

Price to Sales, Book Value and Total Capital Worksheet-Industry Data: Computers and Peripherals
 Figures in billions of dollars

Year	Sales	Earnings	L.T. Debt	Net Worth	Total Capital	P/E Ratio	P/S	P/B
1985	89.50	8.01	8.51	52.80	61.31	14.60	1.306659	2.214886
1986	96.30	7.09	9.84	59.00	68.84	18.40	1.354683	2.211119
1987	109.00	9.08	9.20	66.40	75.6	17.30	1.441138	2.365723
1988	124.40	10.80	15.10	70.60	85.7	12.50	1.085209	1.912181
1989	132.50	12.40	17.65	80.35	98	15.7	1.469283	2.4229
1990	140.00	12.78	20.08	89.95	110.03	15.7	1.433186	2.230639

Price to Sales, Book Value and Total Capital Worksheet-IBM Data
 Figures in billions of dollars, except earnings per share

Year	Sales	Earnings per share	L.T. Debt	Net Worth	Total Capital	P/E Ratios		
						High	Low	Avg.
1985	81.340	10.67	3.955	31.990	35.945	14.88	11.00	12.94
1986	84.490	7.81	4.169	34.347	38.516	20.73	15.28	18.005
1987	90.770	8.72	3.858	38.263	42.121	20.17	11.70	15.935
1988	100.780	9.83	8.518	39.509	48.027	13.17	10.63	11.9
1989	109.250	9.05	9.250	40.225	49.475	14.15	14.72	14.435
1990	118.600	10.00	9.100	42.000	51.1	14.15	10.57	12.36

Source: Value Line Investment Survey, 2 February 1990

Total Capitalization and Price to Sales Worksheet-IBM Data

Year	Current Liabilities	Long Term Debt	Total Debt	High Price	Low Price	# of Shares	High Mkt. Equity Val.	Low Mkt. Equity Val.
1979	6.445	1.589	8.034	80.500	61.125	0.584	47.012	35.697
1980	6.526	2.099	8.625	72.750	50.375	0.584	42.486	29.419
1981	7.320	2.669	9.989	71.500	48.375	0.592	42.328	28.638
1982	8.209	2.851	11.06	98.000	55.625	0.602	58.996	33.48625
1983	9.507	2.674	12.181	134.250	92.250	0.611	82.02675	56.36475
1984	9.640	3.269	12.909	128.500	99.000	0.613	78.7705	60.687
1985	11.433	3.955	15.388	158.750	117.375	0.615	97.63125	72.18563
1986	12.743	4.169	16.912	161.875	119.250	0.607	98.25813	72.38475
1987	13.377	3.858	17.235	175.875	102.000	0.597	104.9974	60.894
1988	17.387	8.518	25.905	129.500	104.250	0.590	76.405	61.5075

Figures in billions of dollars, except price per share

Source: Standard & Poor's NYSE Stock Reports

IBM Relative Ratios **

P/TC	P/S	P/B	P/TC
1.907454	2.307122	1.393621	1.924224
1.895061	3.717742	1.439908	1.919842
2.077831	2.468229	1.198008	1.543329
1.575263	4.83585	1.349786	3.037839
1.986531	5.518833	1.224901	3.073434
1.823557	3.771942	1.177101	2.623101

** based on average of highs and lows

P/S Ratios			P/B Ratios			P/TC Ratios		
High	Low	Avg.	High	Low	Avg.	High	Low	Avg.
1.951925	4.07732	3.014622	4.963101	1.210321	3.086711	4.417015	2.923723	3.670369
1.916218	8.156507	5.036363	4.713696	1.653918	3.183807	4.203482	3.072953	3.638217
1.937671	5.176445	3.557058	4.59667	1.071641	2.834156	4.175646	2.237908	3.206777
1.284591	9.211225	5.247908	3.27675	1.885322	2.581036	2.69559	6.875197	4.785393
1.172151	15.0453	8.108727	3.18353	2.752097	2.967814	2.588327	9.622615	6.105471
1.193086	9.6187	5.405893	3.369048	1.882329	2.625688	2.76908	6.797668	4.783374

Sales	Total Cap. To Sales		Price to Sales	
	High	Low	High	Low
22.863	2.407646	1.912741	2.056248	1.561344
26.213	1.949834	1.451341	1.620799	1.122306
29.070	1.79969	1.328758	1.456072	0.985139
34.364	2.038645	1.296306	1.716797	0.974457
40.180	2.344643	1.705967	2.041482	1.402806
45.937	1.995766	1.602107	1.714751	1.321092
50.056	2.257856	1.749513	1.950441	1.442097
51.250	2.247222	1.742376	1.917232	1.412385
54.217	2.254503	1.441042	1.936614	1.123153
59.681	1.714281	1.464662	1.280223	1.030604