2.26	3.00	2.84	2.79	1.65	0.64	38.98	
25. Tata	0.86	0.85	0.97	1.45	1.04	1.57	1.21	1.63	1.86	1.73	1.89	2.38	1.92	1.04	2.08	2.08	2.44	2.16	1.50	1.61	0.51	31.54	
26. United	0.88	1.01	1.09	1.04	1.13	1.34	1.55	1.44	1.36	1.18	1.33	1.18	1.09	3.74	2.02	2.27	2.07	1.73	2.18	1.56	0.68	43.48	
27. Zandu	1.20	1.20	0.99	1.19	1.14	1.13	1.18	1.35	1.43	1.54	1.52	1.41	1.46	1.51	1.54	1.43	1.34	1.28	1.23	1.32	0.16	12.36	
28. Zuari	2.57	1.88	1.81	1.69	1.64	2.22	2.42	2.29	1.47	1.58	1.40	1.24	1.71	1.74	1.65	1.47	1.87	1.88	1.59	1.80	0.35	19.74	
Average	1.28	1.29	1.32	1.36	1.39	1.43	1.43	1.43	1.36	1.37	1.33	1.34	1.39	1.56	1.52	1.52	1.65	1.68	1.68	1.44	0.33	22.09	
S.D.	0.44	0.46	0.42	0.34	0.36	0.33	0.33	0.32	0.23	0.23	0.18	0.26	0.20	0.50	0.30	0.36	0.66	0.69	0.69	0.19			
C.V.	34.50	36.07	31.53	24.95	25.91	22.80	22.97	22.22	16.98	16.96	13.73	19.75	14.08	32.34	19.80	23.61	39.76	40.93	41.26	12.96			

have an idea about the variations between the companies S.D. and C.V. are also computed yearwise. The highest S.D. is found to be 0.69 for the year 1998 and 1999, and the same is found to be lowest to the tune of 0.18 for the year 1991. The highest C.V. is 41.26 for the year 1999 and the lowest is 13.73 for the year 1991. When the companywise current ratio is examined over a period of time, minimum average current ratio is found to be 1.17 for I.C.I. and the maximum average current ratio is found to be 1.80 for Zauri. The variations as indicated by S.D. and C.V. are also computed companywise. The highest S.D. and C.V. are 1.06 and 64.39 for Duphar and the lowest S.D. and C.V. are 0.09 and 7.21 for Hindustan Lever. The grand average of current ratio for all companies taken together comes to be 1.44. This ratio indicates that all companies have proper current assets to meet its current obligations. A ratio of greater than one means that the firm has more current assets than current claims against them. It is worth noting that the addition of 3, more years and reduction in number of companies do not affect grand average of current ratio to a high extent.

5.6.b QUICK RATIO:

This ratio is derived as quick assets divided by current liabilities.

Table V.27 presents the quick ratio for 28 companies for the period of 19 years from 1981-1999. It is very interesting to note from the table that the minimum ratio is found to be -0.10 for the year 1982 for E.Merck. The highest ratio is found to be 3.19 for

TABLE - V.27

QUICK RATIO

Name/Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg	S.D.	C.V.
1. Abbot	1.01	1.16	1.15	0.95	0.55	0.52	0.51	0.53	0.50	0.60	0.63	0.64	0.68	1.08	1.10	0.74	0.48	0.63	0.60	0.77	0.25	32.04
2. Alembic	0.62	0.56	0.54	0.62	0.55	0.58	0.65	0.61	0.49	0.77	0.54	0.50	0.59	0.65	0.66	0.69	0.85	0.91	0.85	0.60	0.12	20.27
3. Basf	0.71	0.69	0.81	0.81	0.99	1.05	1.14	1.13	0.87	0.88	0.85	0.92	0.83	0.75	0.82	0.82	0.78	0.70	0.94	0.88	0.14	15.48
4. Bayer	0.64	0.60	0.59	0.73	0.72	0.71	0.90	1.11	0.90	0.53	0.71	0.61	0.78	0.83	0.82	0.99	0.84	0.87	0.88	0.76	0.15	19.54
5. Burroughs	0.76	0.78	0.78	0.80	1.28	1.03	0.88	0.87	0.84	0.66	0.67	0.61	0.73	1.27	1.09	1.00	1.44	1.97	2.73	0.88	0.52	59.48
6. Cipla	0.57	0.63	0.64	0.60	0.55	0.62	0.71	0.77	0.84	0.92	0.80	0.61	0.63	0.49	0.58	1.41	1.22	1.15	1.54	0.71	0.31	43.38
7. Colour	0.60	0.51	0.60	0.70	0.69	0.89	0.88	0.84	0.67	0.63	0.52	0.72	0.83	0.89	1.00	0.92	0.87	1.06	1.59	0.74	0.25	33.07
8. Duphar	0.47	0.45	0.52	0.64	0.65	0.52	0.55	0.56	0.48	0.49	0.58	0.48	0.59	0.56	0.51	1.01	2.92	3.19	2.78	0.57	0.91	160.80
9. E.I.D.	0.61	0.71	0.68	0.73	0.80	0.73	0.59	0.64	0.73	0.68	0.66	0.62	0.49	0.81	1.00	1.37	1.15	0.92	1.15	0.74	0.23	30.80
10. E. Merck	0.23	-0.10	0.38	0.39	0.41	0.48	0.67	0.65	0.60	0.58	0.58	0.55	0.64	0.66	0.56	0.63	0.63	0.78	0.85	0.49	0.21	42.72
11. Excel	0.68	0.59	0.57	0.62	0.71	0.85	0.78	0.66	0.62	0.63	0.81	0.88	1.06	1.41	1.26	1.18	1.09	1.08	1.29	0.83	0.27	32.47
12. Fulford	0.66	0.76	0.60	0.59	0.58	0.70	0.82	0.88	0.80	0.73	0.83	0.85	0.69	0.74	0.75	0.82	0.78	0.91	0.95	0.74	0.11	14.49
13. German	0.50	0.53	0.58	0.69	0.79	0.68	0.61	0.59	0.49	0.64	0.51	0.53	0.78	0.95	1.14	1.03	0.98	0.71	0.70	0.69	0.19	28.06
14. Glaxo	0.27	0.34	0.42	0.46	0.48	0.42	0.57	0.91	0.50	0.59	0.54	0.37	0.38	0.92	0.92	0.88	1.09	1.09	1.19	0.56	0.29	52.32
15. Guj-State	0.70	1.03	1.14	1.43	1.26	1.04	0.99	0.99	1.14	1.41	0.90	0.69	0.80	0.75	0.85	0.70	0.73	0.76	0.79	0.99	0.24	23.97
16. Hin-Lever	0.26	0.31	0.33	0.39	0.29	0.28	0.28	0.29	0.35	0.34	0.34	0.37	0.43	0.59	0.69	0.61	0.61	0.62	0.69	0.39	0.15	39.31
17. Hoechst	0.38	0.31	0.26	0.33	0.53	0.62	0.58	0.59	0.55	0.46	0.58	0.63	0.65	0.61	0.59	0.50	0.56	0.54	0.56	0.51	0.12	22.60
18. I.C.I.	0.39	0.40	0.52	0.60	0.76	0.73	0.53	0.49	0.50	0.55	0.63	0.71	0.80	0.95	0.93	0.84	0.78	0.98	0.89	0.65	0.19	28.92
19. Ind-Oil	0.46	0.38	0.42	0.42	0.40	0.32	0.57	0.71	0.84	1.00	1.00	1.09	1.10	0.96	0.87	0.80	1.26	1.46	0.53	0.71	0.33	47.16
20. Knoll	0.42	0.38	0.40	0.46	0.43	0.61	0.92	1.10	0.98	1.02	0.73	0.68	0.89	0.93	0.48	0.52	0.83	1.27	0.98	0.68	0.27	40.20
21. National	0.69	0.64	0.54	0.50	0.72	0.90	0.95	0.89	0.91	0.98	1.12	1.13	1.09	0.96	1.12	0.81	0.81	0.74	0.64	0.87	0.20	22.59
22. Parke	1.09	1.31	1.29	1.14	1.05	0.94	0.89	0.81	0.72	0.63	0.65	0.77	0.60	0.88	0.80	0.99	0.74	0.72	0.73	0.91	0.21	23.41
23. Rallis	0.54	0.60	0.70	0.55	0.57	0.52	0.67	0.66	0.58	0.69	0.61	0.81	0.75	0.69	0.67	0.50	0.70	0.94	0.81	0.63	0.11	17.82
24. Ranbaxy	0.50	0.54	0.66	0.59	0.64	0.79	0.77	0.70	0.73	0.68	0.74	0.73	0.84	1.21	1.90	1.67	2.28	2.06	2.00	0.85	0.60	69.96
25. Tata	0.38	0.38	0.59	1.08	0.87	1.11	0.77	1.22	1.64	1.51	1.62	1.98	1.61	0.84	1.60	1.69	2.03	1.67	1.21	1.18	0.51	43.07
26. United	0.46	0.58	0.57	0.53	0.55	0.68	0.91	0.99	0.78	0.82	0.78	0.75	0.72	2.76	1.39	1.66	1.53	1.37	1.76	0.93	0.58	62.35
27. Zandu	0.58	0.58	0.50	0.55	0.52	0.47	0.61	0.57	0.57	0.58	0.57	0.60	0.63	0.72	0.79	0.77	0.58	0.63	0.70	0.60	0.09	14.27
28. Zuari	0.97	0.91	1.16	1.04	0.70	0.97	1.21	1.20	0.83	0.73	0.76	0.88	0.88	1.12	1.16	0.98	0.84	0.91	0.92	0.97	0.16	16.09
Average	0.58	0.59	0.64	0.68	0.68	0.71	0.75	0.78	0.73	0.74	0.72	0.74	0.77	0.93	0.93	0.95	1.05	1.09	1.12	0.74	0.27	37.74
S.D.	0.21	0.28	0.25	0.25	0.24	0.22	0.20	0.23	0.25	0.26	0.24	0.30	0.24	0.41	0.33	0.33	0.55	0.56	0.58	0.17		
C.V.	36.04	46.51	39.75	37.15	34.80	31.47	27.14	29.56	34.59	34.79	32.47	40.39	30.83	44.45	35.10	35.30	52.11	50.77	51.99	23.00		

the year 1998 for Duphar. Thus substantially wide range is found of ratio. On computation of yearwise average lowest average is found to be 0.58 for the year 1981 and the highest is 1.12 for the year 1999. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise. The highest S.D. and C.V. are found to be 0.58 for the year 1999 and 52.11 for the year 1997 and the lowest is 0.20 and 27.14 respectively for the year 1987. When the companywise quick ratio is examined over a period of time, minimum is 0.39 for Hindustan Lever and the maximum is 1.18 for Tata. To have an idea about the variations between the companies S.D. and C.V. are also computed companywise. The highest S.D. is found to be 0.91 for Duphar and the lowest S.D. is found to be 0.09 for Zandu. The highest C.V. is found to be 160.80 for Duphar and the lowest is 14.27 for Zandu. The grand average of quick ratio for all companies taken together comes to be 0.74. This ratio indicates that on an average sample companies have 0.74 times of current liabilities. It may find it difficult to meet its current obligations. Again here no much difference is found when more number of years are taken.

5.7 CAPITAL STRUCTURE RATIOS:

5.7.a DEBT-EQUITY RATIO:

This ratio is derived as debt divided by equity.

Table V.28 presents the D/E ratio for 28 companies for the period of 19 years from 1981-1999. It can be observed from the table that the minimum ratio is found to be 0.22 for the year 1998 for Duphar and the maximum ratio is found to be 8.10 for Fulford

for the year 1981. Wide fluctuations are observed over a period of time on examining yearwise average lowest average is found to be 1.39 for the year 1999 taking all companies together and the highest is 2.40 for the year 1992. It is worth noting here that barring few fluctuations, the ratio is falling constantly. This implies that proportion of Debt is reducing over a period of time. On examining variations the lowest S.D. and C.V. are found to be 0.68 and 32.76 for the year 1989 and the highest are found to be 1.79 and 76.49 for the year 1981. Thus it can be said that over a period of time the range of fluctuations has narrowed down. When the companywise D/E ratio is examined over a period of time, minimum average debt equity ratio is found for Glaxo to the tune of 1.17 and the maximum average D/E ratio is found to be 3.78 for Fulford. The D/E ratio of Basf has remained steady from 1981-1996, Bayer 1981 - 1991, Hindustan Lever 1981 - 1994 and 1996 - 1999 and Knoll from 1981-1997. The D/E ratio of Hindustan Lever has remained steady over a period of time, which is reflected, in its minimum S.D. of 0.21, where as the D/E ratio has widely fluctuated for Fulford, which is reflected in its highest S.D. of 1.78. To have an idea about the variation between the companies C.V. are also computed companywise. The minimum C.V. is found to be 13.03 for Hindustan Lever where as it is found to be highest to the tune of 63.53 for Burroughs. The grand average of D/E is 2.00. This grand average indicates that the proportion of debt is twice the equity, which is well accepted.

TABLE - V.28

DEBT-EQUITY RATIO

Name	Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg	S.D.	C.V.	
1. Abbot		0.63	0.49	0.62	0.84	1.38	1.93	2.51	2.79	2.89	3.08	2.45	2.46	2.32	1.06	1.02	1.81	2.82	2.89	2.92	1.94	0.92	47.48	
2. Alembic		2.43	2.11	2.28	2.14	1.98	1.89	1.98	2.03	2.29	2.65	3.05	3.13	3.87	3.50	3.54	3.36	2.47	1.67	1.23	2.50	0.72	28.64	
3. Basf		1.62	1.56	1.26	1.59	1.71	1.71	1.73	1.65	1.70	1.74	1.82	1.72	1.70	1.45	1.25	1.75	0.84	0.95	0.91	1.51	0.31	20.62	
4. Bayer		1.35	1.18	1.29	1.22	1.28	1.29	1.22	1.39	1.47	1.94	2.00	2.08	2.11	2.24	3.28	3.57	3.25	3.09	3.24	2.03	0.85	41.91	
5. Burroughs		3.71	3.35	3.22	1.27	0.64	1.05	1.21	1.39	1.71	1.89	1.49	1.74	1.96	1.14	1.30	0.79	0.45	0.42	0.37	1.53	0.97	63.53	
6. Cipla		4.03	4.08	4.21	4.35	2.62	1.85	1.82	1.74	1.77	1.24	1.68	1.73	1.86	1.99	1.73	0.82	0.49	0.52	0.53	2.06	1.25	60.94	
7. Colour		1.37	1.38	1.50	1.55	1.68	2.16	2.16	2.23	2.62	2.89	3.50	3.26	1.98	1.34	1.34	1.29	1.26	1.03	0.96	1.87	0.75	40.02	
8. Duphar		1.40	1.81	1.57	1.65	1.93	2.39	2.59	3.00	2.95	3.06	3.15	2.72	2.95	3.35	2.91	0.54	0.28	0.22	0.29	2.04	1.07	52.67	
9. E.I.D.		7.01	5.36	4.95	4.13	3.69	3.84	2.53	2.42	2.18	2.03	2.44	2.71	2.64	1.81	1.22	1.24	1.26	1.44	1.37	2.86	1.60	56.01	
10. E. Merck		2.87	2.24	2.50	2.60	2.73	2.62	2.31	1.98	2.47	3.59	5.20	7.18	4.49	1.56	1.56	1.29	1.08	0.90	0.67	2.62	1.59	60.80	
11. Excel		1.40	1.21	1.49	2.02	2.17	2.13	2.15	2.14	2.18	2.28	1.98	1.71	1.55	1.45	1.29	1.35	1.41	1.40	1.43	1.72	0.38	21.78	
12. Fulford		8.10	7.69	3.50	4.20	4.09	4.74	4.62	3.97	3.72	4.97	3.91	3.02	2.21	2.48	2.53	2.43	2.08	1.60	1.87	3.78	1.78	47.04	
13. German		1.55	2.16	2.47	2.87	3.76	3.54	3.16	2.70	2.78	2.41	2.58	3.39	3.29	1.50	1.32	1.23	1.26	0.93	0.69	2.29	0.95	41.45	
14. Glaxo		0.95	1.10	1.09	1.09	1.07	1.01	0.95	1.58	1.52	1.48	1.76	1.96	2.10	0.97	0.89	0.86	0.65	0.64	0.52	1.17	0.45	38.17	
15. Guj-State		0.85	0.83	0.72	0.71	0.88	1.02	1.31	1.61	1.85	1.22	1.69	2.43	2.59	2.34	2.07	2.03	1.63	1.43	1.37	1.50	0.60	39.57	
16. Hin-Lever		1.38	1.40	1.29	1.41	1.47	1.44	1.46	1.72	1.56	1.62	1.68	1.79	1.79	1.88	2.03	1.91	1.87	1.73	1.53	1.63	0.21	13.03	
17. Hoechst		1.75	1.76	1.62	1.39	1.37	1.23	0.95	1.14	1.55	2.30	1.22	0.97	1.08	1.02	1.05	1.21	1.23	1.59	1.33	1.36	0.34	25.04	
18. I.C.I.		1.83	2.22	2.48	1.78	1.28	1.20	1.42	1.84	1.97	2.43	2.00	2.18	2.43	1.54	1.33	1.23	1.38	1.53	1.34	1.76	0.44	24.90	
19. Ind-Oil		3.93	3.14	2.81	2.80	2.79	3.10	2.29	2.20	2.22	3.06	3.12	2.38	2.38	2.20	1.88	2.08	2.62	2.22	1.73	2.58	0.54	20.96	
20. Knoll		1.80	1.61	1.60	1.66	1.48	1.17	1.01	1.01	1.04	1.31	1.40	1.29	1.22	1.52	1.55	1.47	1.14	0.87	0.94	1.31	0.26	19.53	
21. National		1.38	1.67	2.06	2.35	1.91	1.49	1.33	1.37	1.49	1.30	1.56	1.50	1.50	1.68	2.01	1.77	1.67	1.67	1.40	1.64	0.28	17.19	
22. Parke		0.62	0.81	0.76	0.52	0.54	0.73	0.97	1.09	1.08	1.02	1.30	1.20	1.41	1.09	1.32	0.98	2.25	2.92	2.27	1.21	0.63	52.64	
23. Rallis		3.83	3.45	3.29	3.31	3.04	3.14	3.37	2.46	2.78	3.28	3.22	3.19	3.43	3.27	3.86	5.00	2.21	2.13	3.67	3.26	0.64	19.54	
24. Ranbaxy		3.07	3.08	3.55	3.52	3.54	4.12	4.59	4.15	3.13	3.05	2.84	3.43	1.92	1.72	0.94	0.81	0.64	0.62	0.54	2.59	1.34	51.55	
25. Tata		1.36	1.46	1.30	1.46	1.94	1.47	2.24	1.62	1.26	1.47	2.16	1.97	2.27	1.91	1.71	1.41	1.34	1.16	1.09	1.61	0.37	22.77	
26. United		2.51	2.61	2.16	2.35	2.48	2.84	3.40	3.29	2.88	4.10	2.48	2.48	2.58	0.49	0.67	0.99	0.86	0.84	1.03	2.16	1.04	48.18	
27. Zandu		2.23	2.20	2.30	2.94	2.74	2.79	2.31	2.43	1.80	1.65	1.51	1.73	1.85	1.62	1.79	2.41	2.74	2.14	1.50	2.14	0.43	21.47	
28. Zuari		0.79	1.10	1.06	1.02	1.06	1.24	1.09	1.12	1.48	1.28	1.24	1.86	1.48	1.75	1.62	1.26	1.40	1.91	2.08	1.36	0.35	25.59	
Average		2.34	2.25	2.11	2.10	2.04	2.11	2.10	2.07	2.08	2.30	2.30	2.40	2.25	1.78	1.75	1.67	1.52	1.45	1.39	2.00	0.31	15.67	
S.D.		1.79	1.52	1.10	1.08	0.97	1.06	1.01	0.82	0.68	0.98	0.93	1.16	0.79	0.72	0.81	0.97	0.78	0.76	0.84	0.99			
C.V.		76.49	67.63	52.07	51.37	47.68	50.13	48.34	39.44	32.76	42.45	40.60	48.37	35.22	40.32	46.07	58.21	51.57	52.35	60.41	49.39			

5.7.b PROPRIETARY RATIO or TE/TA RATIO:

Total assets derive this ratio as Shareholders funds divided.

Table V.29 presents the total equity to total assets ratio for 28 companies for the period of 19 years from 1981-1999. It can be observed from the table that the minimum ratio is found to be 0.11 for Fulford for the year 1981 and the maximum is 0.82 for Duphar for the year 1998. Wide fluctuations are observed over a period of time for sample companies. Lowest average ratio is found to be 0.32 for the year 1991, 1992 and 1993 and the same is found to be highest at 0.46 for the year 1999 taking all companies together. The highest S.D. is found to be 0.15 for the year 1999, and the same is found to be lowest to the tune of 0.07 for the year 1989 and 1993 taking all companies together. The computation of C.V. shows that the minimum C.V. is 21.55 for the year 1989 and it is maximum at 38.27 for the year 1981 taking all companies together. When the company wise TE/TA ratio is examined over a period of time, minimum average TE/TA ratio is found to be 0.23 for Fulford and Rallis and the maximum is 0.48 for Glaxo and Parke. Over a period of time wide fluctuations are observed for Duphar, which is reflected, in its highest S.D. of 0.20 and the lowest is 0.03 for Hindustan Lever and Rallis. The C.V. is also computed companywise. The highest C.V. is found to be 51.41 for Duphar and the lowest is at 8.08 for Hindustan Lever. The grand average of TE/TA ratio for all companies taken together and all years taken together comes to 0.37.

TABLE - V.29
 PROPRIETARY RATIO OF TOTAL EQUITY TO TOTAL ASSETS RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg S.D.	C.V.	
1. Abbot	0.61	0.67	0.62	0.54	0.42	0.34	0.28	0.26	0.25	0.25	0.29	0.29	0.30	0.49	0.50	0.36	0.26	0.26	0.26	0.38	0.14	38.04
2. Alembic	0.29	0.32	0.30	0.32	0.34	0.35	0.34	0.33	0.30	0.27	0.25	0.24	0.21	0.22	0.22	0.23	0.28	0.35	0.42	0.29	0.06	19.12
3. Basf	0.37	0.38	0.44	0.38	0.36	0.37	0.36	0.38	0.37	0.37	0.35	0.37	0.37	0.41	0.44	0.36	0.54	0.51	0.52	0.40	0.06	14.86
4. Bayer	0.43	0.46	0.44	0.45	0.44	0.44	0.45	0.42	0.41	0.34	0.33	0.32	0.32	0.31	0.23	0.22	0.24	0.24	0.24	0.35	0.09	24.93
5. Burroughs	0.21	0.23	0.24	0.44	0.61	0.49	0.45	0.42	0.37	0.35	0.40	0.36	0.34	0.47	0.43	0.56	0.69	0.70	0.73	0.45	0.15	34.59
6. Cipla	0.19	0.19	0.19	0.18	0.27	0.35	0.35	0.36	0.36	0.45	0.37	0.37	0.35	0.33	0.37	0.55	0.67	0.66	0.65	0.38	0.16	40.90
7. Colour	0.40	0.40	0.38	0.37	0.36	0.32	0.32	0.31	0.28	0.26	0.22	0.23	0.34	0.45	0.43	0.44	0.44	0.44	0.51	0.37	0.08	23.12
8. Duphar	0.42	0.36	0.39	0.38	0.34	0.29	0.28	0.25	0.25	0.25	0.24	0.27	0.25	0.23	0.26	0.65	0.78	0.82	0.78	0.39	0.20	51.41
9. E.I.D.	0.12	0.15	0.16	0.19	0.21	0.20	0.28	0.29	0.31	0.33	0.29	0.27	0.27	0.36	0.45	0.43	0.42	0.40	0.41	0.29	0.10	34.92
10. E. Merck	0.26	0.31	0.28	0.28	0.27	0.28	0.30	0.34	0.29	0.22	0.16	0.12	0.18	0.39	0.39	0.44	0.48	0.53	0.60	0.32	0.12	38.58
11. Excel	0.42	0.46	0.40	0.33	0.32	0.32	0.32	0.32	0.31	0.31	0.34	0.37	0.39	0.41	0.44	0.43	0.41	0.42	0.41	0.37	0.05	13.63
12. Fulford	0.11	0.12	0.22	0.19	0.20	0.17	0.18	0.20	0.21	0.17	0.20	0.25	0.31	0.29	0.28	0.29	0.32	0.38	0.36	0.23	0.08	32.60
13. German	0.44	0.32	0.29	0.26	0.21	0.22	0.24	0.27	0.26	0.29	0.28	0.23	0.23	0.40	0.43	0.45	0.44	0.52	0.59	0.34	0.11	33.67
14. Glaxo	0.51	0.47	0.48	0.48	0.48	0.50	0.51	0.39	0.38	0.40	0.36	0.34	0.32	0.51	0.53	0.54	0.61	0.61	0.66	0.48	0.09	19.55
15. Guj-State	0.54	0.55	0.58	0.58	0.53	0.50	0.43	0.38	0.35	0.45	0.37	0.29	0.28	0.30	0.33	0.33	0.38	0.41	0.42	0.42	0.10	23.77
16. Hin-Lever	0.42	0.42	0.44	0.42	0.41	0.41	0.41	0.37	0.39	0.38	0.37	0.36	0.36	0.35	0.33	0.34	0.35	0.37	0.39	0.38	0.03	8.08
17. Hoechst	0.36	0.36	0.38	0.42	0.42	0.45	0.51	0.47	0.39	0.30	0.45	0.51	0.48	0.50	0.49	0.45	0.45	0.39	0.43	0.43	0.06	12.98
18. I.C.I.	0.34	0.33	0.30	0.36	0.44	0.45	0.41	0.35	0.34	0.29	0.33	0.31	0.29	0.39	0.43	0.45	0.42	0.39	0.43	0.37	0.06	14.95
19. Ind-Oil	0.20	0.24	0.26	0.26	0.26	0.24	0.30	0.31	0.31	0.25	0.24	0.30	0.30	0.31	0.35	0.32	0.28	0.31	0.37	0.29	0.04	14.42
20. Knoll	0.38	0.38	0.38	0.37	0.44	0.64	0.50	0.50	0.49	0.43	0.42	0.44	0.45	0.40	0.39	0.40	0.47	0.54	0.52	0.45	0.07	15.08
21. National	0.42	0.37	0.33	0.30	0.34	0.40	0.43	0.42	0.40	0.44	0.39	0.40	0.40	0.37	0.33	0.36	0.37	0.38	0.42	0.38	0.04	9.86
22. Parke	0.62	0.55	0.57	0.66	0.65	0.58	0.51	0.48	0.48	0.49	0.43	0.46	0.42	0.48	0.43	0.50	0.31	0.26	0.31	0.48	0.11	23.02
23. Rallis	0.20	0.22	0.23	0.22	0.24	0.24	0.23	0.29	0.26	0.23	0.24	0.24	0.16	0.23	0.21	0.17	0.26	0.27	0.19	0.23	0.03	14.44
24. Ranbaxy	0.23	0.24	0.21	0.22	0.22	0.19	0.18	0.19	0.24	0.25	0.26	0.23	0.34	0.37	0.51	0.55	0.61	0.62	0.65	0.33	0.17	50.04
25. Tata	0.42	0.40	0.43	0.40	0.34	0.40	0.31	0.38	0.44	0.40	0.32	0.34	0.31	0.34	0.37	0.41	0.43	0.46	0.48	0.39	0.05	13.34
26. United	0.28	0.28	0.32	0.30	0.29	0.26	0.23	0.23	0.26	0.20	0.29	0.29	0.28	0.67	0.60	0.50	0.53	0.53	0.48	0.36	0.14	39.96
27. Zandu	0.30	0.30	0.29	0.25	0.27	0.26	0.30	0.29	0.36	0.38	0.40	0.37	0.35	0.38	0.36	0.29	0.27	0.32	0.36	0.32	0.05	14.21
28. Zuari	0.53	0.45	0.46	0.47	0.47	0.43	0.46	0.46	0.39	0.43	0.43	0.34	0.39	0.36	0.38	0.44	0.42	0.34	0.33	0.42	0.05	12.90
Average	0.36	0.35	0.36	0.36	0.36	0.36	0.35	0.34	0.34	0.33	0.32	0.32	0.32	0.38	0.39	0.41	0.43	0.45	0.46	0.37	0.09	24.53
S.D.	0.14	0.13	0.12	0.12	0.12	0.12	0.10	0.08	0.07	0.09	0.08	0.08	0.07	0.10	0.10	0.11	0.14	0.14	0.15	0.06		
C.V.	38.27	35.70	33.43	33.89	32.81	33.07	28.83	23.84	21.55	26.94	24.04	25.50	23.31	25.19	24.60	27.47	32.77	32.44	31.96	17.59		

This indicates that on an average 37% of assets are financed through equity.

