

Investment Research

March 1992

Midrange Computer Statistical Supplement

March-Quarter Estimates

Things are Getting a Bit Better

Data General
Digital Equipment Corporation
*Hewlett Packard
MIPS Computer Systems
Pyramid Technology

*Sequent Computer
*Silicon Graphics
Stratus Computer
*Sun Microsystems
Tandem Computers

*Recommended for Purchase

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Statistical Supplement Summary Page

SPRS
Information

Investment
Research

		Revenue Growth Trends			Profitability Trends			Operating Efficiency					Production	
		(% Change Yr-Yr)			Oper Margin	ROA	EPS %	Non-S Asset T/Over	Asset Rev/Emp (000's)	Rev/Net PP&E	Inventory T/Over	Rec T/Over	% Chng Yr-Yr	Oper Cash Flow
		Dom	Int'l	Total										
Mini-Based Vendors	DGN	11%	-18%	-5%	2%	8%	-70%	1.64	\$137 <i>Poor</i>	6.02 <i>low</i>	4.65	93	14%	\$4
	DEC	(14)	17	<i>Good</i> 4	(4)	(7)	(222)	1.41	118	3.87	4.29	87	18	(264) <i>Good</i>
	HWP	16	12	13	12	7	46	1.38	160	4.43	3.34	71 <i>Good</i>	NA	54 <i>Good</i>
Micro- Based Vendors	TDM	27	(15)	2	(3)	(3)	NM	1.07 <i>Poor</i>	173	3.11 <i>low</i>	5.08	94	7	(2)
	MIPS	-4%	68%	10	5%	-19%	NM	1.31	\$207	5.88	3.54	76	7%	\$0
	PYRD	(44)	39	(11)	(9)	(5)	(486)	1.19	193	4.56	3.19 <i>poor</i>	77	(9)	(7)
	SQNT	(31)	8	(16)	3	(20)	(60)	1.03	132	3.33	3.20 <i>poor</i>	101	(5)	(6)
	SGI	38 <i>Outstanding</i>	33	38	10	6	0	1.53	236	7.56	3.53	87	52	9
	SRA	7	36	8	17 <i>Very good</i>	14	24	1.70	183	6.81	2.79	94	(1)	1
	SUNW	23	18	21	8 <i>Good</i>	9	22	2.18	267	9.95	7.20	53	11 <i>74 Good</i>	

Leadership on every measure!

Midrange Computer Statistical Supplement

We recommend market weighting both industry groups we cover, midrange computers (hardware) and design automation (software). This statistical supplement focuses on the midrange computer group. Cyclically speaking, industry fundamentals and valuations look good. We believe there is still good money to be made investing in *selected* stocks, on top of the 30% move the technology sector has had over the past two months. (Our longer term outlook for the hardware sector is increasingly cautious, as detailed below).

There is an increasing amount of evidence that the worst part of the economic cycle, at *least* in the United States, is behind the industry (see page 20). Most of the companies with strong product cycles have seen improving demand conditions over the past two to four months. Included in this list are Sequent Computer, Silicon Graphics, Stratus Computer, Sun Microsystems, Cadence Design, Mentor Graphics, Parametric Technology. Most recently, Hewlett Packard reported outstanding January quarter earnings largely due to an acceleration in demand stimulated by its strong new product position. We believe in the March quarter, investors will see further evidence of the group's improving cyclical fundamentals. We advise investors remain highly selective in their investments, given the volatility of technology company fundamentals and stocks. Also, if our Portfolio Strategy Group's view that the multiples for high growth stocks should see further increases, the stocks of the higher quality companies will almost surely benefit the most.

With this in mind, however, we should note our long term negative view on the fundamentals of the computer hardware business. We believe that demand will grow very modestly through the mid part of this decade because unit volume gains will probably not offset continued rapid price declines. Supply, unfortunately, is *increasing* on a secular basis simply because the computer business is becoming less capital and less labor intensive with the new generation of microprocessor-based products. Finally, large computer users continue to require vendor's products conform to a set of industry standards, a trend that promises to result in further product commoditization.

Our favorite stocks are those which we believe have near term product cycle strength, sound long term fundamentals (even in light of the aforementioned trends), and upside valuation potential (see pages 2, 6, and 7). Hewlett-Packard, probably the best big capitalization story in all technology, has very strong product momentum in midrange computer systems, workstations and printers and sells at an 15% discount to the market on 1993 earnings. Specifically, the following are our favorite Recommended Stocks: Cadence Design Systems, selling at a 13% discount to the market on 1993 earnings, will benefit from delivery of its new generation of electronic design automation software and cost savings from its recent merger with Valid. Silicon Graphics, growing revenues at 35%, has an extremely strong product cycle, a 50% share in the high performance workstation market and sells at a 40% premium to the market. (The March quarter for Silicon Graphics will admittedly be a high risk quarter as nearly 75% of shipments should occur in the final month of the quarter due to new product introductions.) Finally, Sun Microsystems selling at a 19% discount on 1993 earnings, is currently growing at 20%, has a 40% plus market share in the fast growing workstation market and this summer will embark on its most significant product cycle in nearly three years. A quick review of the facing page shows that Sun is by far the most efficient company in the industry, an increasingly important fundamental as the hardware industry gets more competitive.

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Tables 1 and 2

Fiscal Earnings Estimates, 1990-1993E

	Fiscal	3/5/92	Fiscal Earnings*				P/E Ratios				March Qtr Estimates	
			Year	Price	Fiscal Earnings*		Absolute		Relative		Current Opinion	
					1991	1992E	1993E	1992E	1993E	1992E	1993E	
Mini-Based Vendors												
Data General	Sept	\$11.50	\$2.55	\$0.75	\$1.05	15.3 X	11.0 X	0.95 X	0.76 X	HOLD	\$0.16	\$0.60
Digital Equipment	June	58.25	3.17	(1.20)	2.00	NM	29.1	NM	2.02	SELL	(0.95)	0.94
Hewlett-Packard	Oct	73.88	3.42	5.00	6.00	14.8	12.3	0.91	0.85	BUY	1.27	0.93
Tandem Computers	Sept	12.63	0.34	0.30	0.45	42.1	28.1	2.60	1.94	HOLD	0.10	0.17
Micro-Based Vendors												
MIPS Computer	Dec	\$11.13	(\$0.37)	\$0.30	\$0.60	37.1 X	18.6 X	2.29 X	1.26 X	HOLD	\$0.00	\$0.02
Pyramid Technology	Sept	15.75	1.01	0.15	1.15	NM	13.7	NM	0.95	HOLD	0.00	0.41
Sequent Computer	Dec	14.38	(1.14)	0.45	1.00	32.0	14.4	1.98	1.00	BUY	0.02	0.30
Silicon Graphics	June	26.50	0.73	1.00	1.30	26.5	20.4	1.64	1.41	BUY	0.25	0.07
Stratus Computer	Dec	51.00	2.22	2.45	2.75	20.8	18.5	1.29	1.28	ATTR	0.42	0.35
Sun Microsystems	June	31.00	1.85	2.00	2.65	15.5	11.7	0.96	0.81	BUY	0.54	0.56
Design Automation												
Autodesk	Jan	\$28.00	\$2.30	\$2.25	\$2.45	12.4 X	11.4 X	0.77 X	0.79 X	HOLD	\$0.37	\$0.63
Cadence Design	Dec	21.88	0.62	1.20	1.75	18.2	12.5	1.13	0.87	BUY	0.17	0.16
Mentor Graphics	Dec	18.00	(0.80)	0.35	0.60	51.4	30.0	3.18	2.08	ATTR	0.03	(0.09)
Parametric Tech	Sept	25.75	0.38	0.60	0.95	42.9	27.1	2.65	1.88	ATTR	0.14	0.09
SDRC	Dec	20.75	0.60	0.75	0.95	27.7	21.8	1.71	1.51	ATTR	0.14	0.12
Viewlogic	Dec	19.25	0.27	0.65	NM	29.6	NM	1.83	NM	HOLD	0.08	0.01
IBM	Dec	\$86.38	\$3.69	\$7.00	\$9.25	12.3 X	9.3 X	0.76 X	0.65 X			
S&P 500	Dec	404.44	22.15	25.00	28.00	16.2	14.4	1.00	1.00			

* Excludes write-offs.

Calendar Earnings, P/E and Valuation Statistics, 1990-1993E

	3/5/92	Calendar Earnings*				P/E Ratios				Price to Rev (c) Book	
		Price	Calendar Earnings*			Absolute		Relative			
			1991	1992E	1993E	1992E	1993E	1992E	1993E	BOE(b)	
Mini-Based Vendors											
Data General	\$11.50	\$1.82	\$0.75	\$1.05	15.3 X	11.0 X	0.95 X	0.76 X	18%	0.33 X	0.78 X
Digital Equipment	58.25	1.89	1.00	3.50	58.3	18.8	3.60	1.15	(11)	0.51	0.97
Hewlett-Packard	73.88	3.40	5.20	6.40	14.2	11.5	0.88	0.80	12	1.25	2.47
Tandem Computers	12.63	0.30	0.50	0.75	25.3	18.8	1.56	1.17	3	0.71	1.17
Micro-Based Vendors											
MIPS Computer	\$11.13	(\$0.37)	\$0.30	\$0.60	37.1 X	18.6 X	2.29 X	1.26 X	-25%	1.64 X	2.28 X
Pyramid Technology	15.75	0.25	1.00	1.25	15.8	12.6	0.97	0.87	(7)	0.85	1.19
Sequent Computer	14.38	(1.14)	0.45	1.00	32.0	14.4	1.98	1.00	(27)	1.49	2.28
Silicon Graphics	26.50	0.78	1.18	1.40	22.8	18.9	1.38	1.31	8	2.01	2.53
Stratus Computer	51.00	2.22	2.45	2.75	20.8	18.5	1.29	1.28	18	2.55	3.74
Sun Microsystems	31.00	1.90	2.40	2.75	12.9	11.3	0.80	0.78	15	0.97	2.46
Design Automation											
Autodesk	\$28.00	\$2.25	\$1.75	\$2.45	16.0 X	11.4 X	0.99 X	0.79 X	27%	2.52 X	2.66 X
Cadence Design	21.88	0.62	1.20	1.75	18.2	12.5	1.13	0.87	14	2.94	3.81
Mentor Graphics	18.00	(0.80)	0.35	0.60	51.4	30.0	3.18	2.08	(21)	1.94	3.03
Parametric Tech	25.75	0.44	0.65	0.95	39.8	27.1	2.45	1.88	30	13.51	14.39
SDRC	20.75	0.60	0.75	0.95	27.7	21.8	1.71	1.51	22	4.11	6.46
Viewlogic	19.25	0.27	0.65	NM	29.6	NM	1.83	NM	11	4.94	5.83
IBM	\$86.38	\$3.69	\$7.00	9.25	12.3 X	9.3 X	0.76 X	0.65 X	3%	0.72 X	1.30 X
S&P 500	404.44	22.15	25.00	28.00	16.2	14.4	1.00	1.00	14	NA	NA

* Excludes write-offs.