5.7.c INTEREST COVERAGE RATIO:

This ratio is derived as earning before interest plus depreciation divided by interest.

Table V.30 presents the interest coverage ratio for 28 companies for the period of 19 years from 1981 - 1999. It can be observed from the Table that the minimum ratio is found to be -5.36 for the year 1990 for E.I.D. The highest ratio is found to be 83.23 for Knoll (1998). Wide fluctuations are observed over a period of time for given companies. On examining yearwise average lowest average is found to be 3.00 taking all companies together for the year 1993 and the same is found to be highest to the tune of 10.50 for the year 1999. To have an idea about the variations between the companies S.D. and C.V. are computed yearwise. The highest S.D. is found to be 17.37 for the year 1998 and the lowest is 1.99 for the year 1992. The lowest C.V. is found to be 50.83 for the year 1983 and the highest is 185.9 for the year 1997 taking all companies together. When the companywise interest coverage ratio is examined over a period of time minimum is found for E.I.D. at 1.67 and the maximum is 17.12 for Knoll. The interest coverage ratio of Ranbaxy remains steady from 1981-1986 and 1988-1992 afterwards wide fluctuations are observed for the remaining years which is reflected in its highest S.D. of 24.07 and it is the lowest to the tune of 0.48 for Alembic. Minimum C.V. is 17.53 for Basf and the same the highest at 163.34 for Ranbaxy when it

TABLE - V.30

INTEREST COVERAGE RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg S.D.	C.V.	
1. Abbot	3.94	2.06	3.52	2.73	1.78	1.32	0.65	1.25	1.49	1.30	1.95	1.89	2.88	7.79	14.62	0.94	1.92	1.27	1.79	2.90	3.25	112.08
2. Alembic	1.48	2.84	3.30	2.53	1.77	1.80	1.90	1.89	2.01	1.56	1.71	2.02	1.64	1.92	1.80	1.58	1.54	1.91	2.54	1.99	0.48	24.38
3. Basf	4.54	3.81	3.52	3.30	3.00	2.73	3.00	3.83	4.27	3.88	4.06	4.69	3.31	4.08	4.57	3.88	2.66	4.80	4.46	3.81	0.67	17.53
4. Bayer	2.81	3.18	4.65	4.51	4.66	4.18	4.12	4.66	4.61	3.10	3.45	3.17	3.04	3.20	2.12	1.20	1.97	2.12	2.06	3.30	1.08	32.73
5. Burroughs	7.61	6.74	5.90	4.74	5.53	2.11	1.55	2.72	3.08	1.79	1.85	1.81	1.72	2.25	3.08	0.79	4.21	9.12	12.21	4.15	3.04	73.23
6. Cipla	5.31	4.75	6.03	5.84	4.56	3.39	3.03	4.25	5.01	8.85	6.41	3.68	2.55	2.89	4.24	3.65	32.41	34.30	35.84	9.32	11.18	119.96
7. Colour	3.83	3.42	2.72	2.58	2.70	2.58	3.64	2.97	2.50	2.31	2.18	1.74	2.15	3.21	3.80	4.03	4.09	4.00	2.46	3.00	0.74	24.54
8. Duphar	4.29	2.50	3.42	5.59	4.17	3.24	2.65	2.95	2.36	2.43	2.55	2.27	2.04	1.92	2.17	-0.91	0.36	3.04	9.97	3.00	2.18	72.62
9. E.I.D.	1.87	1.80	1.61	1.32	1.16	1.69	-0.43	1.19	3.18	-5.36	2.53	2.63	0.76	1.77	3.72	3.21	3.32	3.27	2.53	1.67	2.00	119.42
10. E. Merck	2.91	3.57	3.10	3.01	2.92	2.72	2.67	2.57	2.63	2.22	1.50	1.18	1.45	2.22	4.10	4.62	5.96	8.32	10.54	3.59	2.37	66.05
11. Excel	2.50	2.86	3.39	3.45	2.72	2.57	2.46	2.28	2.05	1.54	1.51	1.43	2.00	2.52	1.99	3.03	3.82	4.65	12.64	3.12	2.45	78.52
12. Fulford	2.35	4.18	3.69	3.53	2.73	2.40	1.81	2.38	2.14	3.00	1.85	0.98	1.34	3.52	7.00	6.41	9.05	12.72	25.61	5.17	5.75	111.07
13. German	6.19	5.66	6.01	7.39	9.98	9.58	5.77	5.43	2.94	2.97	2.97	2.29	2.27	3.15	4.13	5.83	8.20	7.83	10.79	5.76	2.67	46.33
14. Glaxo	10.37	5.87	6.31	8.08	8.71	9.95	3.80	2.77	2.93	5.82	4.86	3.66	2.46	1.73	2.01	3.25	3.14	3.30	2.98	4.84	2.70	55.81
15. Guj-State	10.01	9.85	9.15	8.44	6.33	7.20	6.65	5.62	6.20	7.95	8.76	8.44	7.61	10.06	12.34	15.10	13.45	26.55	42.66	11.70	8.86	75.68
16. Hin-Lever	4.32	3.96	4.02	4.17	3.78	2.57	1.60	1.29	1.49	1.90	1.70	1.83	2.08	3.03	6.94	4.67	4.99	5.24	3.37	3.31	1.56	47.01
17. Hoechst	5.58	3.04	2.78	3.57	3.38	3.19	3.04	2.68	2.86	-1.51	2.59	-1.37	-1.94	-2.04	8.12	10.39	6.22	4.22	3.70	3.08	3.25	105.48
18. I.C.I.	2.57	3.13	5.19	6.73	6.46	8.46	13.44	10.05	6.34	3.09	1.77	1.63	3.23	4.00	4.01	0.59	-2.92	2.75	8.86	4.71	3.77	80.14
19. Ind-Oil	9.86	10.50	11.59	13.29	14.21	16.52	17.13	15.64	10.21	6.96	6.83	5.20	5.98	5.18	6.58	6.87	11.16	83.23	68.26	17.12	21.16	123.60
20. Knoll	3.94	2.47	1.46	2.29	3.54	4.32	4.65	5.38	6.19	5.99	5.18	3.90	2.82	1.59	2.81	2.54	1.73	1.17	0.88	3.31	1.65	49.93
21. National	11.57	5.03	5.41	8.57	13.59	7.54	4.74	6.42	7.81	13.17	8.78	5.56	10.68	11.17	10.34	1.67	5.38	2.23	1.94	7.45	3.65	49.04
22. Parke	2.06	1.90	1.95	0.36	2.04	2.73	2.99	2.77	2.88	1.67	1.53	1.85	2.01	2.59	2.43	2.16	1.67	1.90	1.82	2.07	0.60	29.14
23. Rallis	2.04	2.71	2.63	2.44	2.39	2.20	1.89	2.14	2.33	2.89	2.75	2.75	3.36	4.71	77.09	42.80	70.14	39.84	12.88	14.73	24.07	163.34
24. Ranbaxy	7.29	5.34	4.63	4.05	3.06	2.32	2.89	2.27	2.43	2.14	2.04	2.59	2.91	3.01	3.32	3.48	2.87	3.43	3.04	3.32	1.28	38.47
25. Tata	2.47	1.96	3.61	4.38	4.01	3.72	1.88	0.62	0.82	1.65	3.89	6.36	5.29	3.80	7.02	6.29	1.86	2.15	2.38	3.38	1.88	55.51
26. United	2.39	1.92	2.36	2.36	3.43	3.68	6.50	8.64	6.89	6.11	5.01	4.23	2.95	4.18	4.24	3.24	3.01	3.36	4.12	4.14	1.78	43.09
27. Zandu	6.65	3.95	5.52	6.36	6.20	4.19	3.95	3.24	3.41	3.08	3.99	4.67	2.94	3.33	6.54	3.72	2.70	2.55	1.17	4.11	1.52	36.97
Average	4.81	4.00	4.34	4.60	4.68	4.31	3.92	3.95	3.73	3.37	3.52	3.09	3.00	3.58	7.68	5.30	7.43	10.06	10.50	5.05	4.16	82.46
S.D.	2.88	2.18	2.21	2.74	3.32	3.39	3.63	3.16	2.19	3.38	2.11	1.99	2.28	2.56	13.97	8.00	13.81	17.37	15.32	3.77		
C.V.	59.77	54.42	50.83	59.45	70.84	78.52	92.61	80.09	58.66	100.2	59.92	64.39	76.03	71.60	181.8	151.1	185.9	172.7	145.8	74.65		

is computed company wise. The grand average of interest coverage ratio for all companies taken together and all years taken together comes to be 5.05. This ratio indicates that on an average companies covered their interest charges 5.05 times by funds that are ordinarily available for their payment. This seems to be quite satisfactory.

5.7.d LONG-TERM DEBT TO TOTAL ASSETS RATIO:

This ratio is derived as long-term debt divided by total assets.

Table V.31 presents the long-term debt to total assets ratio for 28 companies for the period of 19 years from 1981-1999. It is very interesting to note from the Table that many companies do not have any long-term debt. Therefore the ratio is zero, e.g. Burroughs for the year 1988-1999, Fulford for the year 1981-1997 and Parke for the year 1984-1986, 1990-1996, Rallis for the year 1985-1989. The highest ratio is found to be 0.38 for the year 1997 for Alembic and for the year 1999 for Zuari. Wide fluctuations are observed over a period of time for given companies. The lowest average is found to be 0.05 taking all companies together for the year 1989 and the same is found at the highest 0.14 for the year 1998. On examining variations the highest S.D. is found to be 0.11 for the year 1997 and 1998, and the lowest S.D. is found to be 0.04 for the year 1987 and 1989. The highest C.V. is found to be 94.30 for the year 1991 and it is found to be lowest 61.71 for the year 1987. When the companywise LTD/TA ratio is examined over a period of time, minimum average is found to be 0.01

TABLE - V.31
LONG-TERM DEBT TO TOTAL ASSETS RATIO

Name Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg	S.D.	C.V.
1. Abbot	0.00	0.01	0.07	0.12	0.05	0.03	0.02	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.11	0.18	0.26	0.13	0.06	0.07	122.32
2. Alembic	0.11	0.06	0.04	0.03	0.03	0.08	0.09	0.09	0.11	0.25	0.08	0.04	0.18	0.26	0.33	0.36	0.38	0.34	0.22	0.16	0.12	76.40
3. Basf	0.09	0.12	0.20	0.19	0.19	0.16	0.14	0.11	0.05	0.01	0.02	0.09	0.08	0.04	0.08	0.30	0.10	0.06	0.09	0.11	0.07	64.78
4. Bayer	0.03	0.03	0.03	0.04	0.03	0.03	0.09	0.20	0.18	0.07	0.22	0.06	0.08	0.11	0.24	0.29	0.22	0.19	0.16	0.12	0.09	70.54
5. Burroughs	0.04	0.03	0.04	0.05	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	148.66
6. Cipla	0.05	0.07	0.12	0.16	0.12	0.10	0.10	0.08	0.06	0.08	0.05	0.07	0.14	0.13	0.12	0.09	0.00	0.00	0.01	0.08	0.05	55.62
7. Colour	0.08	0.05	0.06	0.06	0.04	0.14	0.13	0.13	0.02	0.04	0.06	0.21	0.18	0.11	0.14	0.11	0.09	0.12	0.13	0.10	0.05	51.71
8. Duphar	0.01	0.02	0.06	0.07	0.07	0.06	0.09	0.10	0.07	0.04	0.12	0.07	0.10	0.08	0.06	0.03	0.01	0.00	0.00	0.05	0.03	63.67
9. E.I.D.	0.14	0.16	0.15	0.13	0.11	0.10	0.09	0.11	0.11	0.10	0.09	0.14	0.12	0.11	0.07	0.25	0.27	0.18	0.24	0.14	0.06	40.73
10. E. Merck	0.03	0.06	0.08	0.08	0.07	0.06	0.06	0.06	0.04	0.06	0.09	0.09	0.09	0.04	0.01	0.02	0.06	0.10	0.05	0.06	0.02	38.65
11. Excel	0.07	0.03	0.17	0.26	0.21	0.19	0.11	0.01	0.01	0.03	0.07	0.06	0.10	0.18	0.07	0.08	0.10	0.08	0.17	0.11	0.07	66.72
12. Fulford	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.16	0.01	0.04	320.96
13. German	0.00	0.00	0.03	0.12	0.15	0.06	0.06	0.05	0.04	0.06	0.12	0.13	0.11	0.08	0.05	0.03	0.01	0.01	0.00	0.06	0.05	82.61
14. Glaxo	0.08	0.11	0.05	0.04	0.06	0.04	0.13	0.11	0.01	0.08	0.09	0.01	0.08	0.07	0.04	0.02	0.00	0.00	0.00	0.05	0.04	72.50
15. Guj-State	0.07	0.10	0.04	0.06	0.07	0.06	0.12	0.12	0.10	0.11	0.24	0.25	0.27	0.24	0.23	0.20	0.24	0.23	0.20	0.15	0.08	51.85
16. Hin-Lever	0.04	0.03	0.02	0.02	0.01	0.01	0.02	0.03	0.03	0.01	0.00	0.02	0.06	0.04	0.03	0.03	0.04	0.02	0.01	0.03	0.01	56.20
17. Hoechst	0.03	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02	0.06	0.08	0.10	0.09	0.09	0.11	0.11	0.12	0.09	0.08	0.06	0.04	55.31
18. I.C.I.	0.08	0.12	0.12	0.09	0.06	0.04	0.04	0.06	0.08	0.09	0.09	0.08	0.15	0.04	0.06	0.03	0.05	0.10	0.07	0.08	0.03	41.27
19. Ind-Oil	0.09	0.10	0.10	0.16	0.15	0.10	0.07	0.02	0.01	0.03	0.03	0.11	0.09	0.10	0.10	0.07	0.31	0.35	0.10	0.11	0.09	80.88
20. Knoll	0.12	0.10	0.09	0.07	0.04	0.10	0.05	0.07	0.01	0.10	0.04	0.07	0.07	0.02	0.02	0.03	0.04	0.01	0.01	0.06	0.04	63.05
21. National	0.00	0.00	0.03	0.12	0.11	0.10	0.08	0.06	0.07	0.07	0.04	0.03	0.03	0.05	0.19	0.08	0.08	0.14	0.08	0.07	0.05	66.08
22. Parke	0.05	0.14	0.11	0.00	0.00	0.00	0.06	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.33	0.10	0.06	0.09	151.88
23. Rallis	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.03	0.05	0.09	0.08	0.04	0.09	0.16	0.03	0.04	125.62
24. Ranbaxy	0.11	0.08	0.04	0.04	0.04	0.04	0.05	0.03	0.03	0.04	0.09	0.02	0.08	0.00	0.01	0.11	0.15	0.17	0.20	0.07	0.06	78.89
25. Tata	0.10	0.07	0.06	0.06	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.15	0.23	0.29	0.26	0.22	0.23	0.23	0.11	0.11	0.10	86.04
26. United	0.21	0.17	0.11	0.09	0.11	0.10	0.08	0.07	0.08	0.04	0.03	0.07	0.10	0.06	0.07	0.15	0.09	0.05	0.14	0.10	0.04	45.83
27. Zandu	0.05	0.06	0.08	0.10	0.10	0.11	0.12	0.14	0.10	0.14	0.19	0.18	0.21	0.18	0.17	0.23	0.19	0.22	0.18	0.14	0.05	37.65
28. Zuari	0.28	0.24	0.16	0.07	0.09	0.19	0.16	0.13	0.04	0.02	0.02	0.01	0.08	0.11	0.21	0.10	0.20	0.34	0.38	0.15	0.11	72.09
Average	0.07	0.07	0.08	0.08	0.07	0.07	0.07	0.07	0.05	0.06	0.07	0.08	0.10	0.09	0.10	0.11	0.12	0.14	0.11	0.08	0.06	68.00
S.D.	0.06	0.06	0.05	0.06	0.06	0.05	0.04	0.05	0.04	0.05	0.06	0.07	0.07	0.08	0.09	0.10	0.11	0.11	0.11	0.04	0.04	0.04
C.V.	90.98	81.42	69.19	73.76	76.98	75.88	61.71	72.99	89.31	94.03	94.30	88.43	69.75	88.41	91.75	90.85	86.50	84.99	78.85	50.50	50.50	50.50

for Fulford and Burrough, and the maximum ratio is found to be 0.16 for Alembic. The LTD/TA ratio has widely fluctuated for Alembic, which is reflected in its highest S.D. of 0.12, and the lowest S.D. is found to be 0.01 for Hindustan Lever. The highest C.V. is found to be 320.96 for Fulford and the lowest C.V. is found to be 37.65 for Zandu. The grand average of LTD/TA ratio for all companies taken together and all years taken together comes to 0.08. This ratio indicates that on an average about 8% of total assets are financed through long-term debt. The range of average ratio is 5% to 15%.

5.7.e TOTAL DEBT TO TOTAL ASSETS RATIO:

This ratio is derived as total debt divided by total assets.

Table V.32 presents the total debt to total assets ratio for 28 companies for the period of 19 years from 1981-1999. It can be observed from the Table that the minimum TD/TA ratio is found to be 0.18 for the year 1998 for Duphar. The highest ratio is found to be 0.89 for the year 1981 for Fulford. Wide fluctuations are observed over a period of time for given companies. The TD/TA ratio of Bayer has remained steady over the period of time. Lowest average is found to be 0.54 for the year 1999 taking all companies together and the same is found to be highest to the tune of 0.64 for the year 1981. To have an idea about the variations between the companies S.D. is computed yearwise. The highest S.D. is found to be 0.14 for the year 1981, 1997 and 1998 and the lowest S.D. is found to be 0.07 for the year 1989. The

TABLE - V.32

TOTAL DEBT TO TOTAL ASSETS RATIO

Name\Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg S.D.	C.V.	
1. Abbot	0.39	0.33	0.38	0.46	0.58	0.66	0.72	0.73	0.75	0.75	0.71	0.71	0.70	0.51	0.50	0.64	0.74	0.74	0.74	0.62	0.14	23.33
2. Alembic	0.71	0.68	0.70	0.68	0.66	0.65	0.66	0.67	0.70	0.73	0.75	0.76	0.79	0.78	0.78	0.77	0.72	0.65	0.58	0.71	0.06	7.94
3. Basf	0.63	0.62	0.56	0.62	0.64	0.63	0.64	0.62	0.63	0.63	0.65	0.63	0.63	0.59	0.56	0.64	0.46	0.49	0.48	0.60	0.06	10.05
4. Bayer	0.57	0.54	0.56	0.55	0.56	0.56	0.55	0.58	0.59	0.66	0.67	0.68	0.68	0.69	0.77	0.78	0.76	0.76	0.76	0.65	0.09	13.64
5. Burroughs	0.79	0.77	0.76	0.56	0.39	0.51	0.55	0.58	0.63	0.65	0.60	0.64	0.66	0.53	0.57	0.44	0.31	0.30	0.27	0.55	0.15	27.95
6. Cipla	0.81	0.81	0.81	0.82	0.73	0.65	0.65	0.64	0.64	0.55	0.63	0.63	0.65	0.67	0.63	0.45	0.33	0.34	0.35	0.62	0.15	24.99
7. Colour	0.60	0.60	0.62	0.63	0.64	0.68	0.68	0.69	0.72	0.74	0.78	0.77	0.66	0.55	0.57	0.56	0.56	0.51	0.49	0.63	0.08	13.28
8. Duphar	0.58	0.64	0.61	0.62	0.66	0.71	0.72	0.75	0.75	0.75	0.76	0.73	0.75	0.77	0.74	0.35	0.22	0.18	0.22	0.61	0.20	33.36
9. E.I.D.	0.88	0.85	0.84	0.81	0.79	0.80	0.72	0.71	0.69	0.67	0.71	0.73	0.73	0.64	0.55	0.57	0.58	0.60	0.59	0.71	0.10	14.36
10. E. Merck	0.74	0.69	0.71	0.72	0.73	0.72	0.70	0.66	0.71	0.78	0.84	0.88	0.82	0.61	0.61	0.56	0.52	0.47	0.40	0.68	0.12	18.25
11. Excel	0.59	0.55	0.60	0.67	0.68	0.68	0.68	0.68	0.69	0.69	0.66	0.63	0.61	0.59	0.56	0.57	0.59	0.58	0.59	0.63	0.05	8.00
12. Fulford	0.89	0.88	0.78	0.81	0.80	0.83	0.82	0.80	0.79	0.83	0.80	0.75	0.69	0.71	0.72	0.71	0.68	0.62	0.65	0.77	0.08	9.98
13. German	0.56	0.68	0.71	0.74	0.79	0.78	0.76	0.73	0.74	0.71	0.72	0.77	0.77	0.60	0.57	0.55	0.56	0.48	0.41	0.66	0.11	17.00
14. Glaxo	0.49	0.53	0.52	0.52	0.52	0.50	0.49	0.61	0.62	0.60	0.64	0.66	0.68	0.49	0.47	0.46	0.39	0.39	0.34	0.52	0.09	17.85
15. Guj-State	0.46	0.45	0.42	0.42	0.47	0.50	0.57	0.62	0.65	0.55	0.63	0.71	0.72	0.70	0.67	0.67	0.62	0.59	0.58	0.58	0.10	17.28
16. Hin-Lever	0.58	0.58	0.56	0.58	0.59	0.59	0.59	0.63	0.61	0.62	0.63	0.64	0.64	0.65	0.67	0.66	0.65	0.63	0.61	0.62	0.03	4.93
17. Hoechst	0.64	0.64	0.62	0.58	0.58	0.55	0.49	0.53	0.61	0.70	0.55	0.49	0.52	0.50	0.51	0.55	0.55	0.61	0.57	0.57	0.06	9.87
18. I.C.I.	0.66	0.67	0.70	0.64	0.66	0.55	0.59	0.65	0.66	0.71	0.67	0.69	0.71	0.61	0.57	0.55	0.58	0.61	0.57	0.63	0.05	8.45
19. Ind-Oil	0.80	0.76	0.74	0.74	0.74	0.76	0.70	0.69	0.69	0.75	0.76	0.70	0.70	0.69	0.65	0.68	0.72	0.69	0.63	0.71	0.04	5.76
20. Knoll	0.62	0.62	0.62	0.62	0.56	0.36	0.50	0.50	0.51	0.57	0.58	0.56	0.55	0.60	0.61	0.60	0.53	0.46	0.48	0.55	0.07	12.19
21. National	0.58	0.63	0.67	0.70	0.66	0.60	0.57	0.58	0.60	0.56	0.61	0.60	0.60	0.63	0.67	0.64	0.63	0.62	0.58	0.62	0.04	6.11
22. Parke	0.38	0.45	0.43	0.34	0.35	0.42	0.49	0.52	0.52	0.51	0.57	0.54	0.58	0.52	0.57	0.50	0.69	0.74	0.69	0.52	0.11	21.46
23. Rallis	0.80	0.78	0.77	0.78	0.76	0.76	0.77	0.71	0.74	0.77	0.76	0.76	0.84	0.77	0.79	0.83	0.74	0.73	0.81	0.77	0.03	4.33
24. Ranbaxy	0.77	0.76	0.79	0.78	0.78	0.81	0.82	0.81	0.76	0.75	0.74	0.77	0.66	0.63	0.49	0.45	0.39	0.38	0.35	0.67	0.17	24.86
25. Tata	0.58	0.60	0.57	0.60	0.66	0.60	0.69	0.62	0.56	0.60	0.68	0.66	0.69	0.66	0.63	0.59	0.57	0.54	0.52	0.61	0.05	8.49
26. United	0.72	0.72	0.68	0.70	0.71	0.74	0.77	0.76	0.74	0.80	0.71	0.71	0.72	0.33	0.40	0.50	0.47	0.47	0.52	0.64	0.14	22.16
27. Zandu	0.70	0.70	0.71	0.75	0.73	0.74	0.70	0.71	0.64	0.62	0.60	0.63	0.65	0.62	0.64	0.71	0.73	0.68	0.64	0.68	0.05	6.73
28. Zuari	0.47	0.55	0.54	0.53	0.53	0.57	0.54	0.54	0.61	0.57	0.57	0.66	0.61	0.64	0.62	0.56	0.58	0.66	0.67	0.58	0.05	9.33
Average	0.64	0.65	0.64	0.64	0.64	0.64	0.65	0.65	0.66	0.67	0.68	0.68	0.68	0.62	0.61	0.59	0.57	0.55	0.54	0.63	0.09	14.09
S.D.	0.14	0.13	0.12	0.12	0.12	0.12	0.10	0.08	0.07	0.09	0.08	0.08	0.06	0.10	0.10	0.11	0.14	0.14	0.15	0.06		
C.V.	21.31	19.54	18.59	18.94	18.36	18.63	15.87	12.40	10.98	13.09	11.47	11.86	11.09	15.59	15.68	19.07	25.06	25.98	27.24	10.25		

highest C.V. is found to be 27.24 for the year 1999 and the lowest C.V. is found to be 10.98 for the year 1989 taking all companies together. When the companywise TD/TA ratio is examined over a period of time, minimum average TD/TA ratio is found for Glaxo and Parke to the tune of 0.52 and the maximum average is found to be 0.77 for Fulford and Rallis. Minimum S.D. is found to be 0.03 for Rallis and Hindustan Lever. Wide fluctuations are observed for Duphar over a period of time, which is reflected, in its highest S.D. of 0.20. The highest C.V. is found to be 33.36 for Duphar and it is lowest at the 4.33 for Rallis. The grand average of TD/TA ratio for all companies taken together and all years taken together comes to 0.63. This indicates that out of total assets on an average 60% are financed through debt.

5.8 ACTIVITY RATIOS:

5.8.a.i INVENTORY TURNOVER RATIO:

This ratio is derived as cost of goods sold divided by average inventory.

Table V.33 presents the inventory turnover ratio for 28 companies for the period of 19 years from 1981-1999. It is very interesting to note from the Table that the minimum ratio is found to be 1.26 for the year 1981 for Fulford. The highest ratio is found to be 12.59 for the year 1997 for Indian Oil. Wide fluctuations are observed over a period of time for given companies. On examining yearwise average the lowest average is found to be 3.41 taking all companies together for the year 1981 and the highest is at 4.93 for the year 1999. To have an idea about

TABLE - V.33

INVENTORY TURNOVER RATIO-I

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg S.D.	C.V.	
1. Abbot	3.73	3.79	3.33	3.48	3.40	3.50	3.59	4.00	4.07	3.33	3.20	3.72	4.21	4.40	5.12	4.85	4.81	5.56	6.38	4.13	0.86	20.88
2. Alembic	3.40	3.36	3.20	3.34	3.75	3.36	3.42	4.01	3.33	4.20	4.17	4.58	6.07	5.32	4.02	3.45	4.46	5.04	5.36	4.10	0.84	20.60
3. Basf	4.68	5.11	5.10	4.74	3.90	3.71	3.99	4.38	4.46	3.57	3.35	3.35	3.43	3.84	4.19	4.19	3.69	3.08	3.67	4.02	0.60	14.83
4. Bayer	2.53	2.61	3.04	3.43	3.67	3.50	3.87	4.55	4.93	3.69	3.55	3.38	3.73	3.70	3.96	3.85	4.76	4.80	4.78	3.81	0.70	18.42
5. Burroughs	2.87	3.24	3.26	3.53	4.01	4.14	3.81	4.57	5.06	3.07	3.20	3.76	4.24	5.72	5.71	3.84	5.45	4.88	5.15	4.19	0.92	21.96
6. Cipla	3.03	3.49	3.70	3.86	3.54	3.20	3.09	3.97	5.01	4.42	4.02	2.93	2.79	2.61	2.47	2.81	3.06	2.67	2.71	3.34	0.68	20.51
7. Colour	3.78	3.56	3.36	3.43	3.69	3.56	3.71	3.74	3.81	3.43	3.13	3.43	4.18	4.59	4.99	5.33	5.02	5.81	5.85	4.12	0.86	20.81
8. Duphar	2.13	2.10	2.81	4.29	5.23	4.48	3.97	3.96	3.59	3.15	2.88	2.97	2.96	2.86	2.41	3.36	2.07	2.85	3.61	3.25	0.86	26.47
9. E.I.D.	8.72	10.01	9.99	8.67	8.54	8.25	5.91	5.56	6.46	3.96	4.77	4.95	4.03	4.62	5.57	5.13	5.34	5.76	6.21	6.44	1.95	30.32
10. E. Merck	2.88	2.94	2.75	2.52	2.48	2.79	3.45	3.41	3.41	3.18	3.17	3.19	3.30	3.42	3.41	3.25	3.41	3.43	3.77	3.17	0.35	11.11
11. Excel	3.83	4.15	3.64	2.77	2.53	2.61	2.67	3.82	4.45	3.46	3.31	3.85	3.71	3.28	3.82	4.50	3.87	3.42	3.84	3.55	0.58	16.34
12. Fulford	1.26	3.26	3.29	3.15	2.94	3.62	4.87	5.89	5.79	4.55	4.24	5.57	6.10	5.62	5.78	5.93	5.93	6.08	5.17	4.69	1.40	29.87
13. German	2.82	3.05	3.17	3.56	3.52	3.06	2.66	2.82	3.20	3.50	2.98	2.82	3.57	3.79	3.80	3.68	4.05	4.56	4.35	3.42	0.54	15.67
14. Glaxo	2.51	2.76	2.84	3.07	3.75	4.34	4.50	4.30	2.64	3.53	3.77	3.81	3.81	5.20	6.80	6.71	4.66	4.50	5.02	4.13	1.22	29.49
15. Guj-State	2.07	2.88	3.29	3.74	4.02	4.05	3.57	3.23	3.47	3.56	3.17	3.23	2.71	2.25	2.95	3.12	2.68	3.05	3.56	3.19	0.53	16.62
16. Hin-Lever	3.48	3.67	3.35	3.55	3.24	2.85	3.31	3.03	2.99	3.47	3.60	3.69	3.76	4.43	5.55	5.87	7.23	6.76	7.04	4.26	1.45	34.16
17. Hoechst	2.89	3.04	2.94	2.93	3.30	4.05	4.37	5.15	5.54	3.72	3.09	4.14	4.89	4.55	3.32	3.78	4.23	4.15	4.24	3.91	0.79	20.23
18. I.C.I.	2.98	4.10	5.72	5.87	5.73	5.60	3.87	3.52	3.93	3.43	4.03	4.80	5.34	5.94	4.91	4.69	4.79	4.61	5.38	4.70	0.91	19.31
19. Ind-Oil	5.55	7.51	8.81	8.01	7.39	5.92	5.89	7.14	7.60	8.91	8.92	7.13	8.88	6.48	5.67	10.11	12.59	11.92	11.59	8.21	2.12	25.79
20. Knoll	2.93	3.16	3.25	3.23	3.17	3.04	3.42	4.39	4.00	3.90	3.76	3.52	4.04	4.53	4.26	3.92	4.98	5.12	4.92	3.87	0.69	17.76
21. National	3.73	4.33	4.03	3.90	4.00	4.21	4.56	4.98	5.12	4.26	4.23	4.96	4.86	6.13	5.66	5.66	6.40	6.45	5.76	4.91	0.88	17.87
22. Parke	4.13	4.99	5.10	5.55	6.09	6.21	6.46	6.29	5.81	3.87	3.67	4.30	4.17	4.53	4.57	5.31	4.43	5.18	5.27	5.05	0.86	17.01
23. Rallis	5.66	5.84	6.03	3.31	4.75	4.82	4.82	5.36	4.52	4.67	5.69	4.72	5.05	5.43	6.18	5.66	6.08	8.38	7.43	5.49	1.11	20.13
24. Ranbaxy	2.48	2.75	2.74	2.65	2.55	2.62	2.98	3.22	3.13	2.74	3.01	3.34	3.45	3.92	3.74	3.02	2.78	3.03	2.57	2.99	0.40	13.54
25. Tata	3.23	3.22	2.71	5.23	5.28	3.87	2.49	2.19	3.42	3.06	2.37	2.41	2.84	3.16	2.99	3.19	3.94	3.47	3.03	3.27	0.84	25.77
26. United	2.87	3.19	3.19	2.77	2.65	2.25	2.11	2.71	3.10	3.47	3.26	4.17	3.25	2.70	2.90	2.91	3.50	3.54	4.36	3.10	0.56	18.20
27. Zandu	2.43	2.59	2.87	2.98	3.11	2.56	2.70	2.55	2.53	2.17	2.25	2.35	2.46	2.88	3.13	3.28	2.87	2.35	3.15	2.70	0.33	12.32
28. Zuari	2.86	3.79	4.58	5.12	4.20	3.72	3.75	3.96	4.69	3.37	3.69	6.20	4.68	4.82	5.55	5.47	4.08	3.86	3.82	4.33	0.84	19.39
Average	3.41	3.87	4.00	4.02	4.09	3.92	3.85	4.17	4.29	3.77	3.73	3.97	4.16	4.31	4.40	4.53	4.68	4.80	4.93	4.15	0.88	20.55
S.D.	1.42	1.64	1.78	1.50	1.44	1.30	1.06	1.16	1.21	1.14	1.23	1.10	1.32	1.16	1.22	1.55	1.96	1.99	1.81	1.15		
C.V.	41.6	42.4	44.4	37.4	35.29	33.19	27.23	27.91	28.33	30.27	33.08	27.7	31.67	26.81	27.7	34.2	41.75	41.42	36.72	27.6		

the variations between the companies S.D. and C.V. are also computed yearwise. The highest S.D. is found to be 1.99 for the year 1998 and the lowest is 1.05 for the year 1987. The highest C.V. is found to be 44.4 for the year 1983 and the lowest coefficient is found to be 26.81 for the year 1994. When the companywise ratio is examined over a period of time, minimum average inventory turnover ratio is found to be 2.70 for Zandu and the maximum average inventory turnover ratio is found to be 8.21 for Indian Oil. To have an idea about the variations between the companies S.D. and C.V. are also computed companywise. The highest S.D. is found to be 2.12 for Indian Oil and the lowest S.D. is found to be 0.33 for Zandu. The highest C.V. is found to be 34.16 for Hindustan Lever and the lowest is 11.11 for E.Merck. The grand average of inventory turnover ratio for all companies taken together comes to be 4.15. This ratio indicates the liquidity of inventory. A high inventory turnover ratio indicates active sales, while lower the ratio indicates dull business, over investment in inventory, accumulation of large stock etc.

5.8.a.ii INVENTORY TURNOVER RATIO:

This ratio is derived as sales divided by average inventory.

Table V.34 presents the inventory turnover ratio for 28 companies for the period of 19 years from 1981-1999. It is very interesting to note from the Table that the minimum ratio is found to be 2.66 for the year 1982 for Duphar. The maximum ratio is found to be 13.63 for the year 1999 for Indian Oil. Wide

TABLE - V.34

INVENTORY TURNOVER RATIO-II

Name/Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg	S.D.	C.V.	
1. Abbot	4.59	4.62	4.20	4.44	4.32	4.28	4.15	4.70	4.84	4.02	3.94	4.42	5.00	5.57	6.47	5.73	5.84	6.90	9.21	5.12	1.30	25.35	
2. Alembic	4.54	4.76	4.53	4.44	4.79	4.39	4.41	5.09	3.92	5.00	5.24	5.83	7.64	6.68	5.13	4.51	5.91	6.92	7.53	5.33	1.12	20.93	
3. Basf	6.62	7.17	7.08	6.62	5.53	5.11	5.45	6.05	6.15	4.99	4.77	4.93	4.89	5.16	5.46	5.43	4.89	4.46	4.83	5.56	0.82	14.76	
4. Bayer	3.59	3.35	4.00	4.40	4.82	4.62	5.05	5.93	6.36	4.75	4.90	4.66	5.11	5.40	5.41	5.09	6.66	6.89	6.74	5.14	1.02	19.76	
5. Burroughs	3.98	4.48	4.36	4.34	4.88	4.83	4.54	5.73	6.42	3.80	3.91	4.51	5.03	6.87	7.08	4.42	6.63	6.70	7.16	5.25	1.18	22.51	
6. Cipla	4.05	4.59	4.81	4.99	4.61	4.19	4.04	5.14	6.49	5.88	5.26	4.03	3.69	3.52	3.38	3.83	4.53	4.03	4.06	4.48	0.81	17.97	
7. Colour	4.72	4.28	3.96	4.02	4.31	4.21	4.49	4.41	4.42	3.98	3.75	4.12	5.22	5.75	6.07	6.66	6.53	6.99	6.76	4.98	1.10	22.18	
8. Duphar	2.83	2.66	3.60	5.55	6.95	5.89	5.17	5.15	4.64	3.95	3.75	3.80	3.80	3.68	3.10	3.62	2.69	3.59	5.08	4.18	1.17	28.02	
9. E.I.D.	9.36	10.74	10.76	9.32	9.21	9.01	6.32	6.24	7.48	4.04	5.58	5.76	4.59	5.45	5.02	5.70	6.12	7.24	6.46	7.07	2.06	29.12	
10. E. Merck	3.65	3.58	3.67	3.37	3.26	3.65	4.55	4.60	4.55	4.28	4.09	4.13	4.37	4.49	4.52	4.29	4.50	4.59	4.99	4.16	0.49	11.80	
11. Excel	5.02	5.58	5.01	3.81	3.42	3.49	3.58	5.27	6.22	5.05	5.00	6.00	5.61	4.91	5.39	6.23	5.46	4.82	5.40	5.01	0.87	17.29	
12. Fulford	3.90	4.50	4.45	4.12	3.77	4.56	6.03	7.22	7.00	5.50	4.98	6.56	7.21	6.97	7.10	7.36	7.35	7.48	6.64	5.93	1.36	22.98	
13. German	3.70	4.09	4.27	4.67	4.52	3.89	3.29	3.56	3.94	4.33	3.62	3.32	4.31	4.95	4.96	4.74	5.22	6.04	6.12	4.40	0.81	18.52	
14. Glaxo	3.53	4.08	4.31	4.16	4.86	6.05	5.95	5.45	3.38	4.48	4.85	4.68	4.68	6.40	8.24	8.27	6.49	6.12	6.48	5.39	1.40	26.04	
15. Guj-State	2.79	3.64	4.14	4.83	5.08	4.90	4.18	3.96	4.32	4.42	4.07	4.06	3.39	2.84	3.88	4.36	3.69	3.94	4.42	4.05	0.61	15.06	
16. Hin-Lever	4.09	4.31	4.01	4.25	3.91	3.54	4.08	3.71	3.65	4.20	4.41	4.59	4.73	5.43	6.33	7.00	8.85	8.78	9.24	5.22	1.88	36.10	
17. Hoechst	3.77	3.94	3.81	3.82	4.20	4.86	5.05	5.89	6.44	4.50	3.91	5.16	6.18	5.94	4.28	4.80	5.38	5.32	5.07	4.86	0.85	17.57	
18. I.C.I.	3.58	4.94	6.97	7.25	6.62	6.50	4.51	3.68	4.02	3.37	4.95	4.88	5.22	6.00	6.00	5.72	6.06	6.02	6.95	5.43	1.21	22.28	
19. Ind-Oil	5.86	7.98	9.35	8.60	7.95	6.39	6.43	7.82	8.04	9.51	9.73	8.75	10.34	7.73	7.03	10.17	11.84	12.48	13.63	8.93	2.10	23.47	
20. Knoll	4.26	4.57	4.73	4.89	4.77	4.32	4.73	6.12	5.44	5.26	5.07	4.74	5.26	6.06	5.65	5.33	7.10	7.19	6.72	5.38	0.89	16.47	
21. National	4.29	5.02	4.62	4.75	5.14	5.43	5.72	6.20	6.51	5.45	5.33	6.04	5.79	7.08	6.90	7.18	7.68	7.58	6.66	5.97	1.02	17.09	
22. Parke	5.24	6.56	6.85	7.15	7.71	7.75	8.04	7.98	7.42	5.41	5.14	5.97	6.32	6.48	6.67	6.63	6.83	7.00	7.42	6.77	0.88	12.95	
23. Rallis	6.38	6.61	6.85	3.62	5.52	5.97	5.79	6.04	5.21	5.34	6.23	5.31	5.98	6.21	6.95	6.34	6.73	9.36	8.39	6.25	1.21	19.28	
24. Ranbaxy	3.39	4.02	4.04	3.89	3.78	3.74	4.10	4.48	4.42	3.82	4.11	4.70	5.11	5.94	5.69	4.47	4.23	4.62	3.69	4.33	0.67	15.42	
25. Tata	4.05	3.98	3.37	6.07	6.19	4.99	3.98	3.44	4.70	4.92	3.53	3.72	4.24	4.39	4.70	7.11	7.35	6.38	5.28	4.86	1.23	25.27	
26. United	4.31	5.02	5.06	4.34	4.12	3.60	3.13	3.51	4.21	4.60	5.03	5.83	5.71	4.02	3.91	3.92	4.42	4.70	5.62	4.48	0.76	16.87	
27. Zandu	3.22	3.54	3.69	3.89	4.03	3.69	4.15	4.05	4.03	3.52	3.41	3.66	3.64	4.32	4.43	4.64	3.93	3.73	5.15	3.93	0.47	11.95	
28. Zuari	4.03	4.75	6.14	6.65	5.49	4.81	4.76	4.73	5.81	4.23	4.56	7.42	5.86	5.90	7.52	7.36	4.89	4.87	4.43	5.49	1.12	20.37	
Average	4.40	4.91	5.09	5.08	5.14	4.95	4.85	5.22	5.36	4.74	4.75	5.06	5.32	5.51	5.62	5.75	5.99	6.24	6.43	5.28	1.09	20.26	
S.D.	1.34	1.64	1.78	1.52	1.45	1.31	1.08	1.25	1.32	1.14	1.20	1.21	1.41	1.17	1.32	1.53	1.79	1.95	2.01	1.06			
C.V.	30.52	33.44	34.90	30.02	27.90	26.52	22.21	23.97	24.55	24.03	25.33	23.94	26.46	21.34	23.48	26.63	29.92	31.19	31.23	19.97			

fluctuations are observed over a period of time for given companies. On examining yearwise average, lowest average is found to be 4.40 taking all companies together for the year 1981 and the same is found to be highest to the tune of 6.43 for the year 1999. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise. The highest S.D. is found to be 2.01 for the year 1999 and the lowest is 1.08 for the year 1987. The highest C.V. is 34.90 for the year 1983 and the lowest is 21.34 for the year 1994. When the companywise inventory turnover ratio is examined over a period of time, minimum average inventory turnover ratio is found to be 3.93 for Zandu and the maximum is 8.93 for Indian Oil. To have an idea about the variations between the companies S.D. and C.V. are also computed companywise. The highest S.D. is found to be 2.10 for Indian Oil and the lowest is found to be 0.47 for Zandu. The highest C.V. is found to be 36.10 for Hindustan Lever and the same is found to be lowest at 11.80 for E. Merck and Zandu. The grand average of inventory turnover ratio for all companies taken together comes to be 5.28. This ratio indicates that on an average companies' sales is 5.28 times its average inventory. A high inventory turnover ratio indicates a good inventory management.

5.8.b AVERAGE COLLECTION PERIOD:

This ratio is derived as average debtors divided by sales multiplied by 360.

Table V.35 presents the Average collection period for 28 companies for the period of 19 years from 1981

TABLE V.35
AVERAGE COLLECTION PERIOD

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg S.D.	C.V.	
1. Abbot	52.85	51.93	58.97	58.08	57.72	60.79	71.97	71.16	63.96	71.47	68.86	59.25	55.37	56.75	54.66	52.11	50.76	54.31	53.36	59.17	7.04	11.90	
2. Alembic	65.05	55.19	52.74	61.26	57.79	62.88	75.91	73.30	73.19	58.71	61.74	51.20	40.50	41.39	45.84	53.89	51.57	53.32	55.97	57.45	9.93	17.28	
3. Basf	66.32	70.17	79.88	86.06	91.72	96.93	102.02	98.01	81.31	92.80	103.66	96.34	90.02	80.90	76.91	79.62	85.02	90.35	96.71	87.62	10.45	11.93	
4. Bayer	78.67	74.47	53.14	55.35	57.44	56.25	58.03	59.05	50.90	51.95	48.69	33.32	28.52	37.36	48.71	68.62	86.60	36.75	35.44	41.78	48.59	14.76	30.37
5. Burroughs	54.21	52.53	65.73	64.60	48.69	49.32	53.84	41.34	33.03	42.90	31.17	36.79	31.77	27.23	29.50	18.59	27.34	40.21	46.00	46.33	35.68	8.12	22.76
6. Cipla	40.74	41.75	47.82	44.76	37.36	36.26	38.84	29.77	25.74	31.17	36.79	31.77	27.23	29.50	74.10	74.02	84.07	86.62	80.33	86.11	82.69	8.46	10.23
7. Colour	68.63	65.01	71.78	87.84	88.14	90.87	86.32	91.39	90.61	94.83	88.99	82.58	78.88	74.10	81.15	88.13	118.45	100.40	96.01	96.01	72.77	17.46	24.00
8. Duphar	52.23	59.41	49.94	49.72	66.47	75.38	76.46	73.73	63.27	64.80	71.88	65.05	69.15	81.01	81.15	68.13	75.79	66.71	68.26	68.26	43.23	16.81	38.88
9. E.I.D.	31.19	26.16	22.98	25.39	32.04	37.30	38.28	35.01	36.44	62.79	37.01	33.50	32.53	37.27	55.85	66.88	48.22	47.56	45.57	44.40	62.12	13.90	22.38
10. E. Merck	62.86	56.71	51.87	57.54	60.90	59.59	63.58	71.21	67.32	73.18	84.10	92.43	82.96	63.89	46.37	48.35	90.64	96.89	117.79	123.51	69.47	24.33	35.02
11. Excel	56.81	46.28	35.08	40.37	54.39	62.99	73.60	60.31	51.90	58.69	64.14	58.37	60.77	79.02	88.35	30.17	27.20	32.54	38.54	44.53	75.27	31.80	42.25
12. Fulford	108.36	92.94	85.40	85.62	88.68	94.04	101.10	98.91	91.10	100.82	124.74	100.50	53.07	31.86	62.08	50.06	49.18	50.81	54.44	49.71	66.42	20.90	31.47
13. German	61.67	57.61	60.10	73.98	107.79	116.21	103.10	78.33	54.51	47.64	52.55	60.91	71.28	62.08	10.65	12.48	16.65	26.28	29.48	31.02	15.68	6.62	42.22
14. Glaxo	12.09	9.69	12.33	20.10	15.90	9.18	10.94	12.97	18.58	14.59	13.35	11.01	10.60	10.65	12.48	111.99	115.12	103.10	84.58	106.79	96.37	16.53	17.15
15. Guj-State	92.07	70.59	70.68	78.15	78.87	79.01	101.73	109.74	85.10	99.47	103.93	96.13	118.21	125.81	111.99	30.61	27.46	20.78	20.29	19.96	23.94	5.56	23.24
16. Hin-Lever	8.04	12.71	23.08	26.80	26.45	27.09	26.92	27.07	25.78	25.60	25.86	25.63	26.26	28.42	28.76	29.80	27.29	40.04	50.57	60.83	35.35	10.99	31.08
17. Hoechst	34.17	27.30	19.68	18.06	23.21	31.81	36.55	35.24	41.37	46.27	48.08	40.74	31.90	28.76	29.80	27.29	40.04	50.57	60.83	35.35	10.99	31.08	
18. I.C.I.	52.92	48.80	49.20	52.83	60.87	60.36	65.85	69.72	68.66	96.51	74.53	93.91	99.60	103.80	107.42	87.35	90.72	102.91	94.81	77.94	20.56	26.38	
19. Ind-Oil	38.72	24.36	18.21	16.20	12.69	10.89	9.81	11.13	11.93	12.43	13.81	17.44	19.19	22.47	21.19	18.13	19.38	20.08	20.73	17.83	6.65	37.31	
20. Knoll	24.65	21.70	19.33	17.12	15.49	17.57	22.55	26.70	32.71	31.19	34.61	36.52	36.08	37.21	43.54	48.36	43.32	58.65	46.38	46.38	32.30	12.15	37.61
21. National	54.59	54.12	63.36	54.75	49.09	45.28	41.94	39.76	32.91	42.24	52.65	51.87	59.13	64.41	75.43	73.50	79.08	83.66	90.38	90.38	58.32	15.95	27.34
22. Parke	50.29	46.89	46.51	31.39	22.91	31.84	39.19	35.71	33.85	39.44	40.13	42.54	39.25	46.34	59.71	65.85	52.17	58.15	54.69	44.04	10.98	24.94	
23. Rallis	40.88	42.32	51.42	88.63	47.81	46.08	52.91	55.43	59.62	61.94	52.85	65.29	64.57	55.13	50.00	46.12	49.47	61.16	68.31	55.79	11.18	20.04	
24. Ranbaxy	45.39	38.00	46.09	58.83	66.24	74.57	83.61	77.26	57.78	52.34	56.99	54.15	54.66	66.31	93.08	107.93	121.21	112.08	130.79	73.54	27.44	37.31	
25. Tata	28.26	32.71	62.77	49.86	51.45	46.75	58.71	73.32	80.88	112.40	126.04	78.30	47.67	62.21	82.40	93.25	134.55	132.56	145.57	78.93	35.95	45.55	
26. United	67.24	68.72	65.51	64.64	59.73	71.12	107.39	137.33	113.02	122.38	109.12	71.37	82.15	100.98	95.06	91.37	92.73	130.54	131.06	93.76	25.38	27.07	
27. Zandu	58.46	57.11	58.44	50.27	46.71	44.71	39.84	35.84	26.09	23.14	23.33	26.68	26.67	26.25	34.97	39.58	45.77	39.50	32.39	38.75	11.90	30.72	
28. Zuari	33.51	40.95	48.62	45.17	33.24	32.22	41.91	47.63	32.36	34.05	24.16	21.29	31.71	33.73	39.75	55.03	49.28	26.29	46.04	37.73	9.29	24.63	
Average	51.46	48.08	49.67	52.26	52.14	54.55	60.10	59.87	53.71	59.49	59.85	55.20	53.72	56.01	58.97	61.78	64.43	66.29	69.57	57.22	15.03	27.40	
S.D.	22.00	19.51	19.39	22.20	24.60	26.54	28.50	30.41	25.62	30.13	32.22	26.39	26.03	27.35	27.25	27.59	31.58	32.51	34.94	22.42			
C.V.	42.74	40.58	39.04	42.47	47.18	48.66	47.41	50.79	47.69	50.65	53.84	47.81	48.44	48.82	46.21	44.65	49.02	49.04	49.04	50.23	39.18		

-1999. It is very interesting to note from the Table that the minimum ratio is found to be 9.18 for the year 1986 for Glaxo. The maximum ratio is found to be 145.57 for the year 1999 for Tata. Wide fluctuations are observed over a period of time for given companies. On examining yearwise average the lowest average is found to be 48.08 for the year 1982 and the highest is 69.57 for the year 1999. The highest S.D. is found to be 34.94 for the year 1999 and the same is found to be lowest at 19.39 for the year 1983. The highest C.V. is found to be 53.84 for the year 1991 and the lowest is 39.04 for the year 1983. When the companywise average collection period is examined over a period of time, minimum average of average collection period is found to be 15.68 for Glaxo and the maximum is found to be 96.37 for Gujarat State. To have an idea about the variations between the companies S.D. and C.V. are also computed companywise. The highest S.D. and C.V. is found to be 35.95 and 45.55 for Tata and the lowest S.D. is found to be 5.56 for Hindustan Lever. The lowest C.V. is 10.23 for Colour. The grand average of average collection period for all companies taken together comes to be 57.22. This ratio indicates the speed of their collection of debt. The ratio indicates that on average the sample companies take about 57 days for collection of debt.

5.8.c FIXED ASSETS TURNOVER RATIO:

This ratio is derived as sales divided by average fixed assets.