(b) Trailing 4 quarter net income divided by average equity.

(a) Including extraordinary items and credits.

(c) Based on trailing 4 quarter revenue.

Table 3

Stock Price Performance, 1989-1992 to Date

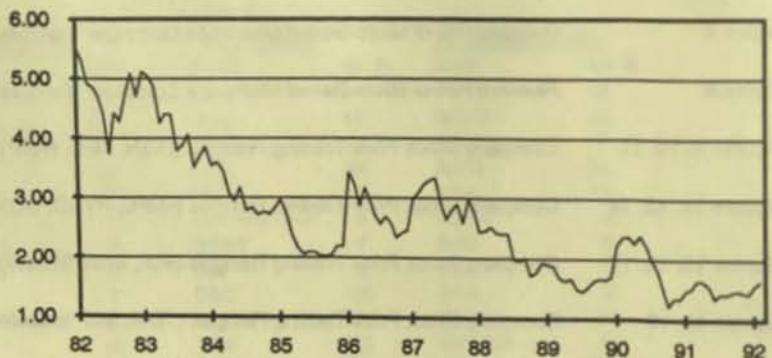
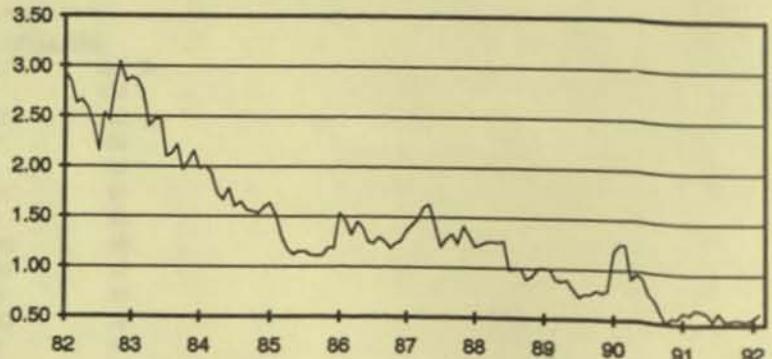
	Yearly Performance				
	1989	1990	1991	1992-to-Date (a)	
SQNT	116 %	ACAD	30 %	DGN	267 %
CDN	89	SUNW	24	PMTC	235
SGI	58	CDN	12	SDRC	127
TDM	38	SRA	1	SRA	115
ACAD	35	S&P 500 —	(7)	HWP	79
S&P 500 —	27	SGI	(8)	SGI	68
MENT	17	SQNT	(10)	SUNW	33
PYRD	13	MENT	(25)	S&P 500 —	26
SUNW	4	HWP	(33)	MENT	17
HWP	(11)	PYRD	(33)	MIPS	17
SRA	(16)	DEC	(33)	WANB	10
DEC	(17)	WANB	(49)	CDN	5
DGN	(32)	TDM	(49)	DEC	1
WANB	(41)	DGN	(64)	PYRD	(2)
				TDM	(3)
				SQNT	(24)
				ACAD	(32)
				SDRC	(28)
				DGN	(30)
	Quarterly Performance				
	2nd Qtr-91	3rd Qtr-91	4th Qtr-91	1st Qtr-92-to-Date	
DGN	13 %	SGI	50 %	PMTC	84 %
MENT	7	PMTC	38	SQNT	55
HWP	1	SDRC	35	CDN	41
TDM	1	DGN	31	SDRC	32
PMTC	(1)	PYRD	30	SRA	32
S&P 500 —	(1)	SRA	28	HWP	15
ACAD	(4)	SUNW	9	S&P 500 —	8
MIPS	(12)	S&P 500 —	4	MENT	7
SUNW	(12)	ACAD	3	SGI	6
DEC	(13)	CDN	1	DEC	(2)
SDRC	(13)	HWP	(2)	SUNW	(6)
SRA	(14)	DEC	(5)	TDM	(13)
WANB	(14)	TDM	(6)	DGN	(15)
SGI	(29)	MENT	(15)	MIPS	(20)
SQNT	(37)	SQNT	(21)	PYRD	(21)
CDN	(42)	MIPS	(23)	ACAD	(31)
PYRD	(49)			SDRC	(28)
				DGN	(30)
% Decline from 52-Week High(s)		% Increase from 52-Week Low(s)			
SQNT	62 %	PMTC	243 %		
ACAD	55	SGI	100		
DGN	49	SQNT	92		
MIPS	47	HWP	90		
PYRD	47	SRA	89		
CDN	37	MENT	57		
SDRC	31	CDN	51		
DEC	30	SUNW	49		
TDM	28	PYRD	47		
PMTC	28	MIPS	41		
VIEW	24	SDRC	39		
SUNW	20	DGN	35		
MENT	17	TDM	33		
SGI	10	VIEW	33		
SRA	6	S&P 500 —	30		
S&P 500 —	4	DEC	20		
HWP	4	ACAD	19		

(a) Based on closing prices on

3/5/92

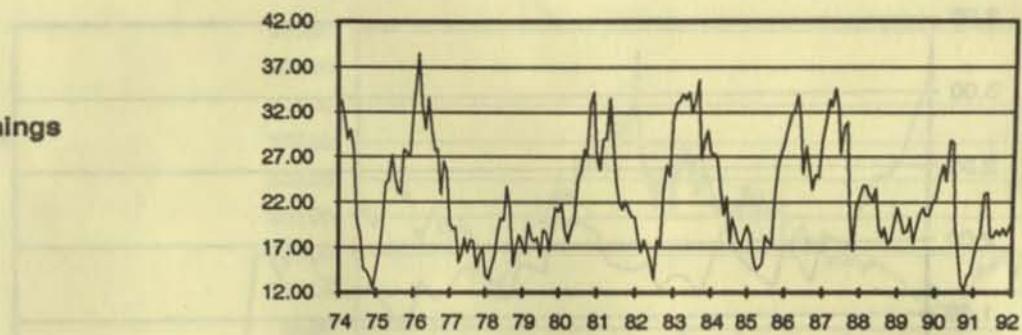
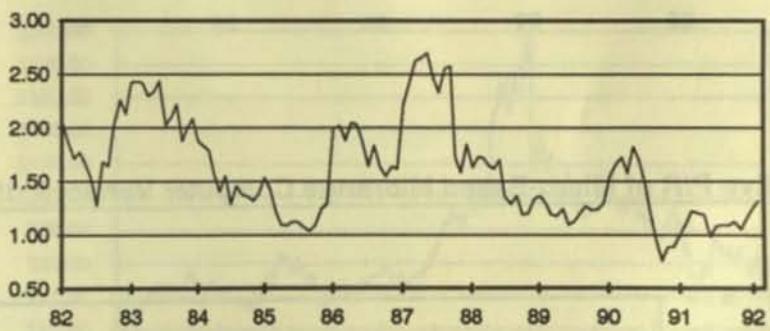
Midrange Computer Stock Price Trends

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Figures 1, 2 and 3**Relative P/E, Price to Revenue, and Price to Book Ratios: Midrange Computer Average *****Relative PE****Relative P/R****Relative Price/Book**

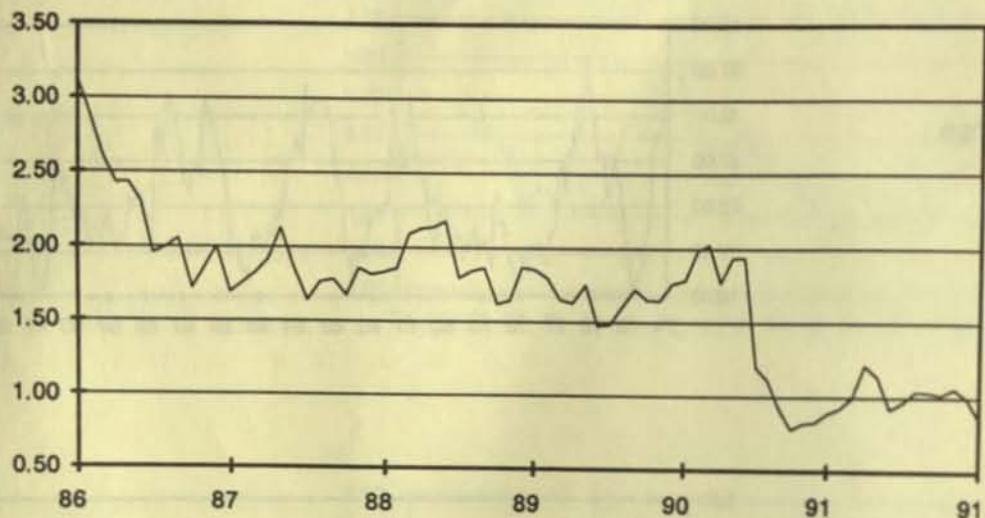
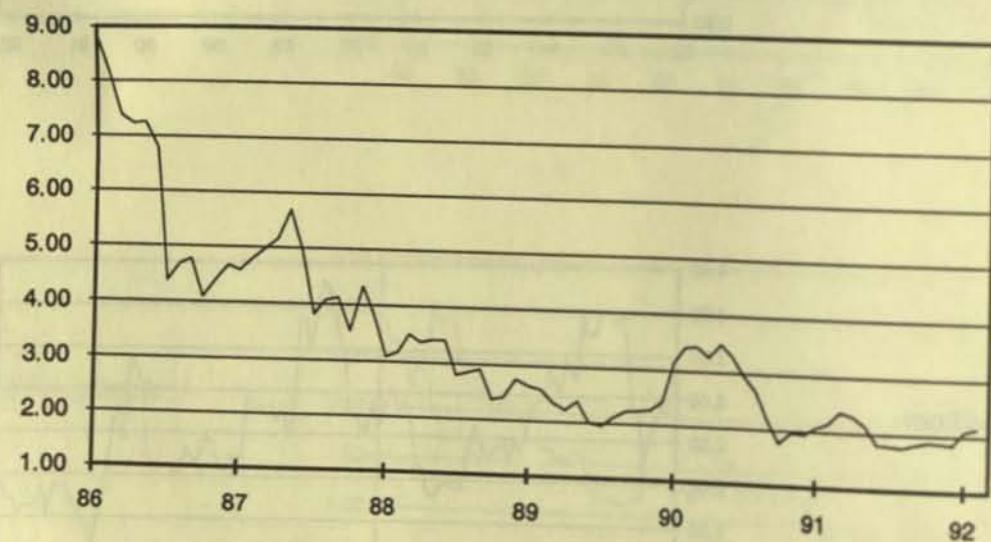
Includes DGN, DEC, HWP, MIPS, PRM (through 8/89), PYRD, SQNT, SGI, SUNW, TDM, WAHB (through 6/91).