Table V.36 presents the fixed assets turnover ratio for 28 companies for the period of 19 years from

TABLE - V.36

FIXED ASSETS TURNOVER RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg	S.D.	C.V.	
1. Abbot	29.13	26.04	17.23	9.26	5.47	4.78	4.64	5.78	7.52	7.62	8.27	10.69	14.89	15.63	14.86	7.62	5.89	6.49	7.89	11.04	7.01	63.49	
2. Alembic	5.10	6.23	7.47	7.46	7.25	5.07	4.27	4.60	3.97	5.50	5.52	6.01	7.87	6.50	4.31	2.97	2.79	2.61	2.77	5.16	1.68	32.62	
3. Basf	3.89	3.46	2.42	2.17	2.55	3.15	3.27	4.72	6.20	6.12	6.72	7.17	6.07	5.33	3.83	2.22	1.75	1.77	2.04	3.97	1.82	45.80	
4. Bayer	5.53	5.47	7.50	8.10	8.74	9.02	8.03	7.62	7.80	5.52	4.94	4.99	5.38	4.63	4.09	3.61	4.62	4.80	5.19	6.08	1.69	27.83	
5. Burroughs	8.15	8.67	7.77	6.95	6.96	6.53	5.93	7.69	10.13	7.51	8.03	9.20	11.02	12.98	13.16	9.22	13.05	14.16	16.32	9.65	2.96	30.71	
6. Cipla	10.64	11.56	9.09	6.84	4.93	3.55	3.09	4.04	5.37	4.28	4.06	4.17	4.35	3.96	3.74	4.01	4.50	4.50	4.66	5.33	2.43	45.61	
7. Colour	2.68	2.75	2.98	3.44	4.27	4.53	5.27	5.27	5.96	6.28	5.75	4.74	4.08	3.92	4.24	4.20	3.94	3.89	3.31	4.29	1.05	24.54	
8. Duphar	7.40	7.18	6.80	5.66	4.91	4.31	4.09	4.67	5.44	5.73	6.30	6.99	7.15	7.71	7.02	7.36	5.90	9.46	12.82	6.68	2.00	29.94	
9. E.I.D.	17.01	23.24	30.77	29.92	28.99	29.52	13.42	8.87	8.25	4.74	7.86	8.56	6.32	6.20	4.58	3.30	2.22	2.09	2.06	12.52	10.57	84.43	
10. E. Merck	4.92	4.72	4.33	3.90	4.11	4.58	4.80	4.40	4.56	3.89	3.13	2.70	2.88	3.25	4.06	4.42	4.44	4.14	4.20	4.08	0.65	15.88	
11. Excel	2.99	3.67	4.39	4.17	3.83	3.71	3.75	5.35	6.32	5.63	5.16	5.83	5.68	4.75	4.60	4.43	4.10	3.68	3.67	4.51	0.92	20.40	
12. Fulford	18.27	22.15	25.70	30.42	32.90	33.48	37.70	45.78	56.57	64.62	51.60	55.61	73.43	80.49	79.05	71.28	66.02	71.61	77.35	52.32	20.99	40.11	
13. German	7.92	8.43	6.97	4.95	4.20	4.46	4.40	5.13	6.44	7.53	4.90	3.80	4.25	4.55	5.10	5.09	4.53	3.29	2.86	5.20	1.55	29.79	
14. Glaxo	3.82	4.15	3.83	3.01	3.08	4.09	6.78	8.53	3.78	4.32	4.58	4.91	5.42	6.97	8.17	9.01	8.23	8.55	9.20	5.81	2.21	38.05	
15. Guj-State	2.09	2.59	2.76	3.21	3.76	4.12	3.08	2.66	3.17	2.65	1.58	1.26	1.07	1.04	1.28	1.29	1.11	1.03	0.96	2.14	1.04	48.36	
16. Hin-Lever	9.27	8.31	6.71	7.08	7.34	7.26	8.11	7.87	7.54	7.92	8.65	9.66	10.08	10.47	10.91	11.21	12.20	11.19	11.38	9.11	1.72	18.92	
17. Hoechst	5.17	5.61	5.41	5.18	5.83	5.78	3.83	3.46	4.05	3.92	2.44	1.85	2.00	2.40	1.97	2.18	2.29	2.93	2.87	3.64	1.46	39.97	
18. I.C.I.	1.08	1.48	2.50	3.20	2.97	3.10	2.92	2.91	3.11	2.52	3.90	3.85	4.34	4.83	4.45	4.17	3.88	3.21	3.16	3.24	0.96	29.48	
19. Ind-Oil	8.21	10.56	11.74	11.97	12.31	12.01	12.69	13.65	13.53	13.65	12.22	9.69	8.77	6.82	6.06	6.59	6.28	5.45	5.13	9.86	3.05	30.96	
20. Knoll	6.69	7.45	7.64	8.02	8.35	7.74	8.15	9.65	8.75	8.48	7.35	7.83	10.44	12.75	7.34	5.10	5.35	4.68	5.39	7.74	1.93	24.96	
21. National	3.46	3.83	2.84	2.58	2.92	3.41	3.85	4.05	4.78	4.97	5.12	5.70	5.83	4.81	3.31	2.95	2.54	2.19	1.99	3.74	1.17	31.28	
22. Parke	11.41	12.96	12.96	14.08	15.78	14.98	13.61	13.81	13.57	12.15	13.57	14.79	15.71	15.10	16.99	15.64	5.21	3.69	4.20	12.64	3.93	31.09	
23. Rallis	22.52	21.88	18.07	8.95	13.49	12.29	9.65	8.90	8.91	9.53	10.69	9.30	11.55	11.93	11.19	11.08	9.97	9.11	8.36	11.97	4.24	35.45	
24. Ranbaxy	5.32	6.04	5.20	4.12	4.32	4.77	4.06	3.93	4.76	5.71	5.80	4.64	4.14	3.96	3.32	2.80	2.69	2.73	2.07	4.23	1.13	26.80	
25. Tata	1.41	1.43	1.10	1.57	1.30	1.36	1.47	1.43	1.62	1.41	1.08	0.83	0.55	0.37	0.43	0.82	0.84	0.83	0.72	1.08	0.40	36.75	
26. United	1.64	2.38	3.59	3.74	4.12	5.19	6.04	5.86	5.43	4.74	5.26	5.17	3.50	2.34	1.78	1.86	2.26	1.97	2.25	3.64	1.55	42.65	
27. Zandu	5.44	6.21	6.24	6.47	6.06	5.09	4.95	5.22	6.42	5.56	4.23	3.83	3.59	4.40	5.45	5.47	5.21	3.85	3.31	5.10	0.99	19.38	
28. Zuari	2.28	3.08	4.22	4.19	4.17	5.26	6.38	6.74	9.49	7.51	7.18	9.94	9.83	10.30	5.46	3.58	2.69	2.12	1.33	5.57	2.87	51.56	
Average	7.62	8.27	6.15	7.52	7.67	7.61	7.10	7.59	8.34	8.21	7.71	7.99	8.93	9.23	8.60	7.62	6.95	7.00	7.41	7.87	3.00	35.60	
S.D.	6.71	6.93	7.06	7.03	7.39	7.41	6.78	8.04	9.87	11.37	9.07	9.86	13.20	14.55	14.39	12.94	11.96	13.06	14.22	9.27			
C.V.	88.03	83.81	86.62	93.53	96.31	97.41	95.51	105.95	118.41	138.43	117.65	123.44	147.89	157.70	167.33	169.66	172.20	186.56	191.88	117.7			

1981-1999. It is very interesting to note from the Table that the minimum ratio is found to be 0.37 for the year 1994 for Tata. The highest ratio is found to be 80.49 for the year 1994 for Fulford. Wide fluctuations are observed over a period of time for given companies. On examining yearwise average the lowest average is found to be 6.95 taking all companies together for the year 1997 and the same is found to be highest at 9.23 for the year 1994. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise. The highest S.D. is found to be 14.55 for the year 1994 and the same is found to be lowest at 6.71 for the year 1981. The highest C.V. is 191.88 for the year 1999, and the lowest is 83.81 for the year 1982. When the companywise ratio is examined over a period of time, minimum average is found to be 1.08 for Tata and the maximum average is found to be 52.32 for Fulford. To have an idea about the variations between the companies S.D. and C.V. are also computed companywise. The highest S.D. and C.V. are found to be 10.57 and 84.43 respectively for E.I.D and the lowest S.D. is found to be 0.40 for Tata. The lowest C.V. is 15.88 for E.Merck. The grand average of fixed assets turnover ratio for all companies taken together comes to be 7.87. This ratio indicates the efficiency of utilising fixed assets in the firm. The ratio indicates that the fixed assets are used almost 7 times to generate sales.

5.8.d TOTAL ASSETS TURNOVER RATIO:

This ratio is derived as sales divided by average total assets.

Table V.37 presents the total assets turnover ratio for 28 companies for the period of 19 years from 1981-1999. It is very interesting to note from the Table that the minimum ratio is found to be 0.24 for the year 1994 for Tata. The highest ratio is found to be 4.00 for the year 1983 for E.I.D. Wide fluctuations are observed over a period of time for given companies. On examining yearwise average the lowest average is found to be 1.32 taking all companies together for the year 1999 and the same is found to be highest to be tune of 1.73 for the year 1983. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise. The highest S.D. is found to be 0.76 for the year 1983 and the same is found to be lowest at 0.41 for the year 1990. The highest C.V. is found to be 48.28 for the year 1999 and the lowest C.V. is found to be 27.57 for the year 1990. When the companywise total assets turnover ratio is examined over a period of time, minimum average total assets turnover ratio is found to be 0.51 for Tata and the maximum average total assets turnover ratio is found to be 2.38 for Indian Oil. To have an idea about the variations between the years S.D. and C.V. are also computed company wise. The highest S.D. and C.V. are found to be 0.97 and 44.40 for E.I.D. and the lowest S.D. and C.V. are found to be 0.09 and 6.75 for Colour. The grand average of total assets turnover ratio for all companies taken together comes to be 1.54. This ratio indicates firms' ability in generating sales from all financial resources committed to total assets. The grand average indicates that on an average companies generate a sale

TABLE - V.37

TOTAL ASSETS TURNOVER RATIO

Name Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg	S.D.	C.V.
1. Abbot	2.40	2.39	2.06	1.95	1.69	1.57	1.45	1.63	1.82	1.64	1.69	1.97	2.28	2.41	2.53	2.00	1.68	1.70	2.13	1.95	0.33	17.06
2. Alembic	1.54	1.76	1.85	1.75	1.83	1.57	1.42	1.55	1.34	1.73	1.70	1.89	2.44	2.16	1.65	1.31	1.40	1.38	1.43	1.67	0.29	17.40
3. Basf	1.52	1.50	1.24	1.12	1.16	1.22	1.30	1.46	1.71	1.49	1.45	1.55	1.50	1.54	1.42	1.11	0.94	0.92	0.99	1.32	0.23	17.60
4. Bayer	1.41	1.40	1.80	1.87	1.94	1.90	1.88	1.94	2.12	1.69	1.67	1.65	1.68	1.47	1.33	1.19	1.56	1.62	1.66	1.67	0.24	14.39
5. Burroughs	1.10	1.23	1.20	1.34	1.72	1.71	1.62	2.03	2.24	1.48	1.68	2.00	2.12	2.12	1.77	1.26	1.77	1.53	1.39	1.65	0.35	20.94
6. Cipla	1.66	1.80	1.72	1.70	1.59	1.38	1.26	1.57	1.90	1.55	1.37	1.30	1.37	1.42	1.47	1.12	1.14	1.08	0.99	1.43	0.26	18.18
7. Colour	1.23	1.23	1.23	1.24	1.37	1.35	1.47	1.43	1.47	1.40	1.37	1.37	1.42	1.47	1.50	1.49	1.44	1.45	1.30	1.38	0.09	6.75
8. Duphar	1.50	1.40	1.68	1.90	1.81	1.60	1.50	1.58	1.66	1.56	1.52	1.60	1.59	1.53	1.38	1.19	0.65	0.78	0.96	1.44	0.33	22.76
9. E.I.D.	3.02	3.62	4.00	3.55	3.19	3.07	2.37	2.22	2.29	1.27	1.91	2.04	1.71	1.78	1.29	1.13	0.98	1.05	1.05	2.19	0.97	44.40
10. E. Merck	1.43	1.42	1.46	1.36	1.35	1.46	1.57	1.43	1.45	1.32	1.17	1.08	1.16	1.31	1.56	1.59	1.64	1.62	1.68	1.43	0.17	11.80
11. Excel	1.29	1.56	1.76	1.53	1.34	1.28	1.25	1.71	2.00	1.72	1.57	1.72	1.62	1.33	1.22	1.22	1.20	1.09	1.09	1.45	0.26	18.00
12. Fulford	1.34	1.36	1.60	1.92	1.80	1.89	1.93	1.94	2.10	1.94	1.64	2.03	2.85	3.16	3.04	2.95	2.97	3.29	3.15	2.26	0.66	29.38
13. German	1.67	1.81	1.73	1.52	1.26	1.18	1.16	1.37	1.69	1.88	1.47	1.27	1.40	1.47	1.44	1.34	1.32	1.30	1.39	1.46	0.21	14.38
14. Glaxo	1.58	1.74	1.64	1.36	1.47	1.95	2.07	1.83	1.17	1.61	1.77	1.84	1.99	2.40	2.31	1.96	1.64	1.72	1.74	1.78	0.30	16.93
15. Guj-State	0.76	0.96	0.99	1.00	1.03	1.14	0.98	0.89	1.03	0.91	0.73	0.68	0.58	0.55	0.68	0.69	0.62	0.61	0.58	0.81	0.19	23.27
16. Hin-Lever	2.25	2.30	2.07	2.14	2.07	1.97	2.18	2.04	1.99	2.16	2.29	2.39	2.41	2.41	2.31	2.42	2.88	2.60	2.52	2.28	0.23	10.15
17. Hoechst	1.66	1.82	1.85	1.83	1.91	1.93	1.61	1.61	1.76	1.52	1.15	1.08	1.20	1.36	1.08	1.20	1.25	1.40	1.23	1.50	0.30	20.08
18. I.C.I.	0.70	0.98	1.50	1.65	1.45	1.45	1.28	1.20	1.28	1.02	1.47	1.34	1.38	1.40	1.24	1.24	1.25	1.14	1.23	1.27	0.22	16.97
19. Ind-Oil	2.30	3.22	3.84	3.72	3.68	3.25	3.03	2.88	2.39	1.86	1.48	1.41	1.55	1.36	1.54	2.03	1.94	1.76	2.05	2.38	0.85	35.68
20. Knoll	2.08	2.27	2.35	2.43	2.60	2.74	2.39	2.31	1.92	1.83	1.76	1.87	2.14	2.08	1.87	1.75	1.92	1.41	1.24	2.05	0.38	18.69
21. National	1.15	1.33	1.17	1.22	1.35	1.41	1.47	1.51	1.64	1.45	1.30	1.35	1.33	1.43	1.15	1.06	0.98	0.89	0.82	1.26	0.22	17.11
22. Parke	0.60	0.57	0.56	0.62	0.66	0.59	0.61	0.61	0.50	0.45	0.42	0.41	0.43	0.41	0.36	0.39	0.74	0.55	0.48	0.52	0.11	20.24
23. Rallis	2.86	2.85	2.60	1.37	2.22	2.35	2.13	2.10	1.96	1.95	2.23	1.90	1.74	1.93	2.43	2.42	2.35	2.35	1.99	2.20	0.37	16.72
24. Ranbaxy	1.38	1.59	1.39	1.21	1.25	1.26	1.21	1.25	1.34	1.35	1.44	1.43	1.44	1.31	0.79	0.65	0.66	0.71	0.58	1.17	0.32	27.27
25. Tata	0.86	0.86	0.64	0.85	0.61	0.58	0.52	0.45	0.48	0.40	0.33	0.33	0.30	0.24	0.30	0.51	0.49	0.48	0.42	0.51	0.19	37.21
26. United	0.91	1.14	1.40	1.35	1.38	1.33	1.12	1.03	1.19	1.21	1.35	1.53	1.26	0.74	0.65	0.66	0.74	0.65	0.66	1.07	0.30	28.76
27. Zandu	1.29	1.42	1.44	1.54	1.61	1.48	1.52	1.55	1.74	1.56	1.42	1.39	1.31	1.51	1.55	1.54	1.45	1.30	1.38	1.47	0.11	7.45
28. Zuan	1.19	1.42	1.63	1.56	1.62	1.79	1.80	1.70	1.95	1.46	1.55	1.90	1.63	1.84	1.67	1.38	1.16	1.13	0.79	1.54	0.30	5.56
Average	1.52	1.68	1.73	1.66	1.68	1.66	1.57	1.60	1.65	1.48	1.46	1.51	1.57	1.57	1.48	1.39	1.38	1.34	1.32	1.54	0.31	20.32
S.D.	0.61	0.70	0.76	0.68	0.66	0.62	0.54	0.51	0.48	0.41	0.43	0.49	0.58	0.64	0.64	0.60	0.63	0.63	0.64	0.49		
C.V.	39.74	41.50	44.13	40.87	39.11	37.27	34.50	31.85	29.21	27.57	29.65	32.22	36.93	40.71	43.42	43.31	45.41	47.31	48.28	31.70		



of 1.54 for one rupee investment in fixed and current or total assets.

5.8.e WORKING CAPITAL TURNOVER RATIO:

This ratio is derived as sales divided by average working capital.

Table V.38 presents the working capital turnover ratio for 28 companies for the period of 19 years from 1981-1999. It is very interesting to note from the Table that the minimum ratio is found to be -354 for the year 1987 for Duphar. The highest ratio is found to be 322.70 for the year 1982 for Indian Oil. Wide fluctuations are observed over a period of time for given companies. On examining the yearwise average the lowest average is found to be -0.05 taking all companies together for the year 1987 and the highest is 24.13 for the year 1984. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise and presented in the table. The highest S.D. is found to be 70.60 for the year 1987 and the lowest is 3.57 for the year 1995. The highest C.V. is found to be 1252 for the year 1992 and the lowest C.V. is found to be -141097 for the year 1987. However it may be noted that this negative C.V. is on account of negative average. But this indicates highest variations. When the companywise ratio is examined over a period of time, minimum average ratio is found to be 0.68 for Tata and the maximum average ratio is found to be 52.73 for Indian Oil. To have an idea about the variations between the companies S.D. and C.V. are also computed companywise. The highest S.D. is found to be 94.98 for Duphar and the lowest S.D. is found to be 1.36 for Bayer. The highest coefficient is found to be 3711 for Alembic and the

TABLE - V.38

WORKING CAPITAL TURNOVER RATIO

Name\Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg S.D.	C.V.	
1. Abbot	4.54	4.36	3.81	4.30	6.73	15.14	41.39	164.1	52.87	14.67	8.62	8.49	8.92	6.93	5.91	6.79	22.35	103.3	114.0	31.44	46.80	145.7
2. Alembic	12.6	13.61	14.2	13.62	14.93	14.94	13.49	16.75	17.26	11.53	15.06	-2.99	1.18	18.45	9.70	7.78	8.69	8.40	9.64	2.07	76.82	3711
3. Basf	20.9	28.39	17.5	11.47	6.75	4.94	4.71	4.95	6.30	6.37	6.42	6.08	6.21	8.23	10.2	8.96	7.49	8.44	7.19	9.55	6.20	64.86
4. Bayer	7.01	6.37	7.5	7.57	7.51	7.34	6.88	5.91	6.40	9.27	10.93	8.80	9.50	8.38	8.15	6.21	8.09	9.80	8.99	7.93	1.36	17.21
5. Burroughs	11.0	11.49	10.5	7.59	5.08	4.34	4.80	6.71	8.14	5.95	6.65	7.93	9.01	6.92	5.28	4.04	5.14	3.42	2.39	6.65	2.57	38.59
6. Cipla	18.9	18.36	17.7	19.68	16.96	10.50	7.26	7.85	9.11	7.20	7.31	7.92	7.68	9.19	9.28	3.80	3.15	3.29	2.68	9.89	5.64	57.10
7. Colour	15.6	16.07	13.9	9.32	8.56	6.21	5.34	5.58	8.09	11.03	18.02	13.6	8.45	7.42	6.60	7.21	8.30	7.68	4.85	9.57	3.96	41.43
8. Duphar	6.70	6.98	10.3	17.15	32.46	168.06	-35.4	71.78	32.96	26.08	13.66	13.2	12.9	10.73	8.85	5.35	1.49	1.26	1.65	4.61	94.98	2060
9. E.I.D.	129	39.14	24.6	19.94	17.21	17.42	16.47	18.57	18.90	8.90	13.17	14.9	17.3	13.31	5.71	4.39	4.29	7.02	6.23	20.87	27.48	131.7
10. E. Merck	-9.39	-6.15	-11.6	106.8	53.05	26.27	14.25	10.49	12.74	17.54	26.02	190	27.1	9.99	9.16	8.44	7.80	6.60	6.08	26.59	47.38	178.2
11. Excel	11.9	14.30	10.2	6.24	5.09	4.49	4.57	9.61	17.21	13.12	9.20	8.03	5.84	3.72	3.51	4.24	4.36	4.16	3.96	7.57	4.14	54.73
12. Fulford	36.5	26.25	15.6	13.62	12.89	14.84	15.32	13.05	12.30	12.47	10.62	10.8	12.0	12.25	12.3	11.96	11.29	9.64	7.17	14.26	6.57	46.06
13. German	15.1	15.34	13.9	13.17	9.25	7.98	8.19	8.76	10.38	9.61	7.97	9.99	9.98	6.25	4.62	4.25	5.25	9.12	12.95	9.58	3.32	34.68
14. Glaxo	10.5	12.33	14.5	17.94	22.06	23.27	13.71	7.14	5.67	9.81	10.27	17.4	23.5	11.74	9.33	10.06	6.71	5.49	5.50	12.46	5.90	47.31
15. Guji-State	4.96	4.51	3.62	3.17	3.11	3.94	4.10	4.03	3.89	2.99	3.35	7.95	7.21	4.90	6.73	10.50	9.40	7.75	9.59	5.56	2.46	44.15
16. Hin-Lever	14.7	15.30	13.5	13.19	12.85	16.22	65.88	27.57	13.62	17.40	20.73	19.5	15.8	14.87	15.6	19.57	34.05	43.47	38.47	22.76	13.79	60.59
17. Hoechst	25.6	27.23	27.8	17.99	10.42	9.58	11.34	17.89	31.26	23.47	15.10	13.7	14.0	12.23	8.54	13.92	29.23	26.02	33.27	19.40	8.12	41.85
18. I.C.I.	-14.0	-15.2	-34.1	83.05	17.92	12.45	11.89	16.41	26.74	27.81	22.27	14.4	10.8	8.73	7.13	7.88	11.93	8.73	8.41	12.28	22.73	185.1
19. Ind-Oil	244	322.7	154	45.28	31.66	31.91	25.70	20.66	15.84	12.07	9.75	7.53	7.42	7.02	9.00	20.07	11.14	6.48	19.58	52.73	88.66	168.1
20. Knoll	9.89	11.30	12.2	10.40	9.09	7.05	5.86	6.06	5.27	5.24	6.48	7.69	7.01	6.98	13.7	43.26	18.78	6.20	5.28	10.41	8.69	83.53
21. National	13.0	20.35	73.8	122.2	15.58	7.66	6.46	7.24	7.83	5.96	4.78	4.74	4.70	6.94	6.18	8.61	26.83	86.02	-31.4	20.92	35.34	168.9
22. Parke	4.90	5.66	5.53	6.07	7.14	7.85	8.91	9.61	10.05	8.39	8.66	9.54	11.0	10.12	8.76	8.00	9.99	17.32	17.57	9.21	3.37	36.60
23. Rallis	32.8	27.31	20.4	12.16	23.80	33.05	19.47	13.80	14.57	14.50	16.15	10.7	9.57	11.55	15.9	28.01	27.55	15.95	12.70	18.94	7.56	39.92
24. Ranbaxy	17.7	18.87	13.9	17.20	12.39	6.73	6.67	9.16	9.00	7.24	7.58	8.67	7.92	5.38	2.32	1.79	1.72	1.82	1.59	8.30	5.54	66.78
25. Tata	-14.3	-13.0	-16.5	11.15	9.08	5.68	4.92	3.20	1.94	1.37	1.07	1.11	1.33	2.91	3.11	2.83	2.35	2.25	2.57	0.68	7.32	1071
26. United	-14.6	-49.5	42.9	35.39	25.25	9.05	4.42	3.84	5.46	8.24	8.90	11.8	18.6	2.07	1.82	2.07	2.18	2.36	2.34	6.45	18.87	292.3
27. Zandu	10.0	11.05	25.5	23.95	15.44	17.35	16.19	10.32	8.41	6.54	6.14	6.98	6.86	7.18	6.43	6.79	7.45	8.41	11.78	11.20	5.88	52.53
28. Zuari	4.11	5.04	5.79	5.80	6.66	5.65	4.43	4.03	6.14	5.97	6.99	11.5	7.50	5.73	6.03	6.55	5.52	5.53	4.95	6.00	1.61	26.93
Average	22.5	21.38	18.24	24.13	14.96	17.85	-0.05	18.04	13.51	11.10	10.78	5.49	14.5	8.58	7.86	9.76	10.80	15.21	11.78	13.50	20.07	320.2
S.D.	50.5	61.37	32.35	30.07	10.76	30.52	70.60	31.44	10.95	6.51	5.83	68.8	21.0	3.68	3.57	8.80	9.09	24.10	23.18	10.66		
C.V.	224.5	287	177	125	71.89	171	-141097	174.3	81.05	58.66	54.09	1252	144.8	42.95	45.4	90.13	84.16	158.4	196.7	79.00		

same is found to be lowest at 17.21 for Bayer. The grand average of the ratio for all companies taken together comes to be 13.50. This indicates that on an average the sales are generated of 13 times the working capital. This indicates the efficient use of working capital.

5.9 PROFITABILITY RATIOS:

5.9.a GROSS PROFIT MARGIN RATIO or OPI/Sale RATIO:

This ratio is derived as gross profit divided by sales.

Table V.39 presents the gross profit margin ratios for 28 companies for the period of 19 years from 1981-1999. It is very interesting to note from the Table that the minimum ratio is found to be -16.52 for I.C.I. for the year 1990. The highest ratio is found to be 47.31 for Tata for the year 1996. Thus wide range is observed of the ratio. The lowest average is found to be 8.99 for the year 1990 taking all companies together and the highest is 11.83 for the year 1998 and 1999. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise. The lowest S.D. is found to be 3.83 for the year 1985 and the highest is found to be 9.52 for the year 1996 taking all companies together. The lowest C.V. is found to be 36.80 for the year 1985 and the highest is 90.51 for the year 1996. When the company wise gross profit margin ratio is examined over a period of time, minimum average gross profit margin ratio is found to be 2.80 for E.I.D. and the maximum ratio is found to be 28.58 for Tata. Wide fluctuations are observed for I.C.I over a period of time, which is reflected, in its highest S.D. of 9.79

TABLE - V.39

GROSS PROFIT MARGIN RATIO OR OPI/Sale RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg	S.D.	C.V.
1. Abbot	4.66	3.36	4.38	5.16	4.43	4.36	2.15	5.04	5.83	5.78	6.92	5.45	5.51	9.19	9.47	0.05	6.91	4.03	4.60	5.12	2.16	42.21
2. Alembic	6.06	11.34	11.83	9.50	6.39	7.98	8.28	8.20	7.67	7.24	7.70	6.88	5.62	6.74	8.22	9.43	10.03	12.08	14.60	8.73	2.36	27.04
3. Basf	13.96	14.26	13.73	14.73	14.80	13.41	13.34	14.85	14.67	15.74	16.03	18.78	16.47	16.91	15.30	14.87	16.89	16.39	15.91	15.32	1.39	9.10
4. Bayer	10.82	10.78	13.31	12.13	12.54	13.21	13.52	13.21	12.82	10.31	13.11	13.94	12.99	13.65	7.79	5.83	10.20	9.51	8.51	11.48	2.29	19.98
5. Burroughs	16.77	17.43	15.49	12.61	10.86	4.82	4.72	9.45	11.29	8.71	7.09	6.60	6.43	7.64	8.50	2.11	8.81	14.79	17.28	10.07	4.58	45.43
6. Cipla	10.13	9.71	9.67	9.93	10.56	11.52	11.66	12.19	12.73	13.29	12.40	12.83	11.94	12.10	15.17	15.41	22.36	23.92	24.17	13.77	4.62	33.52
7. Colour	15.97	12.40	10.79	10.60	10.98	12.03	13.42	11.12	9.69	8.99	10.55	10.35	13.25	12.95	11.36	11.47	13.37	7.66	2.75	11.04	2.73	24.72
8. Duphar	11.87	9.14	10.80	10.54	11.17	11.19	9.58	9.49	8.66	8.23	8.98	7.57	8.27	7.42	9.71	-6.06	-0.80	3.84	12.08	7.98	4.53	56.74
9. E.I.D.	2.52	2.38	2.44	1.49	0.72	1.33	-2.47	0.91	3.81	-12.33	3.90	4.37	0.53	4.66	4.17	4.32	7.40	10.18	12.84	2.80	5.07	181.19
10. E. Merck	11.27	13.19	12.96	12.88	11.58	10.62	9.85	9.20	9.42	9.65	9.21	8.79	12.24	12.85	14.72	15.52	15.53	15.94	14.73	12.11	2.41	19.87
11. Excel	10.43	11.98	13.64	13.11	10.71	9.36	9.08	11.69	12.79	16.80	18.71	20.99	19.27	17.03	16.05	15.47	15.56	12.20	13.29	14.11	3.41	24.16
12. Fujiford	11.78	12.72	12.90	11.38	10.69	9.48	8.84	9.01	7.83	6.09	5.95	5.15	4.31	3.69	3.22	3.88	4.23	4.45	3.09	7.30	3.44	47.11
13. German	15.91	16.98	16.78	15.27	14.20	12.42	9.27	10.93	8.53	9.19	6.02	3.64	7.03	14.00	14.46	13.30	13.93	18.55	20.24	12.66	4.44	35.09
14. Glaxo	11.04	9.49	10.22	11.32	10.89	8.16	9.62	10.52	8.70	8.30	10.13	7.31	7.96	8.21	7.96	8.38	10.14	9.18	10.61	9.38	1.23	13.14
15. Guji-State	16.69	13.47	15.25	14.75	13.26	12.64	8.84	11.85	14.05	14.51	16.38	15.20	14.95	14.78	13.96	20.71	20.01	15.47	13.21	14.74	2.64	17.94
16. Hin-Lever	8.58	9.98	10.56	10.57	10.83	12.46	11.51	11.85	10.95	9.97	9.76	9.67	9.90	9.75	9.25	8.93	8.52	9.08	10.24	10.12	1.07	10.61
17. Hoechst	10.74	10.69	10.54	10.78	8.71	5.46	3.25	2.52	3.39	7.16	7.58	7.24	8.94	10.87	11.72	11.63	10.96	10.14	7.09	8.39	2.97	35.38
18. I.C.I.	9.81	10.84	9.99	10.22	6.68	6.36	8.62	9.72	11.35	-16.52	7.64	-11.29	-15.63	-12.76	7.46	8.18	9.43	9.33	9.40	4.15	9.79	236.02
19. Ind-Oil	3.05	3.20	3.05	3.46	3.48	3.53	4.36	4.79	4.60	5.27	4.82	4.20	4.03	5.36	5.53	-0.38	-7.21	3.56	14.03	3.83	3.77	98.50
20. Knoll	11.31	10.77	11.06	13.82	15.78	16.55	15.16	15.31	12.84	11.76	12.63	11.44	8.72	7.97	8.03	8.17	10.09	14.04	10.61	11.90	2.69	22.63
21. National	8.22	8.51	7.23	12.88	16.43	16.30	14.46	13.82	15.94	16.86	14.94	12.40	9.73	6.53	11.42	14.12	9.66	6.11	4.75	11.59	3.91	33.71
22. Parke	6.89	7.08	6.92	9.36	8.33	6.94	5.84	6.36	6.37	7.86	8.45	6.89	11.89	12.61	11.93	1.87	9.99	5.91	6.88	7.81	2.54	32.51
23. Rallis	4.64	4.16	4.38	0.44	5.02	6.05	6.81	5.14	5.89	4.38	3.55	6.32	5.82	5.70	5.57	5.45	6.21	6.42	7.07	5.21	1.49	28.62
24. Ranbaxy	9.12	11.87	11.27	10.23	11.53	9.92	8.85	9.55	10.08	10.42	10.43	11.37	14.83	17.29	17.96	16.31	17.92	16.04	11.57	12.45	3.16	25.34
25. Tata	27.84	26.69	23.70	9.50	9.80	15.88	32.10	30.95	26.78	31.24	28.41	28.90	28.01	32.41	35.80	47.31	36.93	38.23	32.70	28.58	9.24	32.34
26. United	14.60	15.76	15.82	14.85	13.74	14.77	8.99	1.49	3.42	8.31	16.91	18.80	24.31	21.54	14.76	16.29	13.44	10.01	11.52	13.65	5.55	40.67
27. Zandu	9.86	7.84	10.16	7.54	12.38	11.21	14.89	14.93	11.36	15.34	13.35	12.96	9.88	13.01	11.88	8.87	10.95	12.70	12.00	11.64	2.26	19.38
28. Zuari	18.52	11.29	16.46	14.26	15.02	12.89	11.37	10.57	9.84	9.20	9.90	8.61	10.64	9.25	15.53	13.04	11.67	10.33	5.42	11.78	3.13	26.61
Average	11.18	10.98	11.26	10.47	10.41	10.02	9.85	10.17	10.05	8.99	10.77	9.83	9.92	10.76	11.68	10.52	11.54	11.79	11.83	10.63	0.78	7.95
S.D.	5.29	4.92	4.60	3.86	3.83	4.03	5.97	5.65	4.76	8.46	5.30	7.13	7.79	7.53	6.12	9.52	7.72	7.13	6.46	6.11		
C.V.	47.29	44.86	40.86	36.86	36.80	40.23	60.57	55.56	47.35	94.12	49.22	72.52	78.55	69.93	52.44	90.51	66.86	60.45	54.58	57.45		

and the lowest of 1.07 is observed for Hindustan Lever. To have an idea about the variation between companies C.V. is also computed and presented in the Table. The highest C.V. is found for I.C.I. of 236.02 and the lowest is 9.10 for Basf. The grand average of gross profit margin ratio for all companies taken together and all years taken together comes to 10.63. This ratio indicated that on an average the gross profit margin of selected companies is around 11%.

5.9.b NET PROFIT MARGIN RATIO:

This ratio is derived as net profit divided by sales.

Table V.40 presents the net profit margin ratios for companies for the period of 19 years from 1981-1999. It can be observed from the Table that the minimum ratio is found to be -2.40 for the year 1990 for I.C.I. Ltd. and the highest ratio is found to be 55.50 for Tata. for the year 1994. Wide fluctuations are observed over a period of time for given companies. On examining yearwise average the lowest average is found to be 3.76 for the year 1988 taking all companies together and the highest is 7.37 for the year 1995. To have an idea about the variations between the companies S.D. and C.V. are computed year wise. The highest S.D. is 9.93 for the year 1994 and the lowest is at 2.07 for the year 1982. Similarly, 4Tthe highest C.V. is found to be 145.70 for the year 1994 and the lowest C.V. is found to be 54.83 for the year 1982. When the company wise net profit margin ratio is examined over a period of time, minimum average net profit margin ratio is found for Rallis to the tune of 1.71 and the maximum average net profit margin ratio is found for Tata to the tune of 17.72.

TABLE - V.40
NET PROFIT MARGIN RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg S.D.	C.V.		
1. Abbot	2.11	1.57	2.27	2.44	2.14	2.99	2.92	1.50	2.47	0.21	1.62	1.08	2.62	6.42	5.02	0.17	-0.28	-0.14	0.30	1.97	1.70	86.30	
2. Alembic	1.99	4.64	3.06	2.10	2.40	2.68	1.28	2.08	2.01	1.29	0.84	0.93	0.48	2.14	2.61	2.17	1.81	2.92	5.04	2.24	1.16	51.72	
3. Basf	4.61	4.09	5.45	4.13	3.26	2.53	2.84	3.60	3.84	6.29	4.94	6.62	5.92	5.60	6.19	8.32	5.94	5.55	5.06	4.99	1.46	29.18	
4. Bayer	2.13	2.41	3.64	3.17	4.25	4.67	4.94	4.43	5.44	3.59	4.64	6.27	4.14	4.19	0.52	1.45	2.18	1.92	1.55	3.45	1.54	44.72	
5. Burroughs	4.64	4.29	3.95	5.44	4.73	2.69	1.80	3.74	5.22	2.86	2.31	1.88	2.13	3.23	-4.97	-0.23	6.22	10.00	12.49	4.34	2.92	67.42	
6. Cipla	2.92	2.98	2.65	2.46	2.52	5.32	6.12	4.01	4.61	4.64	5.16	5.45	5.24	5.95	9.55	7.99	15.48	19.56	18.20	6.89	5.21	75.66	
7. Colour	4.64	4.02	1.33	2.13	2.10	2.63	4.11	3.21	3.00	2.10	3.31	3.36	4.83	7.22	6.05	5.80	7.13	9.91	0.50	4.07	2.33	57.30	
8. Duphar	3.85	2.25	2.91	3.14	4.03	3.20	1.81	2.41	3.65	3.13	2.95	2.22	1.93	1.37	2.12	4.98	8.77	6.50	5.71	3.52	1.85	52.43	
9. E.I.D.	1.73	1.50	0.69	0.70	0.41	0.55	1.02	1.38	3.52	2.61	2.57	2.25	2.25	3.53	4.44	3.73	3.95	4.11	4.66	2.43	1.42	58.65	
10. E. Merck	2.93	4.91	5.26	3.75	3.09	3.90	3.66	3.59	4.18	4.27	1.26	-0.61	2.03	4.40	6.25	7.62	7.94	8.98	9.13	4.55	2.55	55.89	
11. Excel	2.76	4.74	6.45	4.83	2.75	2.70	2.14	4.13	5.37	8.54	7.91	10.49	9.84	9.90	9.73	7.95	7.94	4.89	5.06	6.21	2.76	44.34	
12. Fulford	2.09	2.95	3.53	2.99	2.72	2.48	2.34	2.51	2.71	2.83	1.24	0.80	1.27	1.36	1.51	1.89	2.23	2.79	1.63	2.20	0.74	33.49	
13. German	3.66	4.02	3.87	3.38	2.49	2.00	2.50	2.36	1.85	6.30	3.43	1.52	0.87	5.97	8.23	7.01	9.30	12.46	13.32	4.98	3.63	72.94	
14. Glaxo	4.82	3.83	4.00	4.38	4.45	3.53	3.65	4.33	7.83	5.16	2.91	1.15	2.01	3.07	11.37	15.90	6.32	6.36	9.59	5.51	3.55	64.42	
15. Guj-State	7.73	7.37	10.33	10.03	6.38	6.71	7.31	8.99	7.50	7.52	8.74	7.27	5.84	3.46	7.28	11.32	9.66	8.32	6.41	7.80	1.81	23.16	
16. Hin-Lever	3.81	4.17	4.39	3.54	4.00	5.07	4.57	4.66	5.06	4.61	4.74	4.98	4.97	5.45	5.88	6.13	5.86	7.02	8.03	5.10	1.11	21.76	
17. Hoechst	3.69	3.49	5.69	8.19	4.40	3.83	2.62	1.01	1.58	3.23	2.45	1.75	1.04	2.68	6.04	5.27	5.46	5.81	3.84	3.78	1.92	50.87	
18. I.C.I.	5.44	6.35	3.62	3.21	4.02	3.88	2.69	2.07	2.62	-2.40	2.76	1.92	0.29	4.84	5.73	5.85	6.04	6.79	6.89	3.82	2.40	62.68	
19. Ind-Oil	1.41	1.33	1.19	0.80	0.75	1.14	3.41	2.85	3.39	3.85	3.73	3.79	2.78	3.25	3.57	2.84	2.51	2.85	3.10	2.56	1.08	42.42	
20. Knoll	3.57	3.52	3.42	3.89	5.57	6.92	6.29	5.42	6.31	6.57	6.74	5.66	4.54	5.24	5.47	6.20	10.62	17.33	12.58	6.62	3.45	52.10	
21. National	3.35	2.92	1.97	2.72	6.81	7.58	6.25	6.88	8.65	9.48	7.18	5.33	5.06	4.78	6.81	7.54	4.94	3.30	3.62	5.54	2.16	38.97	
22. Parke	2.98	3.46	2.36	2.91	3.79	4.61	4.77	5.15	3.83	6.31	3.56	3.21	5.18	5.16	6.45	4.88	5.82	4.00	3.49	4.31	1.18	27.29	
23. Rallis	1.11	0.89	1.00	0.48	1.53	2.00	2.52	2.17	2.74	0.51	0.26	2.00	2.88	2.53	2.11	2.20	1.91	1.81	2.07	1.71	0.78	45.51	
24. Ranbaxy	3.91	5.40	6.49	5.40	4.73	4.09	2.67	2.09	1.53	2.27	4.68	4.78	7.62	10.69	15.44	15.98	13.99	12.31	10.16	7.07	4.64	65.62	
25. Tata	10.92	10.23	11.49	7.76	16.57	13.98	12.39	13.17	13.94	15.31	14.94	16.89	18.07	55.50	37.22	25.89	13.75	16.96	11.80	17.72	11.20	63.21	
26. United	2.77	5.80	8.14	5.76	4.81	6.95	4.68	0.78	1.00	1.68	10.26	14.00	16.05	13.77	12.60	11.24	4.77	4.02	5.61	7.09	4.64	65.46	
27. Zandu	3.61	2.45	3.31	2.33	5.12	5.91	6.63	4.54	7.56	9.88	7.77	6.35	3.69	5.03	4.93	3.39	2.74	4.63	5.05	5.00	1.99	39.91	
28. Zuan	8.89	0.32	6.60	4.62	6.03	3.65	5.79	2.33	3.00	3.18	3.93	3.16	3.73	4.14	8.25	8.08	5.67	5.53	1.76	4.67	2.28	48.92	
Average	3.86	3.78	4.25	3.81	4.14	4.22	4.06	3.76	4.44	4.49	4.53	4.45	4.56	6.82	7.37	6.84	6.38	7.02	6.30	5.00	1.29	25.71	
S.D.	2.21	2.07	2.63	2.20	2.91	2.61	2.38	2.58	2.77	3.53	3.23	3.98	4.17	9.93	6.74	5.50	3.87	4.93	4.43	3.83			
C.V.	57.19	54.83	61.92	57.64	70.43	61.94	58.70	68.53	62.25	78.61	71.25	89.59	91.51	145.7	91.46	80.40	60.66	70.26	70.34	76.44			

Net profit margin ratio of Fulford remains steady from 1984-1990 and from 1993-1996, which is reflected in its minimum S.D. of 0.74, where as wide fluctuations are observed for Tata, which is reflected, in its highest S.D. of 11.20. The highest C.V. is found to be 86.30 for Abbot and it is found to be lowest to the tune of 21.76 for Hindustan Lever. The grand average of net profit margin ratio for all companies taken together comes to be 5.00. This ratio indicates that the Net Profit Margin of all companies on average is 5% of sales.

5.9.c COST OF GOODS SOLD RATIO:

This ratio is derived as cost of goods sold divided by sales.

Table V.41 presents the cost of goods sold ratio for 28 companies for the period of 19 years from 1981-1999. It is interesting to note from the Table that the minimum ratio is found to be 32.36 for the year 1981 for Fulford. The highest ratio is found to be 106.31 for the year 1997 for Indian Oil. Wide fluctuations are observed over a period of time for given companies. On examining the average ratio for various years the lowest average is found to be 75.41 for the year 1998 and it is found to be highest at 79.73 for the year 1989. To have an idea about the variations between the companies S.D. and C.V. are computed yearwise. The highest S.D. is found to be 11.08 for the year 1981 and the lowest is 6.62 for the year 1986. The highest C.V. is found to be 14.56 for the year 1981 and the lowest is 8.46 for the year 1986. When the companywise cost of goods sold ratio is examined over a period of time, minimum average cost of goods sold ratio is found to be 68.23 for Tata and

TABLE - V.41

COST OF GOODS SOLD RATIO

Name/Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg S.D.	C.V.	
1. Abbot	81.26	81.93	79.28	78.57	78.57	81.83	86.43	85.00	84.08	82.75	81.16	84.22	84.15	78.92	79.02	84.64	82.26	80.60	69.25	81.26	3.76	4.63
2. Alembic	74.74	70.58	70.62	75.09	78.36	76.56	77.54	78.87	84.80	84.10	79.53	78.50	79.47	79.64	78.29	76.61	75.51	72.78	71.09	76.98	3.99	5.18
3. Basf	70.78	71.30	72.05	71.60	70.52	72.67	73.13	72.48	72.49	71.52	70.16	68.07	70.05	74.48	76.69	77.18	75.36	68.98	76.00	72.39	2.56	3.53
4. Bayer	70.45	77.84	76.11	78.09	76.26	75.81	76.56	76.62	77.54	77.68	73.97	72.52	73.01	68.42	73.14	75.62	71.43	69.64	70.84	74.29	3.06	4.11
5. Burroughs	72.20	72.31	74.80	81.31	82.21	85.67	84.05	79.71	78.79	80.83	82.02	83.30	84.29	83.19	80.71	87.04	82.22	72.83	71.98	79.97	4.82	6.03
6. Cipla	74.93	76.07	76.85	77.37	76.77	76.25	76.59	77.10	77.26	75.11	76.51	72.70	75.60	74.22	73.09	73.30	67.57	66.35	66.58	74.22	3.59	4.83
7. Colour	80.07	83.19	84.89	85.46	85.54	84.57	82.69	84.91	86.03	86.15	83.41	83.17	80.14	79.91	80.55	79.94	76.87	83.01	86.55	83.00	2.72	3.28
8. Duphar	75.44	78.86	78.19	77.34	75.22	76.15	76.83	76.95	77.48	79.60	76.65	78.26	77.77	77.88	77.72	92.86	77.13	79.44	70.97	77.93	4.08	5.23
9. E.I.D.	93.17	93.27	92.84	93.06	92.70	91.52	93.48	89.14	86.37	98.00	85.54	85.87	87.78	84.88	110.94	90.07	87.15	79.60	96.14	91.13	6.56	7.19
10. E. Merck	78.89	82.03	74.81	74.92	75.94	76.42	75.92	75.73	75.00	74.36	77.33	77.29	75.42	76.12	75.57	75.85	75.87	74.70	75.49	76.19	1.77	2.33
11. Excel	76.35	74.26	72.73	72.61	74.03	74.63	74.55	72.53	71.61	68.63	66.27	64.13	66.13	66.84	70.88	72.30	70.78	71.04	71.10	71.13	3.33	4.69
12. Fulford	32.36	72.36	73.95	76.45	77.88	79.23	80.73	81.55	82.79	82.65	85.13	85.15	84.56	80.68	81.35	80.60	80.57	81.28	77.83	77.74	11.51	14.81
13. German	76.29	74.56	74.28	76.30	77.69	78.66	80.91	79.34	81.37	80.65	82.43	85.09	83.00	76.51	76.49	77.73	77.60	75.47	71.13	78.18	3.44	4.40
14. Glaxo	71.01	67.74	65.89	73.87	77.05	71.69	75.66	78.90	78.05	78.72	77.81	81.46	81.40	81.25	82.54	81.09	71.78	73.55	77.40	76.15	4.85	6.37
15. Guj-State	74.05	78.94	79.34	77.35	79.15	82.72	85.39	81.46	80.41	80.56	78.01	79.51	79.98	79.27	75.96	71.60	72.72	77.39	80.50	78.65	3.34	4.25
16. Hin-Lever	85.13	85.15	83.68	83.58	83.04	80.36	81.17	81.58	82.00	82.47	81.67	80.38	79.43	81.50	87.72	83.92	81.69	77.00	76.19	81.98	2.74	3.34
17. Hoechst	76.68	77.06	77.03	76.58	78.62	83.22	86.44	87.46	85.95	82.69	78.95	80.13	79.26	76.63	77.61	78.74	78.64	77.99	83.61	80.17	3.58	4.47
18. I.C.I.	83.23	82.96	82.08	80.92	86.68	86.19	85.75	95.67	97.70	101.86	81.39	98.45	102.43	99.08	81.69	81.88	79.07	76.49	77.41	87.42	8.72	9.97
19. Ind-Oil	94.72	94.11	94.22	93.19	92.90	92.60	91.66	91.28	94.52	93.73	91.69	81.55	85.88	83.83	80.65	99.37	106.31	95.52	85.00	91.72	6.19	6.75
20. Knoll	68.66	69.16	68.65	66.07	66.45	70.36	72.32	71.76	73.60	74.23	74.28	74.13	76.68	74.73	75.40	73.67	70.11	71.22	73.19	71.82	3.03	4.22
21. National	86.78	86.39	87.31	82.06	77.88	77.50	79.69	80.25	78.72	78.25	79.26	82.00	83.96	86.53	82.08	78.78	83.32	85.13	86.39	82.23	3.44	4.18
22. Parke	78.79	76.16	74.49	77.71	78.98	80.18	80.31	78.79	78.24	71.48	71.43	71.99	66.03	69.92	68.49	80.05	64.76	74.04	70.97	74.36	4.95	6.66
23. Rallis	88.72	88.26	87.93	91.63	86.08	80.73	83.15	88.72	86.88	87.32	91.33	88.96	84.54	87.46	88.89	89.26	90.35	89.44	88.57	87.80	2.69	3.06
24. Ranbaxy	73.25	68.35	67.94	67.98	67.51	69.92	72.65	71.91	70.94	71.87	73.34	71.13	67.58	65.92	65.72	67.60	65.76	65.66	69.74	69.20	2.65	3.83
25. Tata	79.85	80.93	80.44	86.14	85.33	77.61	62.66	63.45	72.79	62.26	67.10	64.86	67.04	72.02	63.62	44.91	53.51	54.42	57.40	68.23	11.49	16.84
26. United	66.69	63.52	63.08	63.76	64.31	62.44	67.50	77.27	73.58	75.29	64.76	71.45	57.03	67.21	74.11	74.21	79.03	75.41	77.52	69.38	6.37	9.17
27. Zandu	75.64	73.05	77.85	76.59	77.23	69.40	65.13	62.38	62.87	61.79	66.04	64.32	67.70	66.68	70.53	70.59	73.00	63.18	61.11	68.69	5.61	8.16
28. Zuari	70.99	79.81	74.51	76.96	76.36	77.21	78.84	83.75	80.67	79.72	80.93	83.54	79.94	81.70	72.93	74.35	83.35	79.31	86.26	79.01	4.00	5.06
Average	76.11	77.86	77.35	78.31	78.54	78.29	78.85	79.45	79.73	79.44	77.79	78.29	77.87	77.69	77.94	78.35	76.92	75.41	75.94	77.90	4.60	5.95
S.D.	11.08	7.51	7.50	7.18	6.81	6.62	7.22	7.55	7.27	9.08	6.99	8.00	8.96	7.50	8.70	9.74	9.47	8.11	8.55	6.45		
C.V.	14.56	9.65	9.70	9.17	8.67	8.46	9.15	9.50	9.12	11.43	8.99	10.22	11.51	9.65	11.17	12.43	12.32	10.76	11.26	8.28		

the maximum average cost of goods sold ratio is found to be 91.72 for Indian Oil. When S.D. and C.V. are computed companywise it is found to be highest at 11.51 for Fulford and 16.84 for Tata. And the lowest are 1.77 and 2.33 for E. Merck respectively. The grand average of cost of goods sold ratio for all companies taken together comes to be 77.90. This indicates that on an average cost of goods sold constitutes 77.9% of sales. This is substantially high.

5.9.d OPERATING INCOME TO TOTAL GROSS ASSETS RATIO:

This ratio is derived as operating income divided by total gross assets.