Data contained in Appendix.

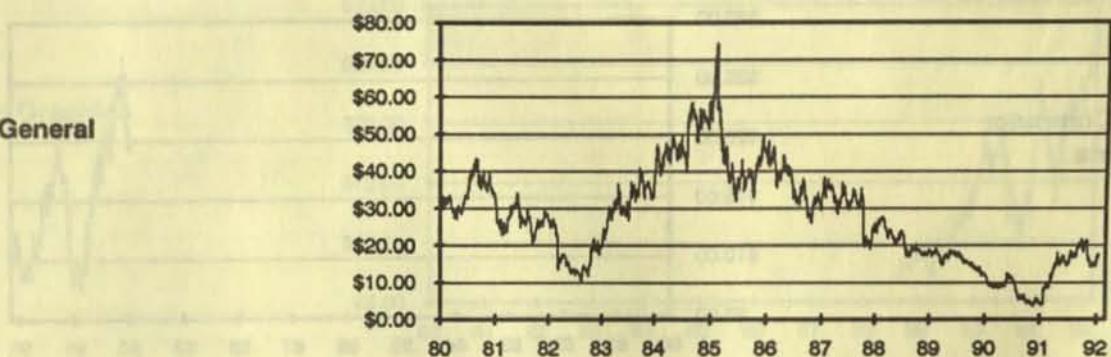
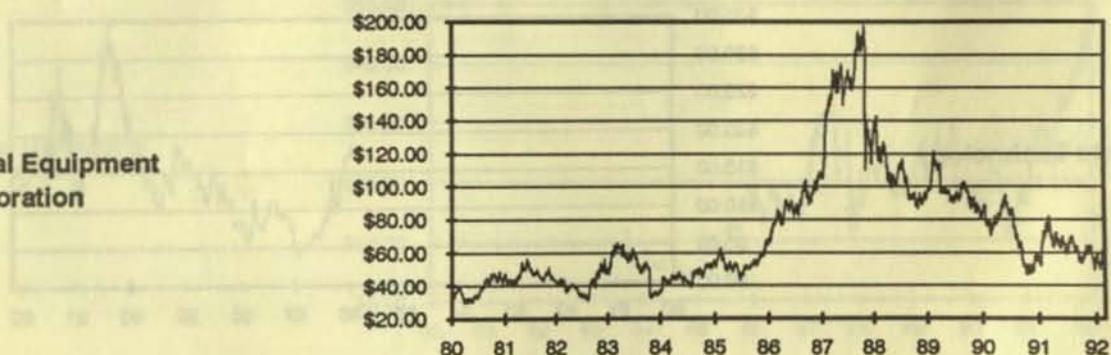
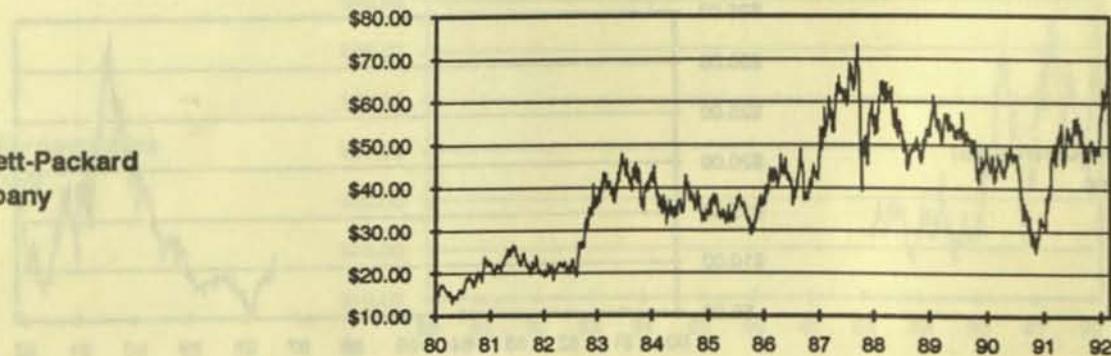
Figures 4, 5 and 6**P/E, Price to Revenue, and Price to Book Ratios: Midrange Computer Average *****Price to Earnings****Price to Revenues****Relative Price/Book**

Includes DGN, DEC, HWP, MIPS, PRM (through 8/89), PYRD, SQNT, SGI, SUNW, TDM, WANB (through 6/91).

Data contained in Appendix.

Figures 7 and 8**Relative P/E of Micro-Based Midrange Computer Vendors, 1986-1991 To Date****Relative P/R of Micro-Based Midrange Computer Vendors, 1986-1991***

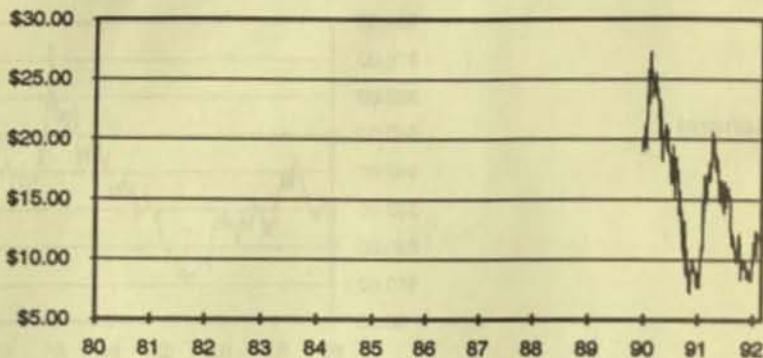
* Based on trailing 4 quarter earnings. Relative to the S&P 400. Group includes SRA (since 1/86), SUNW (since 7/86), BGI (since 7/87), SQNT (since 7/87), & PYRD (since 1/88). Data contained in Appendix.

Figures 9, 10, and 11**Company Stock Price Trading Ranges****Data General****Digital Equipment
Corporation****Hewlett-Packard
Company**

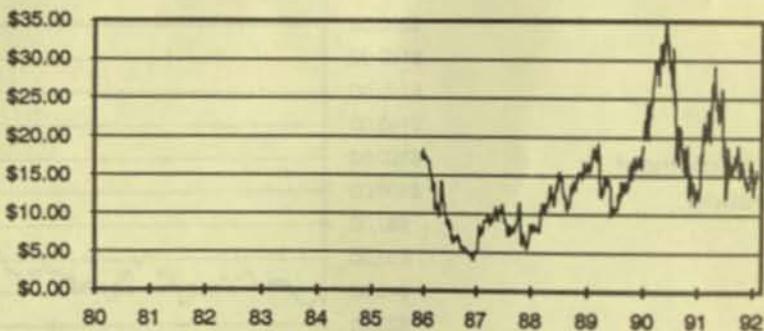
Figures 12, 13, and 14

Company Stock Price Trading Ranges

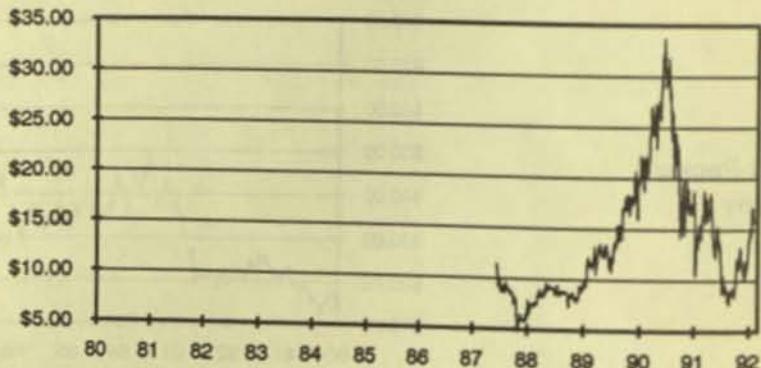
MIPS Computer
Systems



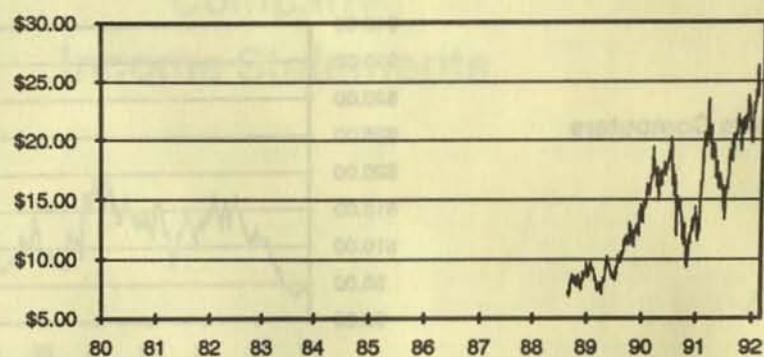
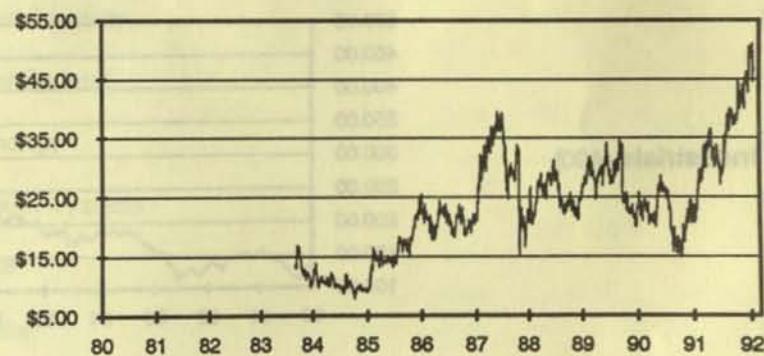
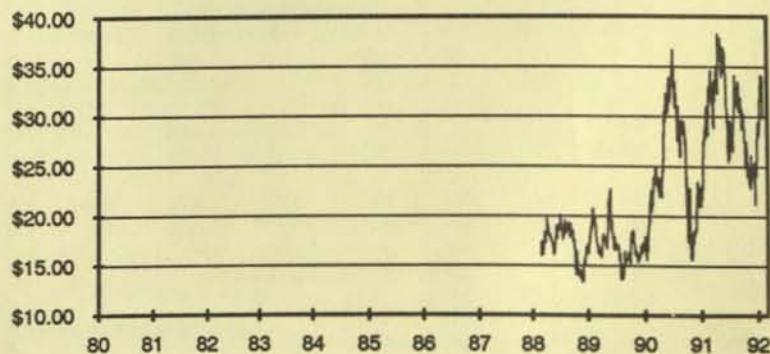
Pyramid Technology