Table V.42 presents the operating income to total gross assets ratio for 28 companies for the period of 19 years from 1981-1999. It is very interesting to note from the Table that the minimum ratio is found to be -15.24 for the year 1994 for I.C.I. The highest ratio is found to be 31.97 for the year 1986 for Knoll. Thus there is substantially a wide range. The lowest average is found to be 9.77 for the year 1996 and the highest is 13.50 for the year 1983 taking all companies together. To have an idea about the variations between the companies S.D. and C.V. are also computed year wise. The highest S.D. is found to be 7.43 for the year 1994 and the lowest S.D. is found to be 4.36 for the year 1982. The minimum C.V. is found to be 32.42 for the year 1983 and the maximum is 69.92 for the year 1990. When the company wise OPI/TGA ratio is examined over a period of time, minimum average OPI/TGA ratio is found for I.C.I. to the tune of 3.43 and is found to be maximum at 18.69 for Knoll. Wide fluctuations are observed for I.C.I. over a period of time, which is reflected, in its highest

TABLE - V.42
OPERATING INCOME TO TOTAL GROSS ASSETS RATIO

Name/Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg	S.D.	C.V.
1. Abbot	9.17	5.98	7.10	8.14	5.86	5.69	2.75	6.98	8.95	8.28	10.63	9.00	10.29	19.68	18.44	0.07	9.19	6.13	8.70	8.48	4.52	53.37
2. Alembic	6.53	13.43	14.56	11.43	7.74	7.58	8.00	8.76	6.90	8.64	9.15	9.27	9.45	10.46	9.36	8.92	10.73	12.93	15.60	9.97	2.56	25.71
3. Basf	16.54	14.88	11.82	12.15	12.97	12.01	12.15	15.98	18.25	16.33	16.79	21.31	18.58	20.32	15.47	12.05	12.72	11.80	12.37	14.97	3.08	20.55
4. Bayer	11.90	11.38	16.88	16.27	16.53	17.28	17.68	17.43	19.03	11.90	15.83	16.77	16.68	15.26	7.88	5.50	12.85	12.05	10.76	14.19	3.68	25.94
5. Burroughs	17.45	19.19	16.79	16.74	17.33	6.77	6.70	15.95	20.54	11.26	11.28	11.11	11.44	13.47	12.47	2.61	12.82	19.08	20.15	13.85	4.97	35.87
6. Cipla	13.67	12.87	12.35	12.38	11.61	11.38	11.69	15.10	18.71	13.87	12.31	12.89	12.54	12.46	15.14	12.99	21.85	20.23	19.32	14.39	3.20	22.27
7. Colour	14.53	10.83	9.04	10.23	9.71	10.37	12.56	10.32	9.20	8.55	9.61	10.24	13.28	13.57	12.17	13.03	14.28	8.54	2.80	10.68	2.72	25.46
8. Duphar	14.35	9.59	14.63	14.70	14.36	12.75	10.80	10.74	10.82	9.40	10.23	9.37	10.13	8.76	10.96	-5.38	-0.50	2.70	10.04	9.39	5.20	55.41
9. E.I.D.	5.86	6.38	7.47	4.03	1.76	2.91	-3.87	1.54	6.73	-12.03	5.65	6.81	0.66	6.29	3.63	3.82	6.13	8.98	11.27	3.90	5.10	131.02
10. E. Merck	14.43	14.95	15.23	14.64	13.00	12.88	12.55	10.42	10.69	9.65	8.53	7.89	12.58	15.39	18.26	20.05	20.37	20.30	19.59	14.28	3.99	27.91
11. Excel	9.84	13.09	15.37	13.38	10.53	8.85	8.23	14.10	18.35	19.08	22.13	26.13	23.27	17.30	15.84	14.87	14.97	11.08	11.92	15.16	4.94	32.55
12. Fulford	14.93	13.73	20.97	17.24	16.07	14.88	15.02	16.06	14.60	9.60	9.16	10.93	12.59	10.24	8.86	10.34	11.56	13.46	8.24	13.08	3.35	25.63
13. German	23.19	24.82	22.85	18.05	13.65	12.38	9.00	12.56	11.49	12.77	6.87	3.53	8.26	18.33	16.34	14.26	14.34	19.55	22.51	14.99	5.95	39.67
14. Glaxo	14.88	13.17	13.04	12.47	13.36	12.42	14.75	12.92	7.26	10.37	13.05	10.07	11.65	14.31	13.18	12.30	13.23	11.83	13.80	12.53	1.79	14.30
15. Guj-State	8.53	8.33	9.72	9.43	8.81	9.59	5.78	7.25	10.50	9.49	8.48	7.56	6.94	6.38	7.86	11.21	10.13	7.90	6.18	8.43	1.52	18.02
16. Hin-Lever	16.78	18.57	18.21	18.56	17.77	19.27	19.54	18.48	17.88	17.07	17.70	18.26	19.16	18.37	16.15	17.34	18.79	19.61	21.48	18.37	1.19	6.49
17. Hoechst	14.21	14.56	14.65	14.98	12.80	8.17	3.99	3.36	4.76	8.25	7.14	7.06	8.80	11.44	10.57	11.04	10.83	10.10	7.51	9.70	3.60	37.18
18. I.C.I.	4.67	6.77	8.75	9.94	6.21	5.93	6.81	7.29	9.64	-10.75	7.22	-9.21	-13.19	-15.24	6.88	7.44	8.36	8.25	9.37	3.43	8.41	245.39
19. Ind-Oil	6.21	8.96	9.52	10.02	9.71	8.17	9.63	9.87	7.94	6.83	5.61	5.20	5.14	6.12	7.16	-0.60	-10.69	5.33	24.37	7.08	6.36	89.91
20. Knoll	19.78	19.21	20.18	25.45	30.48	31.97	22.44	25.83	17.46	15.15	16.24	16.29	14.27	12.01	11.80	12.59	16.42	16.25	11.23	18.69	6.11	32.68
21. National	6.34	7.23	5.57	10.35	14.59	15.19	13.75	13.10	16.75	16.09	12.95	12.04	9.22	6.22	9.87	12.59	8.10	4.56	3.37	10.40	4.11	39.48
22. Parke	11.22	13.40	13.62	19.54	18.00	14.89	11.74	13.25	15.41	14.82	15.77	14.52	24.59	28.01	22.49	3.85	11.82	6.35	8.86	14.85	5.90	39.74
23. Rallis	12.54	11.14	10.43	0.55	10.19	11.93	12.22	9.18	9.32	7.46	7.10	11.16	7.50	11.01	10.83	10.12	13.18	13.46	11.09	10.02	2.93	29.24
24. Ranbaxy	11.73	15.62	12.19	9.98	12.12	10.03	9.15	10.16	11.39	11.95	12.63	12.62	17.07	17.19	9.70	9.20	10.06	9.80	5.96	11.50	2.79	24.25
25. Tata	16.94	14.94	9.86	5.16	3.75	6.66	11.47	10.73	9.85	9.22	6.95	7.91	6.16	6.15	8.95	20.27	15.36	15.48	11.30	10.37	4.45	42.93
26. United	10.87	13.73	17.61	13.96	13.61	13.91	7.36	1.26	3.36	7.49	19.04	20.03	21.82	10.77	8.26	8.84	9.48	5.84	6.58	11.25	5.66	50.30
27. Zandu	11.26	9.40	12.23	9.48	16.08	13.09	18.56	17.51	14.95	17.29	14.49	13.41	10.07	15.19	13.45	9.79	11.82	12.34	13.08	13.34	2.77	20.73
28. Zuari	15.19	10.28	17.24	14.31	14.93	14.28	13.33	11.82	12.25	9.28	10.18	10.34	12.79	11.52	17.38	14.40	10.40	8.42	3.62	12.21	3.30	26.99
Average	12.63	12.73	13.50	12.63	12.63	11.83	10.85	11.71	12.25	9.90	11.53	11.16	11.49	12.18	12.10	9.77	11.38	11.51	11.82	11.77	4.08	34.65
S.D.	4.47	4.36	4.37	5.08	5.45	5.46	5.44	5.31	4.79	6.92	4.37	6.47	7.36	7.43	4.33	6.00	6.14	5.07	5.92	3.64		
C.V.	35.40	34.25	32.42	40.23	43.14	46.13	50.12	45.33	39.10	69.92	37.92	57.93	64.09	60.99	35.76	61.42	53.99	44.07	50.08	30.97		

S.D. and C.V. are found to be 8.41 and 245.39 respectively. The lowest S.D. and C.V. are found to be 1.19 and 6.49 respectively for Hindustan Lever. The grand average of OPI/TGA ratio for all companies taken together and all years taken together comes to 11.77. This indicates that on an average companies earn around 12% on its gross assets.

5.9.e PROFIT BEFORE TAX TO TOTAL NET ASSETS RATIO:

This ratio is derived as profit before tax divided by total net assets.

Table V.43 presents the PBT/TNA ratios for 28 companies for the period of 19 years from 1981-1999. It can be observed from the Table that the minimum PBT/TNA ratio is found to be -4.64 for the year 1986 for Glaxo. The highest ratio is found to be 40.39 for the year 1986 for Knoll. Thus wide fluctuations are observed over a period of time for given companies. On deriving yearwise average lowest average is found to be 8.18 taking all companies together for the year 1988 and the highest is 12.87 for the year 1995. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise. The highest S.D. is found to be 11.10 for the year 1995 and the lowest S.D. is found to be 4.54 for the year 1982 taking all companies together. The highest C.V. is found to be 89.93 for the year 1986 and the lowest C.V. is 47.081 for the year 1982. When the company wise PBT/TNA ratio is examined over a period of time, minimum average PBT/TNA ratio is found to be 4.43 for Alembic and the maximum average ratio is found to be 21.29 for Knoll. The PBT/TNA ratio has widely fluctuated for Glaxo which is reflected in its highest S.D. of 13.17 and the same is found to be

TABLE - V.43

PROFIT BEFORE TAX TO TOTAL NET ASSETS RATIO

Name/Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg S.D.	C.V.	
1. Abbot	9.72	5.80	8.47	7.21	3.80	4.32	4.15	2.47	4.56	0.39	2.87	2.05	5.76	25.32	19.95	0.28	-0.41	-0.24	0.71	5.64	6.71	118.90
2. Alembic	3.39	10.64	10.89	5.87	5.08	3.59	1.96	3.59	2.99	2.53	2.33	2.75	1.39	5.49	4.32	2.62	2.68	4.35	7.68	4.43	2.70	61.06
3. Basf	10.81	8.74	5.76	4.28	3.95	3.57	5.27	10.59	13.20	13.64	12.91	18.90	15.04	16.48	12.91	8.60	6.03	5.42	5.93	9.58	4.67	48.75
4. Bayer	6.34	7.64	15.51	14.70	16.21	16.39	14.76	11.53	13.21	8.36	11.76	14.72	12.42	10.27	0.61	2.29	5.33	4.85	4.06	10.05	5.01	49.83
5. Burroughs	15.49	16.33	13.26	13.87	15.21	6.01	2.53	10.29	16.11	5.71	7.41	6.02	5.55	9.67	12.23	1.51	16.58	22.46	25.50	11.67	6.48	55.52
6. Cipla	10.93	10.05	8.06	6.07	5.14	7.58	8.38	8.13	11.84	8.76	10.61	10.25	9.41	9.37	13.10	9.73	24.87	24.40	21.61	11.49	5.74	49.95
7. Colour	12.04	6.90	2.40	3.84	4.37	4.16	8.36	6.32	5.40	4.03	6.42	6.96	8.98	13.18	10.95	10.89	13.08	18.95	0.79	7.79	4.50	57.79
8. Duphar	12.46	5.78	11.22	12.13	10.61	6.98	3.70	4.46	6.68	5.87	6.65	5.99	5.07	4.10	5.12	47.56	8.15	7.34	11.27	9.51	9.63	101.23
9. E.I.D.	5.22	5.42	4.17	4.43	1.93	3.41	4.84	5.43	10.19	8.08	7.14	7.46	4.34	5.82	5.08	3.66	4.21	4.60	5.12	5.29	1.86	35.23
10. E. Merck	9.59	11.66	10.25	8.47	8.23	8.34	8.00	6.25	7.54	5.57	1.59	-0.59	2.62	8.74	15.84	19.27	20.31	20.28	20.98	10.15	6.44	63.39
11. Excel	3.74	7.32	10.65	7.17	3.97	3.70	2.92	8.62	13.28	15.98	17.74	23.84	20.15	16.22	14.97	12.43	11.98	6.88	7.73	11.02	6.02	54.65
12. Fulford	9.95	9.85	15.74	12.41	9.78	8.53	8.49	8.53	8.98	7.94	3.96	4.38	8.84	9.43	9.27	9.94	11.51	14.22	8.25	9.47	2.78	29.33
13. German	16.92	18.89	15.68	8.76	5.32	4.26	2.54	3.93	3.67	15.03	5.86	1.72	1.27	13.44	16.92	13.83	15.47	19.99	23.94	10.92	7.14	65.40
14. Glaxo	13.55	11.41	11.76	11.50	12.47	-4.64	6.12	10.76	8.69	10.63	7.36	4.27	7.59	14.63	61.68	18.77	15.90	25.18	19.93	14.08	13.17	93.49
15. Guji-State	11.06	7.85	9.79	10.77	11.89	13.43	7.88	8.39	8.37	7.36	5.80	5.06	3.20	1.76	4.83	7.15	6.68	5.61	4.00	7.41	3.06	41.30
16. Hin-Lever	16.71	17.48	17.45	15.66	14.83	15.94	15.99	14.72	15.69	15.53	16.91	18.11	18.90	19.97	18.54	20.57	21.67	23.96	24.99	18.09	2.97	16.42
17. Hoechst	12.64	15.16	15.15	17.29	10.20	7.33	3.96	1.69	2.99	4.94	3.07	2.00	2.18	8.27	10.86	9.83	10.94	10.42	6.47	8.18	4.88	59.66
18. I.C.I.	2.87	5.80	4.71	4.69	6.34	7.09	4.52	3.00	3.72	-2.35	4.11	4.82	0.95	15.61	12.59	12.61	12.12	10.05	10.29	6.50	4.58	70.47
19. Ind-Oil	4.37	4.63	5.67	4.98	5.18	5.05	10.63	10.29	9.45	7.19	6.15	7.43	5.59	5.31	7.21	7.28	5.31	5.69	7.98	6.60	1.88	28.55
20. Knoll	19.24	18.92	19.47	25.07	37.66	40.39	23.55	24.70	19.70	18.52	18.06	18.48	17.23	16.49	6.40	13.06	19.85	33.77	14.01	21.29	8.32	39.07
21. National	4.52	5.05	2.34	3.69	9.89	13.44	13.48	13.46	19.03	20.36	14.06	14.39	10.86	6.04	9.99	12.52	6.33	3.23	3.23	9.78	5.48	56.01
22. Parke	14.57	15.30	15.72	24.09	25.58	21.46	16.15	18.09	17.65	21.63	15.86	17.57	26.87	30.31	25.81	16.96	13.64	5.64	6.12	18.36	6.48	35.30
23. Rallis	6.66	5.33	5.12	0.67	6.16	3.51	6.56	5.77	5.38	1.15	0.83	3.97	4.40	6.47	5.64	4.87	5.22	5.31	4.16	4.59	1.86	40.48
24. Ranbaxy	9.17	10.09	8.11	6.38	6.25	5.07	3.29	2.84	2.25	3.29	6.23	5.81	9.80	11.98	10.40	11.19	9.60	8.80	6.11	7.19	2.99	41.62
25. Tata	13.75	11.59	6.96	10.78	8.82	9.72	7.49	7.19	9.03	7.45	5.16	8.11	6.79	11.73	10.19	13.08	7.67	9.31	5.70	8.97	2.40	26.75
26. United	2.51	5.98	11.06	8.96	9.09	12.12	6.21	0.89	1.22	1.89	15.57	20.72	18.21	7.26	7.69	6.71	4.17	2.86	3.94	7.74	5.68	73.44
27. Zandu	7.26	4.67	7.32	4.75	10.70	9.68	14.44	9.59	13.85	15.97	11.70	9.65	4.57	7.31	8.13	4.56	4.87	3.52	5.08	8.30	3.74	45.09
28. Zuari	10.58	5.53	24.31	9.71	13.47	10.88	14.31	7.46	9.87	8.15	10.76	11.12	12.16	12.74	19.05	15.41	7.86	5.88	1.47	11.09	5.07	45.74
Average	9.86	9.64	10.61	9.58	10.38	8.96	8.23	8.18	9.45	8.70	8.52	9.14	8.93	11.55	12.87	11.33	10.41	11.17	9.54	9.83	5.08	51.69
S.D.	4.65	4.54	5.37	5.88	7.37	8.06	5.33	5.22	5.29	6.24	5.18	6.64	6.61	6.39	11.10	8.97	6.31	8.79	7.70	6.61		
C.V.	47.13	47.08	50.58	61.35	73.18	89.93	64.80	63.81	55.99	71.72	60.73	72.64	73.96	55.32	86.28	79.20	60.58	78.68	80.72	67.04		

lowest to the tune of 1.86 for E.I.D. and Rallis. The highest C.V. is found to be 118.90 for Abbot and the lowest is 16.42 for Hindustan lever. The grand average of PBT/TNA ratio for all companies taken together and all years taken together comes to 9.83. This indicates that on an average companies are generating 9-10% profit on their net assets.

5.9.f.i RETURN ON TOTAL ASSETS RATIO:

As discussed in section A, this ratio is derived in three ways. To begin with this ratio is derived as net profit divided by total assets.

Table V.44 presents the ROTA ratio for the 28 companies for the period of 19 years from 1981-1999. It can be observed from the Table that the minimum ratio is found to be -2.35 for the year 1990 for I.C.I. The highest ratio is found to be 28.99 for Glaxo for the year 1996. Thus wide fluctuations are observed over a period of time for given companies. On examining yearwise average lowest average is found to be 5.37 for the year 1981 and the highest is 8.26 for the year 1995. To have an idea about the variations between the companies S.D. and C.V. are computed year wise. The highest S.D. and C.V. are found to be 5.50 and 74.88 respectively for the year 1999. Lowest S.D. and C.V. are found to be 2.06 and 38.29 respectively for the year 1981. When the company wise ROTA ratio is examined over a period of time, minimum average is found for Alembic to the tune of 3.42 and the maximum is 11.80 for the Knoll. The lowest S.D. is found to be 1.33 for Duphar. The ROTA ratio has widely fluctuated for Glaxo, which is reflected in its highest S.D. of 6.71. The minimum C.V. is found to be 27.37 for Hindustan Lever and the same is found to be maximum to

TABLE - V.44

RETURN ON TOTAL ASSETS RATIO-I

Name Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg	S.D.	C.V.	
1. Abbot	5.07	3.32	4.27	4.43	3.18	4.32	4.15	2.31	4.16	0.33	2.83	2.05	5.64	16.45	11.52	0.28	-0.41	-0.24	0.64	3.91	4.09	104.54	
2. Alembic	3.06	7.79	5.23	3.63	4.31	3.69	1.74	3.12	2.50	2.10	1.35	1.71	1.07	4.41	3.79	2.54	2.38	3.87	6.75	3.42	1.76	51.53	
3. Basf	7.01	5.40	5.76	4.19	3.57	2.93	3.33	5.08	6.23	8.39	6.57	9.35	8.20	8.33	7.42	7.72	5.22	4.79	4.89	6.02	1.88	31.28	
4. Bayer	3.01	3.39	6.19	5.87	7.71	8.34	8.89	8.00	10.86	5.35	7.19	9.18	6.46	5.69	0.61	1.64	3.37	3.05	2.46	5.65	2.85	50.50	
5. Burroughs	5.10	5.04	4.62	7.89	8.19	4.10	2.81	6.93	10.31	4.02	4.07	3.51	4.18	6.24	7.91	-0.32	9.97	14.22	16.01	6.57	3.97	60.41	
6. Cipla	4.85	4.76	4.08	3.76	3.38	6.19	7.16	6.03	8.26	5.80	6.06	6.46	6.45	7.05	10.90	7.52	17.07	18.39	16.03	7.91	4.47	56.61	
7. Colour	5.73	4.83	1.60	2.60	2.78	3.42	5.71	4.39	4.05	2.81	4.01	4.45	6.39	9.99	8.22	8.15	9.54	14.01	0.67	5.44	3.31	60.83	
8. Duphar	5.77	2.86	4.90	5.53	6.50	4.52	2.59	3.47	5.71	4.42	4.10	3.34	2.85	1.96	2.95	4.76	6.06	5.04	5.23	4.34	1.33	30.51	
9 E.I.D	5.22	5.13	2.74	2.50	1.38	1.67	2.05	2.87	7.58	3.11	4.45	4.19	4.20	5.71	4.35	3.66	3.66	4.12	4.76	3.86	1.52	39.26	
10. E Merck	4.19	6.16	6.84	4.79	3.95	5.45	5.37	4.67	5.38	4.73	1.28	-0.61	2.35	6.12	9.02	11.59	12.39	13.70	14.79	6.43	4.13	64.30	
11. Excel	3.55	7.31	9.85	6.35	3.51	3.39	2.60	6.65	10.15	11.94	11.47	15.73	14.17	11.77	11.04	8.81	8.77	5.14	5.29	8.29	3.85	46.48	
12. Fulford	2.80	3.32	6.10	4.75	4.27	4.03	4.10	4.63	5.24	4.58	1.97	1.76	3.89	3.96	4.37	5.32	6.47	9.05	4.64	4.49	1.63	36.31	
13 German	6.10	6.71	6.01	4.63	2.76	2.34	2.86	3.30	3.04	10.45	4.63	1.72	1.22	8.23	11.00	8.86	11.18	15.30	17.41	6.72	4.63	68.91	
14. Glaxo	7.61	6.23	5.95	5.71	6.74	6.91	7.39	6.68	8.11	8.15	4.73	2.02	3.80	7.01	23.59	28.99	10.54	10.52	16.02	9.30	6.71	72.20	
15. Guj-State	5.91	6.78	9.79	9.37	6.05	7.08	6.36	7.06	7.05	6.06	5.44	4.24	3.20	1.76	4.83	7.15	5.72	5.04	3.58	5.92	1.95	32.97	
16. Hin-Lever	8.55	8.87	8.81	7.33	7.76	9.35	9.32	8.60	9.80	9.36	10.13	10.97	11.18	11.79	11.63	13.38	14.32	16.57	18.40	10.85	2.97	27.37	
17. Hoechst	6.13	6.05	9.85	13.32	7.52	6.62	3.69	1.55	2.55	4.18	2.58	2.00	1.23	3.42	6.64	6.02	6.58	7.01	4.66	5.35	3.02	56.47	
18. I.C.I.	3.80	5.81	4.72	4.64	5.59	5.57	3.23	2.30	3.26	-2.35	4.11	2.47	0.38	7.57	7.06	7.12	7.01	7.12	8.25	4.61	2.69	58.38	
19. Ind-Oil	3.23	4.33	4.42	2.86	2.66	3.36	9.66	7.38	7.19	5.78	4.95	5.39	4.05	4.26	5.36	5.15	4.22	4.94	6.43	5.03	1.73	34.38	
20. Knoll	7.44	7.60	7.65	8.83	14.51	18.89	11.86	12.02	11.21	10.69	10.81	10.16	9.35	9.56	8.89	10.61	18.24	21.49	14.38	11.80	4.00	33.92	
21. National	3.87	3.63	2.16	3.11	8.88	10.42	8.88	9.61	12.89	12.60	8.34	6.95	6.41	5.56	6.80	7.73	4.80	2.86	3.03	6.77	3.27	48.38	
22. Parke	6.80	8.63	6.32	8.82	11.75	13.03	12.02	13.39	11.74	14.65	8.09	8.38	12.92	14.10	14.44	12.26	7.91	5.01	5.35	10.29	3.21	31.16	
23. Rallis	3.17	2.53	2.56	0.64	3.36	4.26	4.92	4.23	4.71	0.95	0.57	3.97	3.73	5.43	4.50	4.40	4.41	4.18	3.52	3.48	1.43	41.20	
24. Ranbaxy	5.42	7.64	7.46	5.58	5.29	4.35	2.90	2.37	1.86	2.84	6.23	5.81	9.66	11.63	8.80	9.59	8.37	8.11	5.71	6.30	2.72	43.13	
25. Tata	9.36	8.00	6.68	5.90	8.18	7.67	5.40	5.56	6.20	5.35	4.21	5.40	4.48	11.52	10.19	12.38	6.54	8.04	4.90	7.16	2.35	32.82	
26. United	2.51	5.79	9.94	6.75	5.90	7.84	4.48	0.78	1.15	1.72	13.10	16.16	15.28	7.14	7.36	6.37	3.59	2.54	3.48	6.41	4.51	70.38	
27. Zandu	4.95	3.30	4.46	3.27	7.43	7.66	9.32	6.32	12.15	13.31	10.06	7.79	4.54	7.31	6.96	4.56	3.61	5.49	6.99	5.80	2.86	42.09	
28. Zuari	10.58	0.42	10.14	7.00	9.07	6.05	9.95	3.88	5.31	4.68	5.89	5.14	6.23	6.80	11.13	10.84	6.03	5.12	1.35	6.61	3.06	46.28	
Average	5.37	5.41	6.04	5.50	5.93	6.19	5.81	5.47	6.74	5.93	5.69	5.70	5.84	7.53	8.26	7.75	7.41	8.02	7.34	6.42	0.98	15.21	
S.D.	2.06	2.07	2.47	2.60	2.99	3.59	3.10	3.02	3.39	4.20	3.24	4.10	3.94	3.53	4.35	5.49	4.33	5.43	5.50	3.65			
C.V.	38.29	38.26	40.83	47.29	50.42	58.04	53.26	55.16	50.31	70.81	56.89	71.95	67.46	46.94	52.70	70.82	58.46	67.78	74.88	56.91			

the tune of 104.54 for Abbot. The grand average of ratio for all companies taken together comes to 6.42. This indicates that on an average the rate of return is around 6% of total assets.

5.9.f.ii RETURN ON TOTAL ASSETS RATIO:

This ratio is derived as net profit plus interest divided by total assets. This is same as the preceding ratio except that in the numerator it is net profit plus interest.

Table V.45 presents the ROTA ratio for 28 companies for the period of 19 years from 1981-1999. It can be observed from the Table that the minimum ratio is found to be 2.03 for the year 1996 for Abbot and the maximum ratio is found to be 32.25 for Glaxo for the year 1996. Wide fluctuations are observed over a period of time for sample companies. Lowest average is found to be 10.22 taking all companies together for the year 1981 and the same is found to be highest to the tune of 13.04 for the year 1994. To have an idea about the variations between the companies S.D. and C.V. are computed yearwise. The highest S.D. is found to be 5.59 for the year 1996 and the lowest S.D. is 2.19 for the year 1981. The highest C.V. is found to be 47.14 for the year 1996 and it is the lowest at 22.13 for the year 1987. When the company wise ROTA ratio is examined over a period of time minimum average ratio is found to be 7.92 for Indian Oil and the maximum ratio is found to be 15.54 for Excel. The ROTA ratio of Fulford is relatively steady over a period of time, which is reflected in its minimum S.D. and C.V. of 1.53 and 14.75 for Fulford respectively. Wide fluctuations are observed for Glaxo over a period of time which is reflected in its highest S.D. and

TABLE - V.45

RETURN ON TOTAL ASSETS RATIO-II

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg	S.D.	C.V.
1. Abbott	8.40	7.54	6.95	8.19	7.38	10.17	11.71	9.92	11.96	8.40	10.27	8.76	10.49	19.79	13.16	2.03	5.66	6.10	6.79	9.14	3.64	39.86
2. Alembic	11.63	15.62	12.45	12.17	14.08	11.09	9.28	11.06	8.39	11.56	10.06	9.70	10.99	12.81	11.38	10.74	12.54	14.04	16.15	11.88	2.03	17.09
3. Basf	12.99	11.64	11.13	10.37	11.07	10.73	10.09	11.76	13.01	14.77	12.71	15.63	15.78	15.20	11.96	11.80	12.46	8.91	9.65	12.19	2.00	16.43
4. Bayer	9.96	9.55	11.96	11.98	13.57	14.86	15.91	14.35	17.28	11.28	14.08	16.75	14.15	12.53	6.28	9.26	13.11	11.80	10.58	12.59	2.78	22.04
5. Burroughs	7.69	8.32	7.97	12.23	12.04	8.13	8.54	14.10	18.10	11.55	11.58	11.11	12.24	13.29	12.64	4.70	13.64	16.71	17.94	11.71	3.59	30.67
6. Cipla	8.67	8.62	7.31	7.44	7.74	11.41	12.98	11.75	14.09	8.22	8.99	11.47	13.44	12.77	15.56	12.00	17.89	19.09	16.67	11.90	3.61	30.35
7. Colour	12.29	10.87	8.60	9.90	10.21	11.56	12.22	10.72	10.51	9.25	10.85	14.00	16.15	16.82	13.16	13.00	14.77	17.66	4.04	11.93	3.19	26.76
8. Duphar	10.56	8.28	11.09	9.84	12.06	10.89	9.71	10.25	13.53	10.42	9.95	9.44	10.06	8.73	10.27	9.23	8.08	6.43	6.46	9.75	1.71	17.55
9. E.I.D	10.54	10.99	10.89	8.89	5.97	5.52	6.63	6.34	11.02	5.48	8.26	8.65	10.26	11.67	5.95	5.53	6.43	8.27	11.48	8.36	2.32	27.72
10. E. Merck	10.34	11.32	13.05	11.29	10.04	11.94	11.66	10.29	10.78	10.34	8.80	8.55	14.00	15.62	14.88	17.35	16.98	17.04	17.48	12.72	3.00	23.60
11. Excel	10.56	15.54	16.48	13.34	11.92	12.14	11.31	15.46	19.00	18.92	18.86	22.20	21.25	18.40	16.10	14.52	15.21	11.51	11.37	15.48	3.56	22.98
12. Fulford	9.86	8.60	12.98	10.28	10.76	10.37	10.68	12.23	12.90	11.38	8.56	10.27	10.99	8.52	9.46	9.24	9.99	12.40	7.66	10.37	1.53	14.75
13. German	13.39	14.00	13.81	11.95	9.86	10.06	10.52	11.41	11.27	16.31	10.22	8.31	10.46	14.42	14.12	11.83	13.27	17.25	18.56	12.68	2.71	21.36
14. Glaxo	10.80	9.43	8.92	8.15	8.84	9.12	11.74	10.48	12.09	14.02	11.74	9.65	12.28	14.59	28.69	32.25	12.96	12.83	17.93	13.50	6.46	47.89
15. Guj-State	7.51	9.56	12.65	11.52	7.88	8.73	9.13	11.73	12.83	8.56	8.29	7.49	7.76	7.47	10.66	11.87	10.13	8.55	6.85	9.43	1.92	20.33
16. Hin-Lever	10.71	11.25	11.45	10.48	11.65	13.05	13.35	12.98	13.67	12.23	12.79	13.77	14.39	14.07	13.23	14.77	16.00	17.45	19.01	13.49	2.20	16.33
17. Hoechst	11.29	11.92	15.36	18.35	12.32	11.15	7.58	6.09	7.52	9.89	8.49	8.16	7.87	9.05	8.89	9.53	9.90	9.91	8.13	10.07	2.92	29.02
18. I.C.I.	5.66	10.77	11.73	10.42	10.14	9.98	8.00	8.31	10.30	4.47	10.82	9.37	8.64	14.83	8.68	8.45	9.36	10.07	12.21	9.59	2.27	23.66
19. Ind-Oil	6.76	8.61	7.36	5.63	5.38	5.28	10.92	8.97	9.18	8.97	9.46	9.80	6.30	6.45	7.99	7.54	7.55	8.29	10.07	7.92	1.66	20.90
20. Knoll	10.22	10.19	10.19	11.69	17.98	22.07	13.86	14.78	13.77	13.80	14.24	14.82	12.88	12.79	11.06	12.89	20.05	21.73	14.59	14.40	3.63	25.22
21. National	7.60	9.56	9.80	11.90	16.58	17.03	14.53	14.26	17.56	17.01	12.33	11.89	11.65	11.34	11.34	13.90	10.99	8.62	9.27	12.48	3.02	24.19
22. Parke	8.47	12.89	10.52	12.76	13.96	15.84	15.44	16.44	14.68	16.22	10.52	12.05	15.91	17.43	17.21	16.46	10.93	10.40	13.71	13.78	2.70	19.61
23. Rallis	10.07	9.35	8.99	4.59	9.37	9.53	10.03	8.42	8.78	6.91	7.06	11.75	8.37	10.79	10.03	10.00	13.99	13.11	11.05	9.59	2.15	22.44
24. Ranbaxy	12.36	14.47	12.96	10.48	11.31	9.70	8.71	8.46	8.23	8.30	12.15	11.74	16.14	16.17	8.95	9.85	8.55	8.42	6.34	10.70	2.79	26.03
25. Tata	13.63	13.12	10.68	10.09	11.11	13.08	11.36	12.79	12.37	11.72	9.24	9.88	7.40	14.07	13.63	19.83	13.82	14.30	10.44	12.24	2.62	21.44
26. United	8.95	12.57	16.18	11.62	11.24	13.22	10.56	8.62	9.12	7.93	19.20	19.81	19.99	10.41	8.78	8.06	10.05	6.40	7.24	11.58	4.26	36.82
27. Zandu	10.34	9.28	10.75	8.51	13.38	12.24	13.09	9.74	15.70	17.22	14.17	12.45	10.10	13.27	12.01	9.37	10.04	11.02	12.26	11.84	2.29	19.36
28. Zuari	15.00	6.23	15.76	11.59	13.62	12.18	16.25	10.87	11.44	10.09	10.42	8.67	13.18	11.75	14.47	16.08	11.33	9.41	5.98	11.81	3.01	25.50
Average	10.22	10.72	11.36	10.56	11.13	11.47	11.28	11.16	12.47	11.26	11.22	11.65	12.25	13.04	12.16	11.86	11.99	12.06	11.43	11.54	0.69	5.98
S.D.	2.19	2.39	2.66	2.57	2.86	3.32	2.50	2.62	3.09	3.66	2.91	3.57	3.66	3.26	4.32	5.59	3.44	4.23	4.42	3.33		
C.V.	21.39	22.29	23.38	24.36	25.88	28.92	22.13	23.46	24.76	32.55	25.92	30.64	29.84	25.00	35.50	47.14	28.72	35.05	38.69	28.85		

C.V. of 6.46 and 47.89. The grand average of ROTA ratio for all companies taken together and all years taken together comes to 11.54. This indicates that on an average the profitability of sample companies is quite good.

5.9.f.iii RETURN ON TOTAL ASSETS RATIO:

This ratio is derived as gross profit divided by total assets. In this computation of ROTA ratio numerator is still greater as compared to preceding one it is gross profit.

Table V:46 presents the operating power (ROTA) ratio for 28 companies for the period of 19 years from 1981-1999. It can be observed from the Table that the minimum ratio is found to be -21.10 for the year 1993 for I.C.I. and the maximum ratio is found to be 45.16 for the year 1986 for Knoll. Thus wide fluctuations are observed over a period of time for sample companies. Lowest average is found to be 11.34 for the year 1996 taking all companies together and the same is found to be highest to the tune of 16.65 for the year 1983 taking all companies together. To have an idea about the variations between the companies S.D. and C.V. computed yearwise and presented in the Table. The highest S.D. and C.V. are found to be 9.43 and 69.84 respectively for the year 1993. The lowest S.D. and C.V. are found to be 4.83 for the year 1982 and 30.32 for the year 1983. When the company wise ROTA ratio is examined over a period of time, minimum average ratio is found to be 4.71 for the E.I.D. and the maximum ratio is found to be 23.20 for the Knoll. The ROTA ratio of Glaxo has remained steady over a period of time it is reflected in its minimum S.D. and C.V. of 1.33 for Hindustan Lever and 14.70 for Glaxo.

TABLE - V.46

RETURN ON TOTAL ASSETS RATIO-III

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg	S.D.	C.V.	
1. Abbot	11.20	7.09	8.26	9.35	6.57	6.31	3.06	7.75	9.80	9.13	12.04	10.32	11.84	23.51	21.73	0.08	10.14	6.83	9.75	9.72	5.42	56.70	
2. Alembic	9.31	19.03	20.21	16.40	11.48	10.66	11.28	12.30	9.55	11.77	12.33	12.67	12.65	13.91	11.93	11.03	13.17	15.99	19.55	13.43	3.27	24.38	
3. Basf	21.25	18.79	14.50	14.93	16.21	15.57	15.63	20.93	23.84	20.99	21.35	26.53	22.82	25.16	18.33	13.79	14.85	14.16	15.40	18.69	4.07	21.77	
4. Bayer	15.31	15.19	22.61	22.48	22.78	23.62	24.31	23.85	25.59	15.37	20.29	20.43	20.27	18.53	9.14	6.59	15.78	15.11	13.52	18.46	5.29	28.66	
5. Burroughs	18.44	20.47	18.11	18.29	18.83	7.35	7.40	17.53	22.27	12.22	12.50	12.29	12.62	14.74	13.53	2.90	14.12	21.02	22.15	15.09	5.36	35.48	
6. Cipla	16.80	15.51	14.90	15.19	14.17	13.40	13.65	18.30	22.84	16.60	14.54	15.20	14.70	14.33	17.32	14.50	24.67	22.49	21.28	16.86	3.44	20.40	
7. Colour	19.71	14.88	12.99	12.93	14.54	15.67	18.63	15.21	13.09	12.02	12.78	13.69	17.53	17.90	15.44	16.09	17.87	10.83	3.73	14.50	3.56	24.52	
8. Duphar	17.80	11.65	18.22	18.58	18.03	15.80	13.66	13.65	13.55	11.63	12.46	11.37	12.26	10.56	13.48	-5.78	-0.55	2.98	11.07	11.60	6.38	54.98	
9 E.I.D.	7.59	8.17	9.69	5.36	2.42	3.99	-4.95	1.89	8.20	-14.69	6.77	8.11	0.80	7.54	4.08	4.24	6.85	10.21	13.13	4.71	6.18	131.24	
10. E. Merck	16.13	16.56	16.86	16.45	14.80	14.84	14.45	11.96	12.13	10.68	9.36	8.69	14.17	17.89	21.24	23.60	24.21	24.33	23.86	16.43	5.00	30.46	
11. Excel	13.42	18.47	20.83	17.26	13.69	11.74	11.04	18.83	24.18	23.49	27.15	31.47	27.75	20.25	18.22	17.16	17.20	12.84	13.89	18.89	5.77	30.57	
12. Fulford	15.75	14.34	22.27	18.10	16.75	15.37	15.53	16.66	15.10	9.86	9.44	11.33	13.22	10.74	9.31	10.91	12.28	14.42	8.79	13.69	3.53	25.81	
13. German	26.52	28.31	26.04	20.90	15.71	14.58	10.60	15.30	14.01	15.24	8.13	4.13	9.83	19.31	19.32	16.82	16.75	22.77	26.45	17.41	6.69	38.42	
14. Glaxo	17.45	15.45	15.20	14.74	16.49	15.96	19.43	16.22	9.01	13.12	16.46	12.91	15.06	18.78	16.52	15.28	16.92	15.19	17.73	15.68	2.30	14.70	
15. Guj-State	12.75	12.40	14.45	13.78	12.57	13.34	7.69	9.31	13.21	11.70	10.19	8.86	8.20	7.51	9.27	13.08	11.84	9.37	7.37	10.89	2.37	21.73	
16. Hin-Lever	19.27	21.22	21.17	21.90	21.01	22.99	23.45	21.86	21.23	20.24	20.86	21.32	22.28	21.09	18.30	19.50	20.81	21.43	23.48	21.23	1.33	6.27	
17. Hoechst	17.84	18.54	18.24	17.52	14.89	9.43	4.57	3.89	5.46	9.26	8.02	8.25	10.50	13.88	12.88	13.29	13.21	12.23	9.06	11.63	4.58	39.42	
18. I.C.I	6.84	9.91	13.03	14.76	9.29	9.13	10.38	10.78	14.12	-16.15	11.38	-14.51	-21.10	-19.97	9.19	9.95	10.94	9.77	11.26	4.68	12.20	260.41	
19. Ind-Oil	7.01	10.39	11.30	12.35	12.30	10.40	12.33	12.41	9.75	7.91	6.40	5.96	5.86	7.01	8.31	-0.68	-12.11	6.17	29.07	8.53	7.59	88.91	
20. Knoll	23.56	23.26	24.68	31.35	41.13	45.16	28.59	33.96	22.82	19.13	20.26	20.54	17.97	14.54	13.06	13.98	17.33	17.41	12.13	23.20	9.22	39.74	
21. National	9.47	10.56	7.90	14.76	21.42	22.40	20.53	19.30	23.74	22.42	17.36	16.18	12.32	7.61	11.41	14.48	9.38	5.30	3.97	14.24	6.22	43.65	
22. Parke	15.74	17.68	18.53	28.36	25.82	19.63	14.72	16.56	19.51	18.26	19.17	17.98	29.65	34.46	26.72	4.71	13.57	7.39	10.55	18.90	7.55	39.93	
23. Rallis	13.24	11.86	11.21	0.59	11.03	12.93	13.32	10.02	10.13	8.16	7.92	12.51	8.11	12.27	11.91	10.88	14.36	14.83	12.03	10.91	3.18	29.19	
24. Ranbaxy	12.62	16.78	12.95	10.56	12.88	10.56	9.63	10.83	12.24	13.04	13.91	13.82	18.81	18.80	10.24	9.78	10.72	10.56	6.51	12.38	3.13	26.25	
25. Tata	23.84	20.86	13.78	7.23	4.84	8.61	13.99	13.06	11.92	10.91	8.01	9.24	6.94	6.73	9.80	22.62	17.55	18.14	13.57	12.72	5.62	44.23	
26. United	13.25	15.75	19.31	17.40	16.86	16.67	8.60	1.50	3.93	8.48	21.60	21.70	23.15	11.17	8.62	9.23	10.11	6.31	7.16	12.67	6.34	50.05	
27. Zandu	12.70	10.56	13.69	10.57	17.96	14.53	20.93	20.80	18.26	20.65	17.28	15.89	12.14	18.90	16.75	11.91	14.47	15.05	16.61	15.77	3.34	21.15	
28. Zuari	22.03	14.88	25.28	21.62	22.62	21.34	19.53	17.66	17.42	13.55	14.86	13.99	17.79	15.18	20.94	17.48	12.40	9.56	4.14	16.96	5.08	29.95	
Average	15.60	15.66	16.65	15.85	15.97	15.07	13.64	14.73	15.25	11.96	14.03	13.25	13.51	14.37	14.18	11.34	13.17	13.31	13.63	14.28	1.39	9.75	
S.D.	5.20	4.83	5.05	6.41	7.27	7.73	7.01	6.85	6.21	8.97	5.43	8.22	9.43	9.20	5.21	6.90	7.05	5.76	6.93	6.82			
C.V.	33.32	30.82	30.32	40.42	45.53	51.27	51.39	46.52	40.71	75.00	38.71	62.06	69.84	64.00	36.73	60.88	53.53	43.29	50.13	47.78			

Wide fluctuations are observed for I.C.I. over a period under study. This is reflected in its highest S.D. and C.V. of 12.20 and 260.41 respectively. The grand average of ROTA ratio for all companies taken together and all years taken together comes to 14.28. This ratio of companies shows that they have good earning power except E.I.D., for the year 1987 and 1990, Duphar for the year 1996 and 1997, I.C.I. for the years 1992-1994 and Indian Oil. for the years 1996 and 1997. It shows that on an average sample companies have a good profitability position.

5.9.g.i RETURN ON TOTAL SHAREHOLDERS' EQUITY RATIO:

Again for this there are two measures (i) where preference share capital included in shareholders' equity and (ii) where only equity share capital is shareholders' equity.

Table V.47 presents the ROSE ratio for 28 companies for the period of 19 years from 1981-1999. It is very interesting to note from the table that the minimum ratio is found to be -4.97 for the year 1992 for E.Merck. The highest ratio is found to be 56.28 for the year 1992 for United Wide fluctuations are observed over a period of time for sample companies. On examining yearwise average, lowest average is found to be 15.52 taking all companies together for the year 1988 and the same is found to be highest at 20.78 for the year 1995. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise and presented in the Table. The highest S.D. and C.V. are found to be 12.25 and 70.64 for the year 1989 and the lowest is of 6.23 for the year 1984. The lowest C.V. is found to be 38.84 for the year 1986. When the companywise ROSE ratio is examined over a

TABLE - V.47

RETURN ON TOTAL SHAREHOLDERS' EQUITY RATIO-I

Name/Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg	S.D.	C.V.	
1. Abbot	8.26	4.93	6.93	8.15	7.56	12.67	14.57	8.88	16.76	1.34	9.75	7.10	18.72	33.82	23.23	0.79	-1.56	-0.93	2.49	9.66	8.87	91.87	
2. Alembic	10.56	24.30	17.21	11.43	12.84	10.38	5.19	9.45	8.24	7.67	5.47	7.07	5.22	19.87	17.20	11.08	8.48	11.19	15.92	11.51	5.25	45.63	
3. Basf	18.79	14.08	13.14	10.94	9.80	8.02	9.13	13.53	16.92	22.94	18.52	25.47	22.17	20.39	16.69	21.22	9.62	9.35	9.34	15.27	5.53	36.20	
4. Bayer	7.07	7.39	14.18	13.03	17.56	19.14	19.75	19.10	26.81	15.71	21.55	28.28	20.09	18.42	2.60	7.50	14.33	12.48	10.43	15.55	6.74	43.34	
5. Burroughs	24.06	21.93	19.50	17.95	13.41	8.39	6.23	16.56	27.88	11.61	10.13	9.62	12.37	13.35	18.19	-0.57	14.43	20.18	22.01	15.12	6.88	45.54	
6. Cipla	25.21	24.86	21.75	20.46	12.33	17.68	20.23	16.54	22.97	13.03	16.23	17.63	18.44	21.06	29.81	13.66	25.50	27.69	24.50	20.50	5.01	24.44	
7. Colour	14.24	12.03	4.21	6.95	7.81	10.80	18.04	14.19	14.65	10.93	18.04	18.94	19.01	22.00	19.20	18.61	21.52	28.51	1.32	14.79	6.74	45.59	
8. Duphar	13.82	8.06	12.60	14.66	19.03	15.32	9.30	13.89	22.56	17.94	17.00	12.42	11.28	8.50	11.55	7.32	7.74	6.17	6.75	12.42	4.60	37.05	
9 E.I.D.	44.33	33.92	16.92	13.23	6.68	8.29	7.32	9.82	24.10	9.42	15.33	15.54	15.37	16.07	9.64	8.44	8.65	10.31	11.69	15.00	9.68	64.50	
10. E. Merck	16.24	19.97	24.01	17.32	14.77	19.70	17.80	13.90	18.70	21.68	7.95	-4.97	12.90	15.64	23.14	26.52	25.75	26.04	24.71	17.99	7.52	41.78	
11. Excel	8.49	16.07	24.54	19.20	11.14	10.60	8.20	20.92	32.25	39.14	34.13	42.62	36.13	28.87	25.24	20.68	21.17	12.33	12.87	22.35	10.74	48.07	
12. Fulford	25.45	28.86	27.41	24.72	21.71	23.11	23.05	23.04	24.69	27.36	9.67	7.07	12.49	13.80	15.40	18.21	19.94	23.53	13.35	20.15	6.42	31.86	
13. German	13.90	21.21	20.84	17.89	13.14	10.64	11.89	12.22	11.51	35.62	16.56	7.56	5.24	20.61	25.49	19.78	25.21	29.57	29.43	18.33	8.13	44.37	
14. Glaxo	15.02	13.25	12.47	11.91	13.94	13.86	14.44	17.25	21.36	20.21	13.04	5.99	11.80	13.80	44.53	53.80	17.42	17.26	24.32	18.72	11.56	61.73	
15. Guj-State	10.91	12.44	16.85	16.07	11.36	14.31	14.71	18.49	20.15	13.50	14.66	14.54	11.49	5.86	14.81	21.63	15.01	12.18	8.60	14.08	3.77	26.76	
16. Hin-Lever	20.20	21.26	20.16	17.64	19.17	22.86	22.92	23.43	25.07	24.52	27.15	30.57	31.18	33.91	35.21	38.88	41.11	45.21	46.61	28.79	9.04	31.41	
17. Hoechst	16.87	16.69	25.78	31.78	17.84	14.78	7.19	3.33	6.50	13.79	5.74	3.94	2.55	6.91	13.62	13.33	14.69	18.16	10.86	12.86	7.66	59.58	
18. I.C.I.	11.06	17.65	15.75	12.94	12.76	12.25	7.83	6.51	9.67	-8.05	12.31	7.85	1.32	19.23	16.42	15.90	16.67	18.02	19.34	11.86	6.80	57.35	
19. Ind-Oil	15.94	17.90	16.81	10.86	10.11	13.75	31.80	23.63	23.13	23.47	20.41	18.20	13.68	13.61	15.47	15.86	15.27	15.89	17.59	17.55	5.16	29.38	
20. Knoll	19.34	19.85	19.91	23.85	33.09	29.57	23.85	24.21	22.90	24.70	25.91	23.23	20.76	24.05	22.64	26.22	39.13	40.15	27.90	25.86	5.93	22.92	
21. National	9.19	9.69	6.61	10.44	25.84	25.90	20.70	22.77	32.03	28.96	21.38	17.38	16.05	14.90	20.50	21.44	12.81	7.64	7.27	17.45	7.79	44.63	
22. Parke	11.05	15.65	11.13	13.42	18.12	22.54	23.69	27.96	24.41	29.64	18.62	18.41	31.12	29.41	33.52	24.34	25.72	19.64	17.51	21.89	6.71	30.94	
23. Rallis	15.99	11.69	11.35	2.84	14.01	18.10	21.60	14.64	17.79	4.05	2.42	16.63	22.63	23.19	21.88	26.38	16.74	15.23	18.26	15.55	6.77	43.57	
24. Ranbaxy	23.27	32.48	34.98	25.74	24.37	22.55	16.36	12.25	7.69	11.54	23.96	25.73	28.22	31.68	17.12	17.32	13.74	13.13	8.80	20.57	8.23	40.00	
25. Tata	22.34	19.81	15.48	14.59	24.18	18.99	17.48	14.58	13.99	13.21	13.29	16.06	14.64	33.53	27.58	29.85	15.32	17.36	10.25	18.55	6.25	33.68	
26. United	8.82	20.91	31.36	22.63	20.53	30.12	19.78	3.40	4.47	8.77	45.61	56.28	54.69	10.61	12.31	12.87	6.77	4.78	7.22	20.10	16.58	82.50	
27. Zandu	15.65	10.95	15.18	12.89	27.77	29.05	30.82	21.68	34.03	35.24	26.27	21.28	12.92	19.14	19.43	15.56	13.50	17.25	19.17	20.88	7.46	35.73	
28. Zuari	19.91	0.93	21.98	14.78	19.42	14.09	21.49	8.49	13.60	10.99	13.57	15.12	15.81	19.10	29.54	24.48	14.48	14.87	4.14	15.62	6.77	43.35	
Average	16.64	17.10	17.82	15.65	16.44	17.05	16.62	15.52	19.46	17.46	17.28	17.34	17.80	19.69	20.78	18.97	17.11	17.61	15.45	17.46	7.45	44.41	
S.D.	7.67	7.81	7.20	6.23	6.54	6.62	7.26	6.48	8.02	10.95	9.12	12.25	11.06	7.98	8.66	10.98	9.06	10.13	9.79	4.35			
C.V.	46.08	45.70	40.38	39.81	39.79	38.84	43.71	41.78	41.20	62.73	52.80	70.64	62.17	40.53	41.67	57.91	52.95	57.52	63.36	24.91			

period of time, minimum average ROSE ratio is found to be 9.66 for Abbot and the maximum average is found to be 28.79 for Hindustan Lever. To have an idea about the variations between the years S.D. and C.V. are also computed companywise. The highest S.D. is found to be 16.58 for United and the lowest is 4.60 for Duphar. The highest coefficient is found to be 91.87 for Abbot and it is the lowest at 22.92 for Knoll. The grand average of ROSE ratio for all companies taken together comes to be 17.46. This indicates that on an average the sample companies were able to earn around 18% on shareholders' equity. This ratio indicates how well the firm has used the resources of owners. This ratio is one of the most important relationship in financial analysis. Higher ratio indicates the efficiency of the management to use the shareholders' equity in the business. This ratio also indicates the performance and strength of the company.

5.9.g.ii RETURN ON TOTAL SHAREHOLDERS' EQUITY RATIO:

Here the equity share capital excludes preferences share capital. This ratio is derived as net profit minus preference dividend divided by shareholders' equity.

Table V.48 presents the ROSE ratio for 28 companies for the period of 19 years from 1981-1999. It is very interesting to note from the Table that the minimum ratio is found to be -4.97 for the year 1992 for E.Merck. The highest ratio is found to be 56.28 for the year 1992 for United. Wide fluctuations are observed over a period of time for given companies. On examining yearwise average the lowest average is found to be 15.17 taking all companies together for the year 1999, and it is found to be highest at 20.77 for the