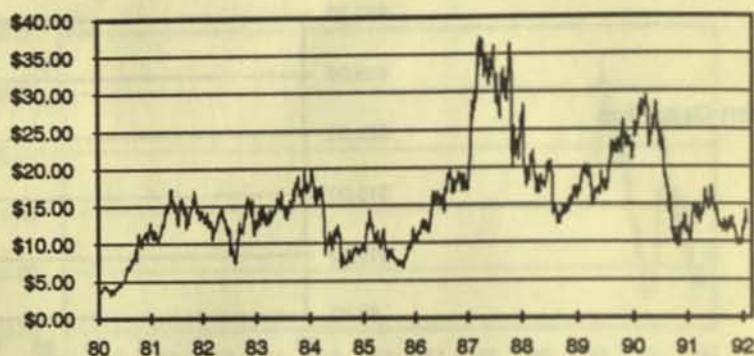
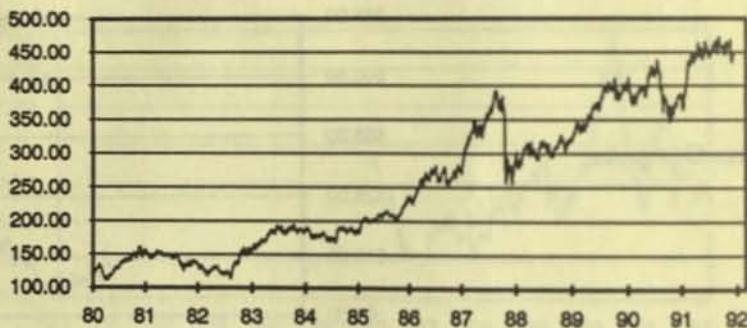


Sequent Computer
Systems



Figures 15, 16 and 17

Company Stock Price Trading Ranges**Silicon Graphics****Stratus Computer****Sun Microsystems
Company**

Figures 18 and 19**Company Stock and S&P 400 Price Trading Ranges****Tandem Computers****S&P Industrials (400)**

Company Income Statements

<u>Diagram</u>	<u>Title</u>	<u>Page</u>
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Table 4

Data General, Income Statement, 1991-1993E

	Fiscal 1991				Fiscal 1992				Fiscal Years		
	Dec	Mar	Jun(b)	Sept	Dec	Mar-E	Jun-E	Sept-E	1991	1992E	1993E
Product sales	\$199.3	\$207.8	\$198.2	\$191.2	\$185.5	\$189.0	\$193.0	\$197.0	\$797	\$765	\$765
Service	112.4	112.6	103.0	104.4	109.3	108.0	108.0	108.0	432	433	433
Total revenues	\$311.7	\$320.4	\$301.2	\$295.6	\$294.8	\$297.0	\$301.0	\$305.0	\$1,229	\$1,198	\$1,198
Cost of product	\$104.8	\$106.6	\$97.3	\$99.2	\$99.9	\$101.9	\$103.3	\$105.4	\$408	\$410	\$420
Cost of sales	65.5	64.7	60.6	60.8	66.4	65.3	65.3	65.3	252	262	260
Cost of revenues	\$170.3	\$171.3	\$157.9	\$160.0	\$166.3	\$167.2	\$168.6	\$170.7	\$660	\$673	\$680
SG&A	100.9	101.3	92.0	90.2	95.7	94.5	95.0	95.5	384	381	359
R&D	25.0	26.1	25.1	25.8	27.9	28.2	28.5	28.9	102	114	108
Operating profit	\$15.5	\$21.7	\$26.2	\$19.6	\$4.9	\$7.1	\$8.9	\$9.9	\$83.0	\$31	\$50.2
Operating margin	5.0%	6.8%	8.7%	6.6%	1.7%	2.4%	3.0%	3.2%	6.8%	2.6%	4.2%
Net interest	(\$1.8)	(\$2.0)	(\$0.6)	(\$0.1)	(\$0.4)	(\$0.5)	(\$0.5)	(\$0.5)	(\$5)	(\$2)	(\$5)
Extra item			13.0						13		
Pretax profit	\$13.7	\$19.7	\$38.6	\$19.5	\$4.5	\$6.6	\$8.4	\$9.4	\$92	\$29	\$45
Pretax margin	4.4%	6.1%	12.8%	6.6%	1.5%	2.2%	2.8%	3.1%	7.4%	2.4%	3.8%
Tax	\$1.3	\$0.5	\$3.0	\$1.1	\$0.5	\$1.0	\$1.3	\$1.4	\$6	\$4	\$7
Tax rate	9.5%	2.5%	7.8%	5.6%	11.1%	15.0%	15.0%	15.0%	6.4%	14.4%	15.0%
Net income	\$12.4	\$19.2	\$35.6	\$18.4	\$4.0	\$5.6	\$7.1	\$8.0	\$86	\$25	\$38
EPS	\$0.40	\$0.60	\$1.05	\$0.53	\$0.12	\$0.16	\$0.20	\$0.22	\$2.61	\$0.73	\$1.03
Shrs used in calc	30.7	31.8	33.8	41.1	34.5	41.5	42.0	42.5	34.4	40.1	43.5
<u>As a % of Revenues</u>											
Sales	63.9%	64.9%	65.8%	64.7%	62.9%	63.6%	64.1%	64.6%	64.8%	63.8%	63.8%
Service	36.1	35.1	34.2	35.3	37.1	36.4	35.9	35.4	35.2	36.2	36.2
Product GM	47.4%	48.7%	50.9%	48.1%	46.1%	46.1%	46.5%	46.5%	48.8%	46.3%	45.0%
Service GM	41.7	42.5	41.2	41.8	39.2	39.5	39.5	39.5	41.8	38.4	40.0
Gross margin	45.4%	46.5%	47.6%	45.9%	43.6%	43.7%	44.0%	44.0%	46.3%	43.8%	43.2%
SG&A	32.4	31.6	30.5	30.5	32.5	31.8	31.6	31.3	31.3	31.8	30.0
R&D	8.0	8.1	8.3	8.7	9.5	9.5	9.5	9.5	8.3	9.5	9.0
Net income	4.0	6.0	11.8	6.2	1.4	1.9	2.4	2.6	7.0	2.1	3.2
<u>Year-Over-Year Growth</u>											
Product sales	7%	1%	1%	-3%	-7%	-9%	-3%	3%	2%	-4%	0%
Service	8	3	(3)	(7)	(3)	(4)	5	3	0	0	0
Total revenues	7	2	0	(4)	(5)	(7)	0	3	1	(3)	0
Operating Profit	NM	NM	NM	NM	(68)	(67)	(66)	(50)	NM	(63)	63
Pretax Profit	NM	NM	NM	NM	(67)	(67)	(78)	(52)	NM	(68)	57
Net Income	NM	NM	NM	NM	(68)	(71)	(80)	(57)	NM	(71)	56
EPS	NM	NM	NM	NM	(71)	(74)	(81)	(58)	NM	(72)	41
<u>Sequential Qtr-to-Qtr Growth</u>											
Product sales	1%	4%	-5%	-4%	-3%	2%	2%	2%			
Service	1	0	(9)	1	5	(1)	0	0			
Total revenues	1	3	(6)	(2)	0	1	1	1			
SG&A	(9)	0	(9)	(2)	6	(1)	1	1			
R&D	(28)	4	(4)	3	8	1	1	1			

Table 5

Digital Equipment Corp, Income Statement, 1991-1993E

	Fiscal 1991				Fiscal 1992				Fiscal Years		
	Sept	Dec	Mar	Jun	Sept	Dec	Mar-E	Jun-E	1991	1992E	1993E
Sales	\$1,866	\$1,989	\$2,100	\$2,343	\$1,863	\$1,939	\$1,890	\$2,238	\$8,299	\$7,930	\$7,930
Service	1,228	1,363	1,420	1,602	1,430	1,540	1,575	1,762	5,612	6,307	6,938
Total revenues	\$3,093	\$3,352	\$3,520	\$3,945	\$3,293	\$3,479	\$3,465	\$4,000	\$13,911	\$14,238	\$14,868
Cost of sales	\$878	\$924	\$989	\$1,114	\$908	\$1,093	\$1,058	\$1,209	\$3,905	\$4,267	\$4,203
Cost of service	780	823	860	910	888	939	961	1,022	3,373	3,810	4,232
Cost of revenues	\$1,658	\$1,747	\$1,850	\$2,024	\$1,796	\$2,031	\$2,019	\$2,230	\$7,278	\$8,077	\$8,435
SG&A	1,024	1,068	1,101	1,281	1,052	1,176	1,155	1,230	4,472	4,612	4,400
R&D	402	404	398	446	409	420	420	420	1,649	1,669	1,636
Operating profit	\$10	\$136	\$172	\$194	\$37	(\$148)	(\$129)	\$120	\$512	(\$121)	\$398
Operating margin	0.3%	4.0%	4.9%	4.9%	1.1%	-4.2%	-3.7%	3.0%	3.7%	-0.8%	2.7%
Net interest	\$25	\$20	\$8	\$16	\$21	\$12	\$16	\$16	\$69	\$64	\$65
Restruct charge				(1,100)					(1,100)		
Pretax profit	\$35	\$156	\$180	(\$890)	\$57	(\$136)	(\$113)	\$136	(\$519)	(\$56)	\$463
Pretax margin	1.1%	4.6%	5.1%	-22.6%	1.7%	-3.9%	-3.3%	3.4%	-3.7%	-0.4%	3.1%
Taxes	\$9	\$45	\$63	(\$18)	\$29	\$3	\$5	\$61	\$98	\$97	\$208
Tax rate	25.0%	28.7%	35.0%	NA	50.0%	NA	-4.4%	45.0%	NA	NA	45.0%
Net income	\$26	\$111	\$117	(\$871)	\$29	(\$138)	(\$118)	\$75	(\$617)	(\$153)	\$254
EPS	\$0.21	\$0.92	\$0.94	(\$7.08)	\$0.23	(\$1.11)	(\$0.95)	\$0.60	(\$5.08)	(\$1.22)	\$2.02
EPS excl charge					\$1.10					\$3.17	
Average shares	124	121	124	123	127	124	125	125	123	125	126
<u>As a % of Revenues</u>											
Sales	60.3%	59.3%	59.7%	59.4%	56.6%	55.7%	54.5%	56.0%	59.7%	55.7%	53.3%
Service	39.7	40.7	40.3	40.6	43.4	44.3	45.5	44.0	40.3	44.3	46.7
Sales gross margin	52.9	53.5	52.9	52.5	51.3	43.7	44.0	46.0	52.9	46.2	47.0
Srvc gross margin	36.5	39.6	39.4	43.2	37.9	39.0	39.0	42.0	39.9	39.6	39.0
Total gross margin	46.4	47.9	47.5	48.7	45.5	41.6	41.7	44.2	47.7	43.3	43.3
SG&A	33.1	31.8	31.3	32.5	31.9	33.8	33.3	30.8	32.1	32.4	29.6
R&D	13.0	12.0	11.3	11.3	12.4	12.1	12.1	10.5	11.9	11.7	11.0
Net income	0.8	3.3	3.3	(22.1)	0.9	(4.0)	(3.4)	1.9	(4.4)	(1.1)	1.7
<u>Year-Over-Year Growth</u>											
Sales	-6%	-1%	1%	13%	0%	-3%	-10%	-4%	2%	-4%	0%
Service	8	16	20	23	16	13	11	10	17	12	10
Total revenues	(1)	5	8	17	6	4	(2)	1	7	2	4
Operating profit	(94)	(21)	24	154	262	(209)	(175)	(38)	(9)	(124)	NM
Net income	(83)	(28)	369	NM	9	(224)	(201)	NM	(930)	NM	NM
EPS	(82)	(26)	372	NM	7	(222)	(200)	NM	(949)	NM	NM
<u>Sequential Qtr-to-Qtr Growth</u>											
Sales	-10%	7%	6%	12%	-20%	4%	-3%	18%	Seems general		
Service	(6)	11	4	13	(11)	8	2	12			
Total revenues	(8)	8	5	12	(17)	6	0	15			