TABLE - V.48
RETURN ON TOTAL SHAREHOLDERS' EQUITY RATIO-II

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg S.D.	C.V.	
1. Abbot	8.26	4.93	6.93	8.15	7.56	12.67	14.57	8.88	16.76	1.34	9.75	7.10	18.72	33.82	23.23	0.79	-1.56	-0.93	2.49	9.66	8.87	91.87
2. Alembic	10.52	24.19	17.17	11.40	12.83	10.35	5.18	9.45	8.24	7.67	5.47	7.07	5.22	19.87	17.20	11.08	8.23	9.98	14.28	11.34	5.19	45.79
3. Basf	18.42	13.81	12.97	10.78	9.65	7.89	9.03	13.42	16.81	22.88	18.52	25.47	22.17	20.39	16.69	21.22	9.62	9.35	9.34	15.18	5.55	36.55
4. Bayer	7.07	7.39	14.18	13.03	17.56	19.14	19.75	19.10	26.81	15.71	21.55	28.28	20.09	18.42	2.60	7.50	14.33	12.48	10.43	15.55	6.74	43.34
5. Burroughs	24.06	21.93	19.50	17.95	13.41	8.39	6.23	16.56	27.88	11.61	10.13	9.62	12.37	13.35	18.19	-0.57	14.43	20.18	22.01	15.12	6.88	45.54
6. Cipla	24.73	24.49	21.45	20.21	12.22	17.62	20.18	16.49	22.91	13.01	16.21	17.62	18.44	21.06	29.81	13.66	25.50	27.69	24.50	20.41	4.98	24.41
7. Colour	13.31	11.15	3.32	6.08	6.95	10.80	18.04	14.19	14.65	10.93	18.04	18.94	19.01	22.00	19.20	18.61	21.52	28.51	1.32	14.56	6.96	47.81
8. Duphar	13.82	8.06	12.60	14.66	19.03	15.32	9.30	13.89	22.56	17.94	17.00	12.42	11.28	8.50	11.55	7.32	7.74	6.17	6.75	12.42	4.60	37.05
9. E.I.D.	44.33	33.66	15.76	12.61	6.27	7.89	7.12	9.67	24.07	9.42	15.33	15.54	14.90	16.01	9.94	8.07	7.93	9.74	11.00	14.68	9.76	66.49
10. E. Merck	16.24	19.97	24.01	17.32	14.77	19.70	17.80	13.90	18.70	21.68	7.95	-4.97	12.90	15.64	23.14	26.52	25.75	26.04	24.71	17.99	7.52	41.78
11. Excel	8.49	16.07	24.54	19.20	11.14	10.60	8.20	20.92	32.25	39.14	34.13	42.62	36.13	28.87	25.24	20.68	21.17	12.33	12.87	22.35	10.74	48.07
12. Fulford	25.45	28.86	27.41	24.72	21.71	23.11	23.05	23.04	24.69	27.36	9.67	7.07	12.49	13.80	15.40	18.21	19.94	23.53	13.35	20.15	6.42	31.86
13. German	13.90	21.21	20.84	17.89	13.14	10.64	11.89	12.22	11.51	35.62	16.56	7.56	5.24	20.61	25.49	19.78	25.21	29.57	29.43	18.33	8.13	44.37
14. Glaxo	14.79	13.03	12.33	11.88	13.94	13.86	14.44	17.25	21.36	20.21	13.04	5.99	11.80	13.80	44.53	53.80	17.42	17.26	24.32	18.69	11.57	61.91
15. Guj-State	10.86	12.44	16.84	16.04	11.34	14.28	14.69	18.47	20.13	13.49	14.65	14.53	11.49	5.86	14.81	21.63	15.01	12.18	8.57	14.07	3.77	26.80
16. Hin-Lever	20.20	21.26	20.16	17.64	19.17	22.86	22.92	23.43	25.07	24.52	27.15	30.57	31.18	33.91	35.21	38.88	41.11	45.21	46.61	28.79	9.04	31.41
17. Hoechst	16.87	16.69	25.78	31.78	17.84	14.78	7.19	3.33	6.50	13.79	5.74	3.94	2.55	6.91	13.92	13.33	14.69	18.16	10.86	12.86	7.66	59.58
18. I.C.I.	11.06	17.65	15.73	12.91	12.74	12.23	7.82	6.51	9.67	-8.05	12.31	7.85	1.32	19.23	16.42	15.90	16.67	18.02	19.34	11.86	6.80	57.37
19. Ind-Oil	15.94	17.90	16.81	10.86	10.11	13.75	31.80	23.63	23.13	23.47	20.41	18.20	13.68	13.61	15.47	15.86	15.27	15.89	17.59	17.55	5.16	29.38
20. Knoll	19.34	19.85	19.91	23.85	33.09	29.57	23.85	24.21	22.90	24.70	25.91	23.23	20.76	24.05	22.84	26.22	39.13	40.15	27.90	25.86	5.93	22.92
21. National	9.19	9.69	6.61	10.44	25.84	25.90	20.70	22.77	32.03	28.96	21.38	17.38	16.05	14.90	20.50	21.44	12.81	7.64	7.27	17.45	7.79	44.63
22. Parke	11.05	15.65	11.13	13.42	18.12	22.54	23.69	27.96	24.41	29.64	18.62	18.41	31.12	29.41	33.52	24.34	25.72	19.64	17.51	21.89	6.71	30.64
23. Rallis	15.72	11.45	11.13	2.70	13.83	17.94	21.58	14.64	17.79	4.05	2.42	16.63	22.63	23.19	21.88	26.38	16.54	11.83	14.85	15.12	6.81	45.08
24. Ranbaxy	22.51	31.90	34.56	25.45	24.15	22.38	16.23	12.20	7.66	11.52	23.95	25.73	28.22	31.68	17.12	17.32	13.74	13.13	8.80	20.43	8.12	39.75
25. Tata	22.22	19.71	15.43	14.52	20.25	18.95	17.45	14.58	13.99	13.21	13.29	16.06	14.64	33.53	27.58	29.85	15.32	17.36	10.25	18.33	6.11	33.36
26. United	8.82	20.91	31.36	22.63	20.53	30.12	19.78	3.40	4.47	8.77	45.61	56.28	54.69	10.61	12.31	12.83	6.36	4.41	6.69	20.03	16.65	83.10
27. Zandu	15.29	10.64	15.18	12.76	27.77	29.05	30.82	21.68	34.03	35.24	25.27	21.28	12.92	19.14	19.43	15.56	13.50	17.07	17.47	20.74	7.54	36.36
28. Zuari	19.08	0.23	19.93	13.89	18.60	13.13	20.56	7.53	12.56	10.18	12.83	14.45	15.20	18.57	29.23	24.48	14.48	14.87	4.14	14.94	6.75	45.18
Average	16.48	16.95	17.63	15.53	16.20	16.98	16.57	15.48	19.41	17.43	17.25	17.32	17.76	19.67	20.77	18.95	17.06	17.41	15.17	17.37	7.46	44.73
S.D.	7.63	7.83	7.21	6.29	6.46	6.66	7.26	6.53	8.05	10.97	9.13	12.25	11.07	7.98	8.65	11.00	9.11	10.25	9.79	4.38		
C.V.	46.27	46.20	40.89	40.51	39.91	39.24	43.80	42.21	41.46	62.95	52.96	70.77	62.36	40.59	41.64	58.03	53.43	58.85	64.53	25.21		

year 1995. To have an idea about the variations between the companies S.D. and C.V. are also computed yearwise and presented in the table. The highest S.D. and C.V. are found to be 12.25 and 70.77 for the year 1992 and the lowest S.D. at 6.29 for the year 1984. The lowest C.V. is at 39.24 for the year 1986. When the companywise ROSE ratio is examined over a period of time, minimum average is found to be 9.66 for Abbot and the maximum is 28.79 for Hindustan Lever. To have an idea about the variations between the companies S.D. and C.V. is also computed companywise and presented in the table. The highest S.D. is found to be 16.65 for United and the lowest is found to be 3.77 for Gujarat State. The highest coefficient is found to be 91.87 for Abbot and the lowest is 22.92 for Knoll. The grand average of ROSE ratio for all companies taken together and all years taken together comes to be 17.37. This ratio indicates how well the firm has used the resources of owners. There is no much difference in return on shareholders equity by first approach and the second approach, because there are very few companies with preference share capital. Higher ratio indicates that all the companies have a good profitability to pay dividends to the shareholders.

5.10 ASSETS STRUCTURE RATIOS:

5.10.a GROSS FIXED ASSETS TO TOTAL GROSS ASSETS RATIO:

This ratio is derived as gross fixed assets divided by total gross assets.

Table V.49 presents the gross fixed assets to total gross assets ratio for 28 companies for the period of 19 years from 1981-1999. It is very

TABLE - V.49
GROSS FIXED ASSETS TO TOTAL GROSS ASSETS RATIO

Name \ Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg S.D.	C.V.	
1. Abbot	0.25	0.25	0.28	0.37	0.41	0.39	0.37	0.34	0.29	0.28	0.29	0.27	0.25	0.31	0.30	0.40	0.32	0.35	0.35	0.32	0.05	16.07
2. Alembic	0.51	0.48	0.45	0.47	0.51	0.53	0.52	0.54	0.51	0.49	0.49	0.50	0.49	0.51	0.54	0.57	0.62	0.62	0.60	0.52	0.05	9.26
3. Basf	0.53	0.58	0.63	0.60	0.55	0.51	0.48	0.46	0.44	0.40	0.38	0.38	0.40	0.44	0.51	0.61	0.59	0.59	0.56	0.51	0.08	16.58
4. Bayer	0.42	0.44	0.42	0.45	0.43	0.42	0.46	0.46	0.47	0.47	0.49	0.44	0.43	0.44	0.43	0.44	0.46	0.47	0.45	0.45	0.02	4.44
5. Burroughs	0.20	0.20	0.22	0.30	0.34	0.33	0.35	0.32	0.26	0.26	0.30	0.29	0.25	0.22	0.19	0.24	0.20	0.18	0.16	0.25	0.06	23.11
6. Cipla	0.31	0.30	0.35	0.41	0.47	0.50	0.49	0.48	0.45	0.48	0.42	0.42	0.42	0.44	0.41	0.32	0.34	0.30	0.28	0.40	0.07	18.29
7. Colour	0.60	0.60	0.57	0.64	0.54	0.53	0.51	0.51	0.45	0.45	0.44	0.49	0.52	0.53	0.48	0.52	0.49	0.52	0.55	0.52	0.05	10.49
8. Duphar	0.36	0.33	0.44	0.49	0.50	0.49	0.50	0.46	0.44	0.40	0.37	0.37	0.35	0.32	0.36	0.19	0.16	0.17	0.16	0.36	0.12	32.40
9. E.I.D.	0.37	0.33	0.32	0.33	0.35	0.34	0.40	0.41	0.41	0.39	0.36	0.36	0.42	0.40	0.36	0.45	0.54	0.58	0.57	0.40	0.08	19.32
10. E. Merck	0.37	0.38	0.42	0.41	0.40	0.41	0.42	0.41	0.45	0.53	0.44	0.47	0.46	0.50	0.45	0.46	0.48	0.50	0.50	0.44	0.04	10.01
11. Excel	0.58	0.59	0.55	0.50	0.50	0.50	0.50	0.49	0.48	0.43	0.44	0.41	0.40	0.38	0.36	0.38	0.39	0.39	0.40	0.46	0.07	15.42
12. Fulford	0.12	0.09	0.13	0.10	0.09	0.09	0.08	0.07	0.07	0.05	0.07	0.07	0.09	0.08	0.09	0.09	0.10	0.11	0.10	0.09	0.02	21.55
13. German	0.31	0.31	0.36	0.43	0.37	0.37	0.38	0.40	0.39	0.37	0.45	0.42	0.44	0.47	0.37	0.38	0.41	0.55	0.57	0.41	0.07	16.71
14. Glaxo	0.50	0.51	0.51	0.55	0.58	0.59	0.58	0.47	0.46	0.48	0.50	0.51	0.50	0.48	0.40	0.34	0.36	0.36	0.35	0.48	0.08	16.91
15. Guj-State	0.58	0.58	0.56	0.51	0.48	0.49	0.50	0.48	0.46	0.48	0.61	0.62	0.61	0.59	0.61	0.60	0.64	0.68	0.67	0.57	0.07	12.08
16. Hin-Lever	0.41	0.40	0.41	0.40	0.38	0.39	0.39	0.37	0.39	0.39	0.37	0.35	0.35	0.32	0.30	0.31	0.32	0.29	0.29	0.36	0.04	11.70
17. Hoechst	0.46	0.47	0.49	0.45	0.41	0.44	0.54	0.54	0.49	0.44	0.60	0.67	0.65	0.63	0.63	0.62	0.63	0.53	0.53	0.54	0.08	15.76
18. I.C.I.	0.76	0.78	0.70	0.66	0.66	0.65	0.62	0.60	0.60	0.59	0.60	0.58	0.56	0.45	0.46	0.49	0.49	0.47	0.50	0.59	0.10	16.50
19. Ind-Oil	0.36	0.42	0.43	0.43	0.45	0.41	0.40	0.36	0.32	0.24	0.23	0.28	0.28	0.32	0.39	0.41	0.38	0.44	0.54	0.37	0.08	21.21
20. Knoll	0.42	0.42	0.45	0.46	0.50	0.56	0.41	0.42	0.39	0.38	0.40	0.39	0.35	0.29	0.41	0.41	0.40	0.31	0.27	0.40	0.07	16.65
21. National	0.55	0.56	0.62	0.64	0.60	0.59	0.58	0.57	0.52	0.48	0.44	0.43	0.42	0.46	0.45	0.45	0.48	0.49	0.51	0.52	0.07	13.42
22. Parke	0.43	0.40	0.41	0.45	0.44	0.41	0.40	0.40	0.39	0.34	0.32	0.33	0.32	0.33	0.27	0.33	0.50	0.43	0.44	0.39	0.06	15.17
23. Rallis	0.17	0.19	0.21	0.21	0.24	0.26	0.30	0.30	0.27	0.27	0.29	0.28	0.19	0.29	0.29	0.27	0.32	0.33	0.28	0.26	0.05	17.67
24. Ranbaxy	0.31	0.32	0.31	0.35	0.32	0.30	0.36	0.35	0.31	0.28	0.34	0.39	0.42	0.37	0.25	0.30	0.29	0.33	0.34	0.33	0.04	12.34
25. Tata	0.72	0.71	0.70	0.65	0.57	0.54	0.45	0.44	0.41	0.39	0.41	0.54	0.63	0.74	0.68	0.63	0.63	0.65	0.65	0.59	0.12	19.82
26. United	0.63	0.56	0.57	0.49	0.45	0.34	0.28	0.32	0.36	0.34	0.34	0.37	0.42	0.31	0.45	0.34	0.39	0.37	0.34	0.40	0.10	24.11
27. Zandu	0.31	0.31	0.32	0.32	0.36	0.36	0.40	0.39	0.40	0.41	0.47	0.46	0.48	0.45	0.40	0.42	0.40	0.51	0.55	0.41	0.07	17.04
28. Zuari	0.67	0.61	0.57	0.59	0.60	0.53	0.50	0.49	0.43	0.46	0.47	0.38	0.40	0.38	0.48	0.50	0.55	0.63	0.66	0.52	0.09	17.33
Average	0.44	0.43	0.44	0.45	0.45	0.44	0.43	0.42	0.40	0.39	0.40	0.41	0.41	0.41	0.40	0.41	0.42	0.43	0.43	0.42	0.07	15.98
S.D.	0.16	0.16	0.14	0.13	0.12	0.12	0.11	0.10	0.10	0.11	0.12	0.12	0.13	0.13	0.13	0.13	0.14	0.15	0.16	0.11		
C.V.	37.66	37.46	32.70	29.41	26.98	27.03	25.14	24.68	25.30	27.98	28.51	29.39	31.26	31.78	32.09	32.38	33.28	34.46	36.92	26.48		

interesting to note from the table that the minimum ratio is found to be 0.05 for the year 1990 for Fulford and the maximum is found to be 0.78 for I.C.I. for the year 1982. Wide fluctuations are observed over a period of time for sample companies. On examining yearwise average the lowest average is found to be 0.39 for the year 1990 and the same is found to be highest at 0.45 for the year 1984 and 1985 taking all companies together. On examining variations the highest S.D. and C.V. are found to be 0.16 and 37.66 respectively for the year 1981. The lowest S.D. is found to be 0.10 for the year 1988 and 1989 and lowest C.V. is 24.68 for the year 1988 taking all companies together. When the companywise GFA/TGA ratio is examined over a period of time, minimum average GFA/TGA ratio is found to be 0.09 for Fulford and the maximum is found to be 0.59 for I.C.I. and Tata. The GFA/TGA ratio of Bayer has remained steady over a period of time which is reflected in its minimum S.D. and C.V. of 0.02 and 4.44 respectively. Wide fluctuations are observed for Duphar over a period of time which is reflected in its highest S.D. of 0.12 and the highest C.V. at 32.4. The grand average of GFA/TGA ratio for all companies taken together and all years taken together comes to 0.42 indicating thereby that approximately 42% of total gross assets are gross fixed assets.

5.10.b NET FIXED ASSETS TO TOTAL NET ASSETS RATIO:

This ratio is derived as net fixed assets divided by total net assets.

Table V.50 presents the net fixed assets to total net assets ratio for 28 companies for the period of 19 years from 1981-1999. It is very clear to note from

TABLE - V.50
NET FIXED ASSETS TO TOTAL NET ASSETS RATIO

Name/Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Avg S.D.	C.V.	
1. Abbot	0.08	0.10	0.14	0.27	0.34	0.32	0.30	0.26	0.22	0.21	0.20	0.17	0.14	0.17	0.17	0.33	0.25	0.27	0.27	0.22	0.08	35.01
2. Alembic	0.30	0.26	0.23	0.24	0.27	0.34	0.33	0.35	0.33	0.30	0.31	0.32	0.32	0.35	0.41	0.47	0.53	0.53	0.50	0.35	0.09	26.37
3. Basf	0.39	0.46	0.54	0.50	0.42	0.36	0.33	0.29	0.26	0.23	0.21	0.23	0.27	0.31	0.42	0.55	0.53	0.51	0.45	0.38	0.12	30.53
4. Bayer	0.26	0.25	0.23	0.24	0.21	0.21	0.25	0.26	0.29	0.32	0.35	0.31	0.31	0.32	0.33	0.33	0.34	0.33	0.31	0.29	0.05	16.25
5. Burroughs	0.13	0.15	0.16	0.23	0.26	0.26	0.28	0.25	0.20	0.19	0.23	0.21	0.18	0.15	0.12	0.15	0.12	0.10	0.07	0.18	0.06	33.01
6. Cipla	0.16	0.16	0.22	0.27	0.36	0.41	0.40	0.38	0.33	0.38	0.31	0.32	0.32	0.35	0.33	0.25	0.26	0.22	0.20	0.30	0.08	26.75
7. Colour	0.46	0.44	0.39	0.33	0.31	0.29	0.27	0.27	0.22	0.22	0.25	0.32	0.37	0.38	0.33	0.37	0.36	0.39	0.40	0.34	0.07	20.35
8. Duphar	0.20	0.19	0.30	0.36	0.37	0.37	0.37	0.32	0.30	0.25	0.23	0.23	0.22	0.18	0.21	0.13	0.08	0.08	0.07	0.24	0.10	42.17
9. E.I.D.	0.18	0.14	0.12	0.11	0.11	0.10	0.23	0.27	0.28	0.26	0.23	0.24	0.29	0.28	0.28	0.39	0.49	0.52	0.50	0.26	0.13	49.51
10. E. Merck	0.29	0.31	0.36	0.34	0.32	0.32	0.33	0.32	0.32	0.36	0.38	0.41	0.39	0.41	0.36	0.36	0.38	0.40	0.40	0.36	0.04	10.65
11. Excel	0.43	0.42	0.39	0.35	0.35	0.34	0.32	0.32	0.31	0.30	0.31	0.28	0.29	0.28	0.26	0.29	0.30	0.30	0.30	0.32	0.05	14.64
12. Fulford	0.07	0.05	0.07	0.06	0.05	0.06	0.05	0.04	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.04	0.05	0.01	26.88
13. German	0.21	0.22	0.27	0.34	0.27	0.26	0.27	0.27	0.26	0.24	0.35	0.32	0.34	0.31	0.28	0.27	0.31	0.47	0.50	0.30	0.08	25.10
14. Glaxo	0.41	0.42	0.43	0.47	0.48	0.47	0.15	0.26	0.34	0.40	0.37	0.38	0.36	0.33	0.25	0.19	0.20	0.20	0.18	0.33	0.11	33.17
15. Guj-State	0.37	0.37	0.34	0.28	0.26	0.29	0.34	0.33	0.32	0.36	0.53	0.55	0.54	0.51	0.54	0.53	0.58	0.62	0.60	0.44	0.12	28.17
16. Hin-Lever	0.24	0.31	0.31	0.29	0.27	0.27	0.27	0.25	0.27	0.27	0.26	0.24	0.24	0.22	0.20	0.23	0.24	0.22	0.22	0.25	0.03	11.80
17. Hoechst	0.32	0.33	0.36	0.35	0.31	0.35	0.47	0.46	0.41	0.37	0.55	0.62	0.59	0.55	0.55	0.55	0.55	0.43	0.43	0.45	0.10	22.50
18. I.C.I.	0.65	0.67	0.55	0.49	0.48	0.45	0.42	0.41	0.42	0.39	0.36	0.34	0.30	0.28	0.28	0.31	0.33	0.38	0.40	0.42	0.11	27.05
19. Ind-Oil	0.28	0.33	0.32	0.30	0.30	0.25	0.23	0.20	0.16	0.12	0.12	0.17	0.18	0.22	0.29	0.32	0.30	0.35	0.45	0.26	0.09	33.36
20. Knoll	0.31	0.30	0.31	0.29	0.33	0.38	0.24	0.23	0.21	0.22	0.25	0.23	0.19	0.15	0.33	0.35	0.36	0.26	0.21	0.27	0.07	24.07
21. National	0.33	0.36	0.46	0.49	0.44	0.39	0.37	0.37	0.32	0.27	0.24	0.23	0.22	0.34	0.35	0.37	0.40	0.41	0.42	0.36	0.07	20.90
22. Parke	0.20	0.21	0.20	0.21	0.20	0.22	0.23	0.23	0.22	0.19	0.17	0.18	0.18	0.18	0.13	0.18	0.42	0.34	0.33	0.22	0.07	31.28
23. Rallis	0.13	0.13	0.15	0.15	0.18	0.20	0.24	0.24	0.21	0.20	0.21	0.19	0.12	0.21	0.22	0.21	0.26	0.26	0.22	0.20	0.04	21.15
24. Ranbaxy	0.26	0.27	0.27	0.31	0.27	0.26	0.33	0.31	0.26	0.22	0.28	0.33	0.36	0.31	0.21	0.25	0.24	0.28	0.28	0.28	0.04	14.08
25. Tata	0.61	0.59	0.57	0.51	0.45	0.40	0.32	0.31	0.28	0.28	0.32	0.46	0.59	0.71	0.65	0.59	0.58	0.59	0.58	0.50	0.14	27.58
26. United	0.55	0.43	0.36	0.36	0.32	0.21	0.16	0.19	0.25	0.26	0.25	0.32	0.38	0.29	0.43	0.31	0.35	0.32	0.28	0.32	0.09	29.26
27. Zandu	0.24	0.22	0.24	0.24	0.29	0.29	0.32	0.28	0.26	0.29	0.37	0.36	0.37	0.32	0.26	0.30	0.26	0.40	0.43	0.30	0.06	19.96
28. Zuari	0.52	0.41	0.36	0.38	0.40	0.29	0.27	0.23	0.18	0.20	0.23	0.17	0.17	0.19	0.38	0.39	0.47	0.58	0.61	0.34	0.14	41.19
Average	0.31	0.30	0.31	0.31	0.31	0.30	0.29	0.28	0.27	0.26	0.28	0.29	0.29	0.30	0.31	0.32	0.34	0.35	0.34	0.30	0.02	7.79
S.D.	0.15	0.15	0.13	0.11	0.10	0.10	0.09	0.08	0.08	0.08	0.11	0.12	0.13	0.14	0.13	0.13	0.14	0.15	0.16	0.12		
C.V.	49.70	47.91	41.80	36.19	33.11	31.79	29.91	27.84	28.71	31.93	38.04	41.68	44.89	45.70	43.87	41.09	41.87	43.15	45.82	39.49		

the Table that the minimum ratio is found to be 0.03 for the year 1989, 1990 for Fulford. The highest ratio is found to be 0.71 for Tata. for the year 1994. Wide fluctuations are observed over a period of time for sample companies. The NFA/TNA ratio of Hindustan Lever has remained steady over a period of time. On examining yearwise average the lowest average is found to be 0.26 for the year 1990 and the highest is 0.35 for the year 1998 taking all companies together. To have an idea about the variations between the companies S.D. and C.V. are computed yearwise. The highest S.D. is found to be 0.16 for the year 1999 and the lowest is found to be 0.08 for the year 1988, 1989 and 1990. Similarly, the highest C.V. is found to be 49.70 for the year 1981 and the lowest is 27.84 for the year 1988 taking all companies together. When the company wise NFA/TNA ratio is examined over a period of time, maximum average NFA/TNA ratio is found to be 0.45 for the Hocht and the minimum average ratio is found to be 0.05 for the Fulford. This indicates that Hocht has on an average a high fixed assets base. The NFA/TNA ratio of Fulford has remained steady over a period of time which is reflected in its minimum S.D. of 0.01. Wide fluctuations are observed for Tata and Zuari over a period of time which is reflected in its highest S.D. of 0.14. Minimum C.V. is found to be 10.65 for E. Merck and it is highest at 49.51 for E.I.D. The grand average of NFA/TNA ratio for all companies taken together and all years taken together comes to 0.30 indicating thereby that on an average about 30% of total net assets are net fixed assets.

TABLE-V. 51
RATIO SUMMARY

SR NO.	Name of the Ratio	Unit of Measure	45 COMPANIES			28 COMPANIES		
			Grand Average	Avg S.D	Avg C.V	Grand Average	Avg S.D	Avg C.V
1	Current Ratio	Times	1.40	0.33	22.60	1.44	0.33	22.09
2	Quick Ratio	Times	0.78	0.26	32.48	0.74	0.27	37.74
3	Debt-Equity Ratio	Times	1.60	1.95	121.50	2.00	0.31	15.67
4	Proprietary Ratio or TE/TA Ratio	Percentage	0.37	0.08	22.86	0.37	0.09	24.53
5	Interest Coverage Ratio	Times	4.27	0.82	19.21	5.05	4.16	82.46
6	Long-term debt to Total Assets Ratio	Percentage	0.09	0.08	65.15	0.08	0.06	68.00
7	Total debt to Total Assets Ratio	Percentage	0.63	0.08	13.22	0.63	0.09	14.09
8	Inventory Turnover Ratio - I	Times	4.42	1.05	22.16	4.15	0.88	20.55
9	Inventory Turnover Ratio - II	Times	5.62	1.29	21.46	5.28	1.09	20.26
10	Average Collection Period	Days	60.95	17.80	28.87	57.22	15.03	27.40
11	Fixed Assets Turnover Ratio	Times	6.74	2.46	33.76	7.87	3.00	35.60
12	Total Assets Turnover Ratio	Times	1.52	0.30	20.00	1.54	0.31	20.32
13	Working Capital Turnover Ratio	Times	11.92	29.43	447.00	13.50	20.07	320.20
14	Gross Profit Margin OR OPI/Sale Ratio	Percentage	11.23	0.55	4.91	10.63	0.78	7.35
15	Net Profit Margin Ratio	Percentage	5.06	0.99	19.67	5.00	1.29	25.71
16	Cost of Goods Sold Ratio	Percentage	78.30	4.86	6.26	77.90	4.60	5.95
17	Operating Income to Total Gross Assets Ratio	Percentage	11.35	3.99	50.66	11.77	4.08	34.65
18	Profit Before Tax to Total Net Assets Ratio	Percentage	9.34	5.17	59.54	9.83	5.08	51.69
19	Return on Total Assets Ratio - I	Percentage	6.19	0.68	10.93	6.42	0.98	15.21
20	Return on Total Assets Ratio - II	Percentage	11.41	0.44	3.83	11.54	0.69	5.98
21	Return on Total Assets Ratio - III	Percentage	14.28	1.14	7.95	14.28	1.39	9.75
22	Return on Total Shareholders' Equity Ratio - I	Percentage	17.11	8.26	51.14	17.46	7.45	44.41
23	Return on Total Shareholders' Equity Ratio - II	Percentage	17.05	8.27	51.36	17.37	7.46	44.73
24	Gross Fixed Assets to Total Gross Assets Ratio	Percentage	0.46	0.07	14.89	0.42	0.07	15.98
25	Net Fixed Assets to Total Net Assets Ratio	Percentage	0.34	0.08	22.57	0.30	0.02	7.79

Conclusion:

The Table V.51 presents summary of the ratios computed in two sections separately for 45 companies and 28 companies.

The grand average of 45 companies' current ratio (16 years) is 1.40 and for 28 companies (19 years) is 1.44 and the quick ratio is 0.78 and 0.74 respectively. Thus there is no major difference in the two. However, it is worth noting that average proportion of inventory is higher for 28 companies. This is because, where the quick ratio is high for 28 companies. The quick ratio is low.

The grand average of 45 companies for D/E ratio is found to be 1.60 and for 28 companies it is found to be 2.00. It indicates that the proportion of D/E is quite good. But for 28 companies the proportion of debt is higher than 45 companies. This indicates that 28 companies are using more debt.

The grand average of proprietary ratio is found to be same. The grand average of interest coverage ratio for 28 companies is found to be somewhat high. For LTD/TA ratio the grand average of 45 companies is found to be 0.09, whereas for 28 companies it is found to be 0.08. This indicates that for 45 companies 9% of total assets are financed through long-term debt. Thus there is no much difference between the two.

The grand average of TD/TA are found to be same. This indicates that for both ratios no variations have been found. The grand average of inventory turnover ratio for 45 companies is 4.42 and 5.62 (taking two methods) and for 28 companies it is 4.15 and 5.28. Thus major difference is not found between two groups of 45 and 28 companies. Same is true for average

collection period. Which is 60.95 and 57.22 respectively. Fixed assets turnover ratio, total assets turnover ratio and working capital turnover ratio also do not show substantial difference between 45 companies and 28 companies.

On comparing profitability ratios no major difference is found for OPI/Sale, Net profit margin, Cost of goods sold ratios. Even when the profitability is examined from view point of assets, there also no major difference is found between the ratios of 45 companies and 28 companies for OPI/TGA and PBT/TNA. In the return on total assets and return on shreholders' equity as well GFA/TGA and NFA/TNA also no major difference is observed in the grand average.

However, when variations are compared, there is a substantial difference in the coefficient of variation of D/E ratio for 45 companies (121.5) and for 28 companies (15/67). Also for interest coverage ratio wide gap is found between 45 companies (19.21) and for 28 companies (82.46) in coefficient of variations.

After creating this basic profile for various companies over a period of study the next chapter intends to examine the dependence of various capital structure ratios on various dependent variables.