Table 6

Hewlett-Packard Company, Income Statement, 1991-1993E

	Fiscal 1991				Fiscal 1992				Fiscal Years		
	Jan	Apr	July	Oct (a)	Jan	Apr-E	July-E	Oct-E	1991	1992E	1993E
Sales	\$2,575	\$2,835	\$2,660	\$2,949	\$2,914	\$3,139	\$2,966	\$3,430	\$11,019	\$12,449	\$14,316
Service	833	895	864	883	949	1,011	978	1,025	3,475	3,962	4,596
Revenues	\$3,408	\$3,730	\$3,524	\$3,832	\$3,863	\$4,150	\$3,943	\$4,455	\$14,494	\$16,411	\$18,912
Cost of sales	\$1,821	\$1,998	\$1,911	\$2,078	\$2,053	\$2,220	\$2,109	\$2,383	\$7,806	\$8,766	\$10,212
SG&A	939	997	951	1,011	972	1,020	1,000	1,075	3,898	4,067	4,482
R&D	343	368	359	383	363	415	394	446	1,453	1,618	1,891
Operating profit	\$305	\$367	\$303	\$380	\$475	\$495	\$439	\$551	\$1,335	\$1,980	\$2,326
Operating margin	8.9%	9.8%	8.6%	9.4%	12.3%	11.9%	11.1%	12.4%	9.2%	11.9%	12.3%
Net interest, other	\$1	(\$19)	(\$17)	(\$23)	(\$18)	(\$15)	(\$15)	(\$15)	(\$58)	(\$63)	(\$40)
Extraordinary item				(\$150)					(\$150)		
Pretax profit	\$306	\$348	\$286	\$188	\$457	\$480	\$424	\$536	\$1,128	\$1,897	\$2,268
Pretax margin	9.0%	9.3%	8.1%	4.9%	11.8%	11.6%	10.8%	12.0%	7.8%	11.6%	12.1%
Tax	\$101	\$115	\$94	\$62	\$151	\$158	\$140	\$177	\$372	\$626	\$754
Tax rate	33.0%	33.0%	32.9%	33.1%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%
Net income	\$205	\$233	\$182	\$126	\$306	\$321	\$284	\$359	\$758	\$1,271	\$1,532
EPS	\$0.63	\$0.93	\$0.76	\$0.50	\$1.21	\$1.27	\$1.11	\$1.40	\$3.02	\$4.99	\$5.98
EPS excl charge				\$0.90					\$3.42		
Avg. shares	247	250	252	252	253	254	255	256	250	255	256
<u>As a % of Revenues</u>											
Sales	75.6%	76.0%	75.5%	77.0%	75.4%	75.6%	75.2%	77.0%	76.0%	75.9%	75.7%
Service	24.4	24.0	24.5	23.0	24.6	24.4	24.8	23.0	24.0	24.1	24.3
Gross margin	46.6	46.4	45.8	45.8	46.9	46.5	46.5	46.5	46.1	46.6	46.0
SG&A	27.6	26.7	27.0	26.4	25.2	24.6	25.4	24.1	26.9	24.8	23.7
R&D	10.1	9.9	10.2	10.0	9.4	10.0	10.0	10.0	10.0	9.9	10.0
Net income	6.0	6.2	5.4	3.3	7.9	7.7	7.2	8.1	5.2	7.7	8.1
<u>Year-Over-Year Growth</u>											
Sales	7%	11%	7%	7%	13%	11%	12%	16%	8%	13%	15%
Service	21	18	15	8	14	13	13	16	15	14	16
Revenues	10	13	9	7	13	11	12	16	10	13	15
SG&A	7	6	4	4	4	2	5	6	5	4	10
R&D	7	9	5	4	6	13	10	16	6	11	17
R&D + SG&A	7	7	4	4	4	5	6	9	5	6	12
Operating profit	11	25	10	13	56	35	45	53	15	47	19
Net income	18	25	8	(38)	49	38	48	186	2	68	21
EPS	15	19	4	(40)	46	36	46	182	(1)	65	20
<u>Sequential Qtr-to-Qtr Growth</u>											
Sales	-7%	10%	-6%	11%	-1%	8%	-5%	16%			
Service	2	7	(3)	2	7	7	(3)	5			
Revenues	(5)	9	(6)	9	1	7	(5)	13			

(a) Expenses exclude charges associated with voluntary severance program.

Table 7

MIPS Computer Systems, Income Statement, 1991-1993E

tough to
forecast

	1991				1992				Years		
	Mar	Jun	Sept	Dec	Mar-E	Jun-E	Sept-E	Dec-E	1991	1992E	1993E
Product revenue	\$27.8	\$32.9	\$29.5	\$39.5	\$33.6	\$39.5	\$37.0	\$47.4	\$129.7	\$157.5	\$196.9
Technology revs	16.2	11.6	3.2	7.8	8.0	8.0	8.0	8.0	38.8	32.0	32.0
Total revenues	\$44.0	\$44.5	\$32.7	\$47.3	\$41.6	\$47.5	\$45.0	\$55.4	\$168.5	\$189.5	\$228.9
Cost of products	\$17.6	\$20.5	\$19.6	\$22.1	\$19.8	\$22.1	\$20.5	\$25.0	\$79.8	\$87.4	\$102.4
Cost of technology	3.2	2.3	0.6	1.6	1.6	1.6	1.6	1.6	7.8	6.4	6.4
Cost of revenue	\$20.8	\$22.9	\$20.2	\$23.6	\$21.4	\$23.7	\$22.1	\$26.6	\$87.5	\$93.8	\$108.8
SG&A	14.8	14.6	13.9	12.5	12.0	12.0	12.0	13.0	55.7	49.0	59.5
R&D	8.3	8.9	8.7	9.0	8.8	9.0	9.1	9.2	35.0	36.1	36.6
Oper profit	\$0.0	(\$1.8)	(\$10.1)	\$2.2	(\$0.6)	\$2.7	\$1.9	\$6.6	(\$9.7)	\$10.6	\$24.0
Oper mgn	0.1%	-4.1%	-30.9%	4.7%	-1.5%	5.8%	4.1%	12.0%	-5.7%	5.6%	10.5%
Other	\$0.9	\$0.9	\$0.6	\$0.6	\$0.6	\$0.6	\$0.5	\$0.5	\$3.1	\$2.2	\$0.6
Extraordinary item			(\$25.5)						(\$25.5)		
Pretax profit(a)	\$1.0	(\$0.9)	(\$35.0)	\$2.8	\$0.0	\$3.3	\$2.4	\$7.1	(\$32.1)	\$12.8	\$24.6
Pretax mgn	2.3%	-2.1%	-107.0%	6.0%	0.0%	7.0%	5.2%	12.9%	-19.1%	6.8%	10.7%
Tax	\$0.4	(\$0.3)	\$2.3	\$0.2	\$0.0	\$1.2	\$0.8	\$2.5	\$2.6	\$4.5	\$8.6
Tax rate	37.0%	36.6%	NA	8.5%	NA	35.0%	35.0%	35.0%	-7.9%	35.1%	35.0%
Net income	\$0.6	(\$0.6)	(\$37.3)	\$2.6	\$0.0	\$2.2	\$1.5	\$4.6	(\$34.7)	\$8.3	\$16.0
EPS(a)	\$0.02	(\$0.03)	(\$1.55)	\$0.10	\$0.00	\$0.08	\$0.06	\$0.17	(\$1.40)	\$0.32	\$0.59
EPS excl ex-item			(\$0.49)						(\$0.37)		
Average shares	25.6	23.6	24.1	26.0	26.0	26.2	26.4	26.6	24.8	26.3	27.0
<u>As a % of Revenues</u>											
Product revenue	63.2%	73.9%	90.2%	83.6%	80.8%	83.2%	82.2%	85.6%	77.0%	83.1%	68.8%
Technology revs	36.8	26.1	9.8	16.4	19.2	16.8	17.8	14.4	23.0	16.9	14.0
Product GM	36.7%	37.6%	33.7%	44.1%	41.0%	43.9%	44.7%	47.3%	38.5%	44.5%	48.0%
Technology GM	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
Gross margin	52.6	48.7	38.2	50.0	48.5	50.0	51.0	52.0	48.1	50.5	52.5
SG&A	33.6	32.7	42.4	26.4	28.8	25.3	26.7	23.5	33.0	25.9	26.0
R&D	19.0	20.1	26.7	18.9	21.1	19.0	20.2	16.6	20.8	19.0	16.0
Net income	1.4	(1.3)	(114.0)	5.5	0.0	4.6	3.4	8.4	(20.6)	4.4	7.0
<u>Year-Over-Year Growth</u>											
Product sales	48%	16%	17%	18%	21%	20%	25%	20%	23%	21%	25%
Technology revs	20	3	(74)	(19)	(51)	(31)	149	3	(17)	(18)	0
Total revenues	36	13	(13)	10	(5)	7	38	17	11	12	21
<u>Sequential Qtr-to-Qtr Growth</u>											
Product revenue	-17%	18%	-10%	34%	-15%	17%	-6%	28%			
Technology revs	69	(28)	(72)	142	3	0	0	0			
Total revenues	2	1	(27)	44	(12)	14	(5)	23			

Table 8

Pyramid Technology, Income Statement, 1991-1993E

	Fiscal 1991				Fiscal 1992				Fiscal Years		
	Dec	Mar	Jun	Sept	Dec	Mar-E	Jun-E	Sept-E	1991	1992E	1993E
Product sales	\$44.0	\$44.7	\$42.9	\$46.9	\$36.4	\$39.5	\$43.0	\$49.0	\$178.6	\$167.9	\$193.1
Service	11.7	13.5	12.0	12.2	13.0	14.0	15.0	16.0	49.4	58.0	69.6
Total revenues	\$55.7	\$58.2	\$54.9	\$59.1	\$49.4	\$53.5	\$58.0	\$65.0	\$227.9	\$225.9	\$262.7
Cost of sales	18.5	19.8	20.5	23.2	18.7	19.4	20.6	23.1	82.1	81.8	89.5
Cost of service	9.4	10.4	9.8	9.7	10.8	11.1	11.9	12.6	39.3	46.4	55.0
Cost of revenues	\$27.8	\$30.2	\$30.4	\$32.9	\$29.5	\$30.5	\$32.5	\$35.8	\$121.4	\$128.2	\$144.5
SG&A	16.0	16.5	17.1	16.2	17.0	16.1	16.0	16.5	65.8	65.6	70.9
R&D	5.4	5.0	7.1	6.8	7.5	7.0	6.8	7.5	24.3	28.8	28.9
Operating profit	\$6.5	\$6.4	\$0.3	\$3.3	(\$4.5)	(\$0.1)	\$2.7	\$5.3	\$16.5	\$3.3	\$18.4
Operating margin	11.7%	11.0%	0.6%	5.5%	-9.2%	-0.2%	4.7%	8.1%	7.2%	1.5%	7.0%
Other income	\$0.6	\$0.3	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$1.2	\$0.4	\$0.1
Extraordinary chrg					\$18.6					\$18.6	
Pretax profit	\$7.2	\$6.8	\$0.4	\$3.4	(\$23.1)	\$0.0	\$2.8	\$5.4	\$17.7	(\$14.9)	\$18.5
Pretax margin	12.8%	11.6%	0.8%	5.7%	-46.7%	0.0%	4.9%	8.2%	7.8%	-6.6%	7.0%
Tax	\$2.5	\$1.9	\$0.0	\$1.2	(\$4.6)	\$0.0	\$0.6	\$1.1	\$5.7	(\$3.0)	\$3.7
Tax rate	35.0%	28.8%	0.0%	36.0%	NM	20.0%	20.0%	20.0%	32.0%	20.1%	20.0%
Net income	\$4.6	\$4.8	\$0.4	\$2.2	(\$18.5)	\$0.0	\$2.3	\$4.3	\$12.0	(\$11.9)	\$14.8
EPS	\$0.40	\$0.41	\$0.03	\$0.18	(\$1.56)	\$0.00	\$0.18	\$0.33	\$1.01	(\$0.95)	\$1.14
EPS excl charge					(\$0.37)				\$0.17		
Average shares	11.5	11.8	12.2	12.0	11.8	12.5	12.7	13.0	11.9	12.5	13.0
<u>As a % of Revenues</u>											
Product sales	78.9%	76.9%	78.2%	79.4%	73.7%	73.8%	74.1%	75.4%	78.3%	74.3%	73.5%
Service	21.1	23.1	21.8	20.6	26.3	26.2	25.9	24.6	21.7	25.7	26.5
Prod gross margin	58.0	55.6	52.1	50.6	48.7	50.8	52.0	52.8	54.0	51.3	53.7
Serv gross margin	20.4	23.0	17.9	20.3	16.7	21.0	21.0	21.0	20.4	20.0	21.0
Gross margins	50.1	48.1	44.6	44.3	40.3	43.0	44.0	45.0	46.8	43.2	45.0
SG&A	28.7	28.4	31.1	27.3	34.4	30.1	27.8	25.4	28.9	29.0	27.0
R&D	9.7	8.7	12.9	11.4	15.1	13.1	11.7	11.5	10.7	12.7	11.0
Net income	8.3	8.3	0.8	3.7	(37.3)	0.0	3.9	6.6	5.3	(5.3)	5.6
<u>Year Over Year Growth</u>											
Product sales	50%	35%	6%	3%	-17%	-12%	0%	4%	20%	-6%	15%
Service	104	86	45	20	11	4	25	31	57	17	20
Total revenues	59	44	13	6	(11)	(8)	6	10	27	(1)	16
Operating profit	46	20	(94)	(51)	(170)	(101)	719	61	(25)	(80)	451
Net income	49	35	(91)	(59)	(497)	(100)	431	98	(28)	(199)	NM
EPS	16	8	(92)	(61)	(486)	(100)	410	82	(37)	(194)	NM
<u>Sequential Qtr-to-Qtr Growth</u>											
Revenues	0%	4%	-6%	8%	-16%	8%	8%	12%			
SG&A	(1)	3	3	(5)	5	(5)	(1)	3			
R&D	(2)	(6)	40	(4)	10	(6)	(3)	10			

Table 9

Sequent Computer Systems, Income Statement, 1991-1993E

	1991				1992				Years		
	Mar	Jun	Sept	Dec	Mar-E	Jun-E	Sept-E	Dec-E	1991	1992E	1993E
Product sales	\$40.7	\$41.9	\$44.2	\$51.5	\$50.5	\$56.0	\$54.5	\$62.0	\$178.3	\$223.0	\$278.8
Service	7.2	8.2	9.6	10.0	10.5	11.0	11.5	13.0	35.0	46.0	59.8
Total revenues	\$47.9	\$50.1	\$53.8	\$61.5	\$61.0	\$67.0	\$66.0	\$75.0	\$213.3	\$269.0	\$338.6
Cost of Sales-E	\$19.6	\$21.6	\$23.7	\$25.5	\$24.4	\$25.8	\$24.3	\$26.9	\$90.4	\$101.4	\$119.9
Cost of Service-E	5.4	6.0	7.0	7.0	7.4	7.7	8.1	9.1	25.4	32.2	41.9
Cost of Revenues	\$25.0	\$27.6	\$30.7	\$32.5	\$31.7	\$33.5	\$32.3	\$36.0	\$115.8	\$133.6	\$161.7
SG&A	25.2	27.0	25.2	22.2	22.2	24.2	24.5	25.5	99.5	96.4	115.1
R&D	7.0	7.3	6.2	5.3	5.5	5.5	5.8	6.3	25.8	23.1	28.8
Operating profit	(\$9.3)	(\$11.8)	(\$8.3)	\$1.5	\$1.6	\$3.8	\$3.4	\$7.2	(\$27.9)	\$15.9	\$32.9
Operating margin	-19.4%	-23.4%	-15.5%	2.5%	2.6%	5.7%	5.1%	9.6%	-13.1%	5.9%	9.7%
Net Interest	(\$0.5)	(\$0.5)	(\$0.7)	(\$0.9)	(\$1.0)	(\$1.0)	(\$1.0)	(\$1.0)	(\$2.6)	(\$4.0)	(\$5.0)
Extraordinary item			(7.6)	(14.6)					(22.2)		
Pretax profit	(\$9.8)	(\$19.9)	(\$23.6)	\$0.6	\$0.6	\$2.8	\$2.4	\$6.2	(\$52.4)	\$11.9	\$27.9
Pretax margin	-20.4%	-39.8%	-43.9%	1.0%	1.0%	4.2%	3.6%	8.3%	-24.6%	4.4%	8.3%
Tax	(\$2.8)	(\$0.2)	(\$0.5)	(\$0.4)	\$0.1	\$0.3	\$0.2	\$0.6	(\$3.7)	\$1.2	\$2.8
Tax rate	28.9%	0.9%	1.9%	NA	10.0%	10.0%	10.0%	10.0%	7.1%	10.0%	10.0%
Net income	(\$7.0)	(\$19.7)	(\$23.2)	\$1.0	\$0.5	\$2.5	\$2.1	\$5.6	(\$48.7)	\$10.7	\$25.1
EPS	(\$0.30)	(\$0.86)	(\$0.99)	\$0.04	\$0.02	\$0.11	\$0.09	\$0.23	(\$2.10)	\$0.45	\$1.01
EPS excl charge			(\$0.52)	(\$0.36)					(\$1.14)		
Avg shares	22.9	23.1	23.3	24.4	23.5	23.7	23.9	24.1	23.2	24.0	25.0
<u>As a Percent of Revenues</u>											
Product sales	85.0%	83.6%	82.1%	83.7%	82.8%	83.6%	82.6%	82.7%	83.6%	82.9%	82.3%
Service	15.0	16.4	17.9	16.3	17.2	16.4	17.4	17.3	16.4	17.1	17.7
GM Sales	51.8	48.4	46.4	50.5	51.7	53.9	55.4	56.6	49.3	54.5	57.0
GM Service	25.0	27.0	27.0	30.0	30.0	30.0	30.0	30.0	27.4	30.0	30.0
Gross Margin	47.8	44.9	43.0	47.1	48.0	50.0	51.0	52.0	45.7	50.3	52.2
<i>Improvement key to profits</i>											
SG&A	52.5	53.9	46.8	36.1	36.4	36.1	37.1	34.0	46.7	35.8	34.0
R&D	14.7	14.5	11.6	8.6	9.0	8.2	8.8	8.4	12.1	8.6	8.5
<u>Year-Over-Year Growth</u>											
Product sales	-14%	-23%	-29%	-24%	24%	34%	23%	20%	-23%	25%	25%
Service	112	116	113	89	46	34	20	30	106	31	30
Revenues	(6)	(14)	(19)	(16)	27	34	23	22	(14)	26	26
SG&A	38	24	2	(26)	(12)	(10)	(3)	15	4	(3)	19
R&D	33	18	(11)	(26)	(22)	(24)	(7)	20	0	(10)	25
Operating profit	(238)	(254)	(207)	(38)	NM	NM	NM	370	(213)	NM	107
Pretax profit	(246)	(344)	(376)	(77)	NM	NM	NM	886	(300)	NM	134
Net income	(251)	(445)	(489)	(60)	NM	NM	NM	442	(358)	NM	134
EPS	(240)	(456)	(504)	(60)	NM	NM	NM	448	(359)	NM	125
<u>Sequential Qtr-to-Qtr Growth</u>											
Revenues	-35%	5%	7%	14%	-1%	10%	-1%	14%			
SG&A	(18)	7	(7)	(12)	0	9	1	4			
R&D	(4)	3	(14)	(16)	4	0	5	9			

Table 10

Silicon Graphics, Income Statement, 1991-1993E

	Fiscal 1991				Fiscal 1992				Fiscal Years		
	Sept	Dec	Mar	Jun	Sept	Dec	Mar-E	Jun-E	1991	1992E	1993E
Net revenues	\$115.8	\$136.0	\$133.1	\$165.1	\$151.7	\$188.0	\$195.0	\$218.0	\$549.9	\$752.8	\$978.6
Cost of sales	\$48.9	\$62.1	\$63.5	\$78.8	\$71.0	\$90.3	\$93.6	\$104.6	\$253.3	\$359.5	\$469.7
SG&A	39.2	44.6	49.7	54.3	50.3	56.7	60.0	63.0	187.8	230.0	293.6
R&D	14.3	15.7	16.1	19.2	18.8	22.8	23.4	26.2	65.3	91.2	117.4
Operating profit	\$13.4	\$13.6	\$3.8	\$12.8	\$11.6	\$18.3	\$18.0	\$24.2	\$43.6	\$72.1	\$97.9
Operating margin	11.6%	10.0%	2.8%	7.7%	7.7%	9.7%	9.2%	11.1%	7.9%	9.6%	10.0%
Net interest	\$0.9	\$1.0	\$0.8	\$1.5	\$2.0	\$2.3	\$1.0	\$1.0	\$4.1	\$6.3	\$2.0
Pretax profit	\$14.3	\$14.6	\$4.5	\$14.2	\$13.6	\$20.6	\$19.0	\$25.2	\$47.7	\$78.4	\$99.9
Pretax margin	12.4%	10.8%	3.4%	8.6%	9.0%	11.0%	9.7%	11.6%	8.7%	10.4%	10.2%
Tax	\$4.7	\$4.2	\$1.4	\$4.4	\$4.2	\$6.4	\$5.9	\$7.8	\$14.8	\$24.3	\$31.0
Tax rate	33.0%	29.0%	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%
Net income	\$9.6	\$10.4	\$3.1	\$9.8	\$9.4	\$14.2	\$13.1	\$17.4	\$32.9	\$54.1	\$68.9
Pfd stock div					\$1.7	\$1.7					\$3.4
Fully diluted EPS	\$0.22	\$0.24	\$0.07	\$0.19	\$0.15	\$0.24	\$0.25	\$0.33	\$0.73	\$0.98	\$1.28
Fully diluted shrs	45.1	44.0	42.8	48.7	50.7	51.6	52.4	53.0	46.1	51.9	54.0
<u>As a % of Revenues</u>											
Gross margin	57.8%	54.3%	52.3%	52.3%	53.2%	52.0%	52.0%	52.0%	53.9%	52.2%	52.0%
SG&A	33.8	32.8	37.4	32.9	33.1	30.2	30.8	28.9	34.2	30.6	30.0
R&D	12.4	11.5	12.1	11.6	12.4	12.1	12.0	12.0	11.9	12.1	12.0
Net interest	0.8	0.7	0.6	0.9	1.3	1.2	0.5	0.5	0.8	0.8	0.2
Net income	8.3	7.6	2.4	6.0	6.2	7.6	6.7	8.0	6.0	7.2	7.0
<u>Year-Over-Year Growth</u>											
Total revenues	34%	32%	21%	37%	31%	38%	47%	32%	31%	37%	30%
SG&A	47	37	37	28	28	27	21	16	36	22	28
R&D	43	51	32	47	31	45	46	37	43	40	29
Operating profit	87	25	(72)	(18)	(13)	34	378	89	(7)	65	36
Pretax profit	81	38	(65)	(15)	(5)	41	319	77	(1)	64	27
Net income	84	44	(64)	(12)	(2)	37	319	77	2	64	27
EPS	53	25	(69)	(14)	(31)	0	285	73	(12)	35	31
<u>Sequential Qtr-to-Qtr Growth</u>											
Revenues	-4%	17%	-2%	24%	-8%	24%	4%	12%	Conservative		
SG&A	(8)	14	12	9	(8)	13	6	5			
R&D	10	9	2	19	(2)	21	3	12			

Table 11

Stratus Computer, Income Statement, 1991-1993E

	1991				1992				Years		
	Mar	Jun	Sep	Dec	Mar-E	Jun-E	Sept-E	Dec-E	1991	1992E	1993E
Product sales	\$82.1	\$88.1	\$91.0	\$106.5	\$88.3	\$96.0	\$101.7	\$119.4	\$367.7	\$405.5	\$466.3
Service	18.9	19.0	21.6	21.5	21.7	22.0	25.3	25.6	80.9	94.5	113.4
Revenues	\$101.0	\$107.1	\$112.5	\$128.0	\$110.0	\$118.0	\$127.0	\$145.0	\$448.6	\$500.0	\$579.7
Cost of product	\$30.6	\$32.1	\$33.2	\$38.9	\$31.4	\$34.5	\$36.0	\$43.1	\$134.7	\$145.0	\$165.1
Cost of service	11.2	11.6	11.4	12.4	13.7	13.9	15.9	16.1	46.6	59.6	71.5
Cost of sales	\$41.8	\$43.7	\$44.6	\$51.3	\$45.1	\$48.4	\$51.9	\$59.2	\$181.3	\$204.6	\$238.5
SG&A	31.8	33.2	33.8	36.8	34.0	36.0	36.5	40.0	135.6	148.5	168.1
R&D	16.7	17.3	17.4	18.3	19.0	19.0	19.5	20.0	69.7	77.5	87.0
Oper profit	\$10.6	\$13.0	\$16.8	\$21.6	\$11.9	\$14.6	\$19.1	\$25.8	\$62.1	\$71.4	\$88.1
Operating margin	10.5%	12.1%	14.9%	16.9%	10.8%	12.4%	15.0%	17.8%	(13.8%)	14.3%	15.2%
Other	\$0.1	\$0.6	\$1.7	\$0.9	\$0.9	\$0.9	\$0.9	\$0.9	\$3.3	\$3.6	\$0.9
Pretax profit	\$10.7	\$13.6	\$18.5	\$22.5	\$12.8	\$15.5	\$20.0	\$26.7	\$65.4	\$75.0	\$89.0
Pretax margin	10.6%	12.7%	16.4%	17.6%	11.6%	13.2%	15.7%	18.4%	14.6%	15.0%	15.4%
Tax	\$3.0	\$3.1	\$4.6	\$5.0	\$3.1	\$3.7	\$4.8	\$6.4	\$15.7	\$18.0	\$21.4
Tax rate	28.0%	22.6%	25.0%	22.1%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%
Net income	\$7.7	\$10.5	\$13.9	\$17.6	\$9.7	\$11.8	\$15.2	\$20.3	\$49.7	\$57.0	\$67.7
EPS	\$0.35	\$0.47	\$0.61	\$0.79	\$0.42	\$0.51	\$0.65	\$0.85	\$2.22	\$2.43	\$2.76
Average shares	21.9	22.2	22.6	23.0	23.0	23.3	23.5	24.0	22.4	23.5	24.5
<u>As a % of Revenues</u>											
Prod Gross mrgn	62.7%	63.6%	63.5%	63.5%	64.4%	64.1%	64.6%	63.9%	63.4%	64.2%	64.6%
Serv gross mrgn	40.7	38.8	47.2	42.3	37.0	37.0	37.0	37.0	42.4	37.0	37.0
Gross margin	58.6%	59.2%	60.4%	60.0%	59.0%	59.0%	59.1%	59.2%	59.6%	59.1%	59.2%
SG&A	31.5	31.0	30.1	28.7	30.9	30.5	28.7	27.6	30.2	29.3	29.0
R&D	16.6	16.1	15.4	14.3	17.3	16.1	15.4	13.8	15.5	15.5	15.0
Net income	7.7	9.8	12.3	13.7	8.8	10.0	11.9	14.0	11.1	11.4	11.7
<u>Year-Over-Year Growth</u>											
Product sales	14%	11%	3%	6%	8%	9%	12%	12%	8%	10%	15%
Service	25	28	36	20	15	16	17	19	27	17	20
Total revenues	16	14	8	8	9	10	13	13	11	11	16
Operating profit	12	32	33	13	12	12	13	19	22	15	23
Net income	16	48	43	30	26	12	9	16	35	15	19
EPS	10	40	32	24	20	7	5	7	25	10	14
<u>Sequential Qtr-to-Qtr Growth</u>											
Revenues	-15%	6%	5%	14%	-14%	7%	8%	14%			
SG&A	(13)	4	2	9	(8)	6	1	10			
R&D	9	3	1	6	4	0	3	3			

Table 12

Sun Microsystems, Income Statement, 1991-1993E

	Fiscal 1991				Fiscal 1992				Fiscal Years		
	Sept	Dec	Mar	Jun	Sept	Dec	Mar-E	Jun-E	1991	1992E	1993E
Net Revenues	\$677	\$753	\$848	\$942	\$755	\$909	\$975	\$1,100	\$3,221	\$3,739	\$4,487
Cost of Sales	\$367	\$410	\$469	\$512	\$409	\$503	\$536	\$605	\$1,758	\$2,053	\$2,468
SG&A	182	193	200	238	220	240	255	270	812	985	1,153
R&D	85	90	90	92	84	92	100	115	357	390	449
Operating Profit	\$43	\$61	\$90	\$101	\$42	\$75	\$84	\$110	\$295	\$311	\$417
Operating Margin	6.3%	8.1%	10.6%	10.7%	5.6%	8.2%	8.6%	10.0%	9.2%	8.3%	9.3%
Net Interest	(\$4)	(\$3)	(\$2)	(\$2)	(\$1)	(\$3)	(\$1)	\$0	(\$11)	(\$5)	(\$4)
Pretax Profit	\$39	\$58	\$88	\$99	\$41	\$72	\$83	\$110	\$284	\$305	\$413
Pretax Margin	5.7%	7.7%	10.3%	10.5%	5.4%	7.9%	8.5%	10.0%	8.8%	8.2%	9.2%
Tax	\$13	\$19	\$29	\$33	\$14	\$24	\$28	\$37	\$94	\$104	\$141
Tax Rate	33.0%	33.0%	33.0%	33.0%	34.0%	34.0%	34.0%	34.0%	33.0%	34.0%	34.0%
Net Income	\$26	\$39	\$59	\$66	\$27	\$47	\$55	\$73	\$190	\$201	\$273
EPS-Fully Diluted	\$0.26	\$0.39	\$0.56	\$0.63	\$0.27	\$0.47	\$0.54	\$0.71	\$1.85	\$1.99	\$2.65
Ave Shrs-Fully Dil	100	101	105	106	101	100	101	102	103	101	103
<u>As a Percent of Sales</u>											
Gross Margin	45.8%	45.6%	44.7%	45.7%	45.8%	44.7%	45.0%	45.0%	45.4%	45.1%	45.0%
SG&A	26.9	25.6	23.5	25.2	29.2	26.3	26.2	24.5	25.2	26.3	25.7
R&D	12.6	11.9	10.6	9.8	11.1	10.1	10.3	10.5	11.1	10.4	10.0
Net Income	3.8	5.2	6.9	7.0	3.5	5.2	5.6	6.6	5.9	5.4	6.1
<u>Year-Over-Year Growth</u>											
Total Revenues	26%	27%	34%	35%	11%	21%	15%	17%	31%	16%	20%
SG&A	39	45	30	39	21	24	28	14	38	21	17
R&D	27	22	14	11	(1)	2	11	25	18	9	15
Operating Profit	272	73	53	41	(2)	22	(7)	9	66	5	34
Net Income	403	94	60	35	3	21	(7)	9	71	6	35
EPS	293	68	37	23	2	22	(3)	13	52	8	33
<u>Sequential Qtr-to-Qtr Growth</u>											
Revenues	-3%	11%	13%	11%	-20%	20%	7%	13%			
SG&A	6	6	4	19	(7)	9	6	6			
R&D	3	6	0	2	(9)	9	9	15			

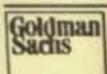
High risk

Should easily make if
new products ship

Table 13

Tandem Computers, Income Statement, 1991-1993E

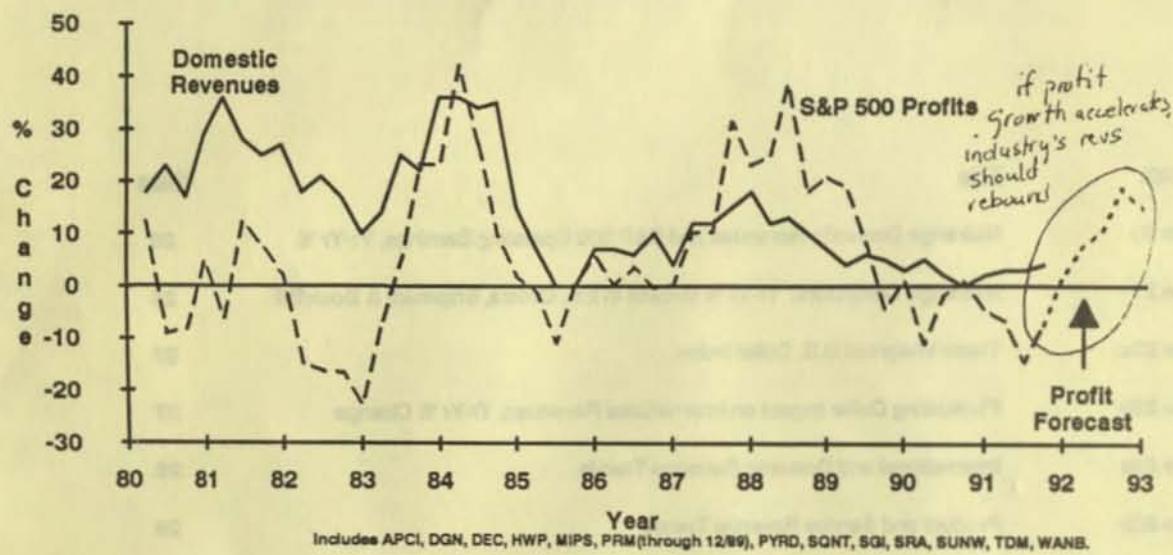
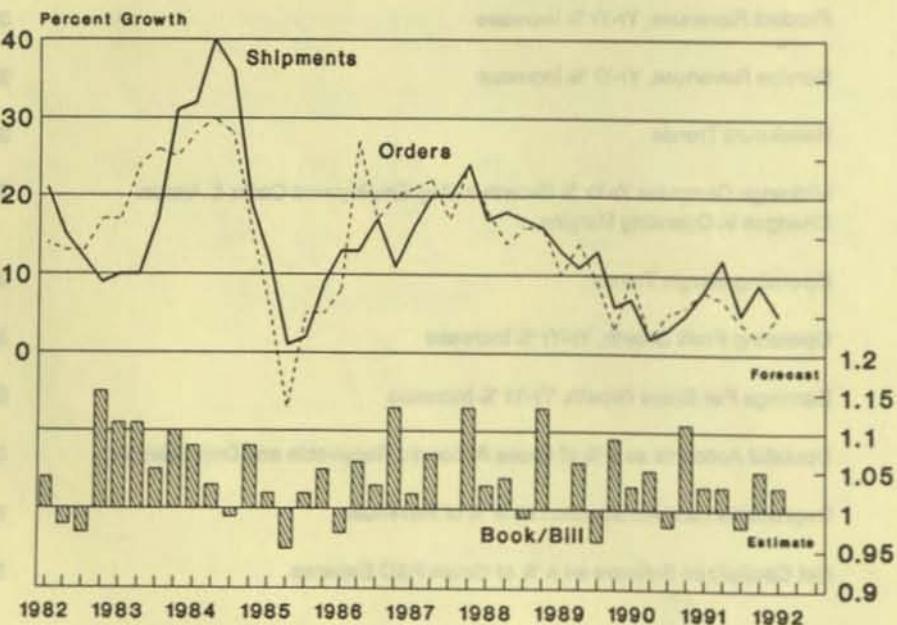
	Fiscal 1991				Fiscal 1992				Fiscal Years		
	Dec	Mar	Jun	Sept	Dec	Mar-E	Jun-E	Sept-E	1991	1992E	1993E
Sales	\$347	\$394	\$393	\$417	\$370	\$404	\$414	\$441	\$1,551	\$1,629	\$1,728
Service	97	95	87	93	85	92	93	95	371	365	365
Total Revenues	\$444	\$489	\$480	\$509	\$454	\$496	\$507	\$536	\$1,922	\$1,993	\$2,093
Cost of Sales	\$104	\$130	\$125	\$143	\$124	\$134	\$138	\$148	\$502	\$544	\$624
Cost of Service	66	63	60	67	61	64	65	67	256	257	255
Cost of Revenues	\$170	\$192	\$185	\$210	\$185	\$198	\$203	\$214	\$758	\$801	\$879
SG&A	197	205	214	223	213	210	214	220	839	857	850
R&D	64	62	68	73	72	73	73	73	267	291	290
Operating Profit	\$13	\$30	\$13	\$3	(\$15)	\$15	\$17	\$29	\$59	\$45	\$74
Operating Margin	2.9%	6.1%	2.8%	0.6%	-3.4%	2.9%	3.4%	5.3%	3.1%	2.3%	3.5%
Other Income	(\$2)	(\$1)	\$0	\$2	\$1	\$2	\$2	\$2	(\$1)	\$8	\$2
Extraordinary Item					(\$96)	generous?				(\$96)	
Pretax Profit	\$11	\$28	\$14	\$5	(\$112)	\$17	\$20	\$31	\$58	(\$45)	\$76
Pretax Margin	2.5%	5.8%	2.9%	1.0%	-24.7%	3.4%	3.9%	5.8%	3.0%	-2.2%	3.6%
Tax	\$4	\$10	\$6	\$2	(\$18)	\$6	\$7	\$11	\$22	\$6	\$27
Tax Rate	36.5%	36.5%	42.5%	36.4%	NM	34.1%	34.1%	34.1%	37.9%	-12.4%	35.0%
Net Income	\$7	\$18	\$8	\$3	(\$95)	\$11	\$13	\$20	\$36	(\$50)	\$49
EPS	\$0.07	\$0.17	\$0.07	\$0.03	(\$0.88)	\$0.10	\$0.12	\$0.18	\$0.34	(\$0.46)	\$0.44
EPS excl charge					(\$0.13)					\$0.28	
Average Shares	106	107	108	108	108	109	110	111	107	109	111
<u>As a % of Revenues</u>											
Sales	78.2%	80.5%	81.9%	81.8%	81.3%	81.5%	81.7%	82.3%	80.7%	81.7%	82.6%
Service	21.8	19.5	18.1	18.2	18.7	18.5	18.3	17.7	19.3	18.3	17.4
Sales Gross Margin	70.0	67.1	68.2	65.8	66.3	66.8	66.7	66.5	67.7	66.6	63.9
Serv Gross Margin	31.7	34.1	30.6	27.3	28.1	30.0	30.0	30.0	31.0	29.5	30.0
Total Gross Margins	61.6	60.7	61.4	58.8	59.2	60.0	60.0	60.0	60.6	59.8	58.0
SG&A	44.3	41.9	44.5	43.8	46.8	42.3	42.2	41.0	43.6	43.0	40.6
R&D	14.4	12.7	14.1	14.4	15.8	14.7	14.4	13.6	13.9	14.6	13.9
Net Income	1.6	3.7	1.6	0.6	(20.9)	2.3	2.5	3.8	1.9	(2.5)	2.4
<u>Year-Over-Year Growth</u>											
Sales	-4%	7%	2%	-1%	6%	3%	5%	6%	1%	5%	6%
Service	30	17	2	8	(12)	(3)	7	3	14	(2)	0
Total Revenues	2	8	2	1	2	1	6	5	3	4	5
Operating Profit	(73)	(31)	(73)	(93)	(221)	(51)	28	791	(69)	(24)	65
EPS	(77)	7	(75)	(90)	(1,429)	7	62	535	(70)	(237)	(197)
<u>Sequential Qtr-to-Qtr Growth</u>											
Sales	-17%	14%	0%	6%	-11%	9%	2%	7%			
Service	12	(1)	(9)	7	(8)	9	1	2			
Revenues	(12)	10	(2)	6	(11)	9	2	6			
SG&A	(5)	4	4	4	(5)	(1)	2	3			
R&D	(7)	(3)	9	8	(2)	2	0	0			



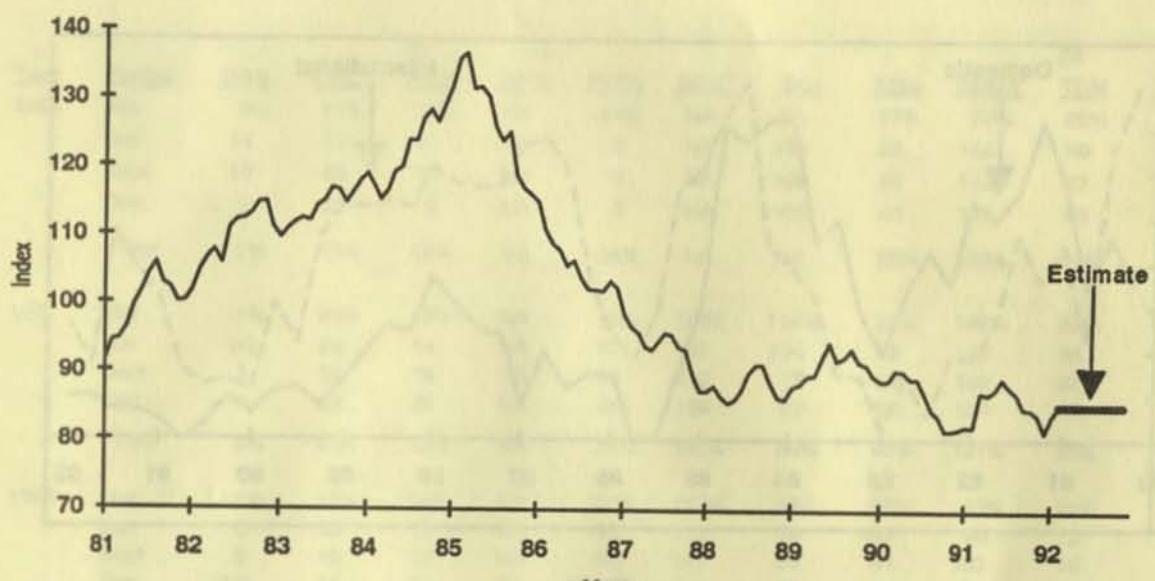
Investment
Research

Demand & Profit Trends

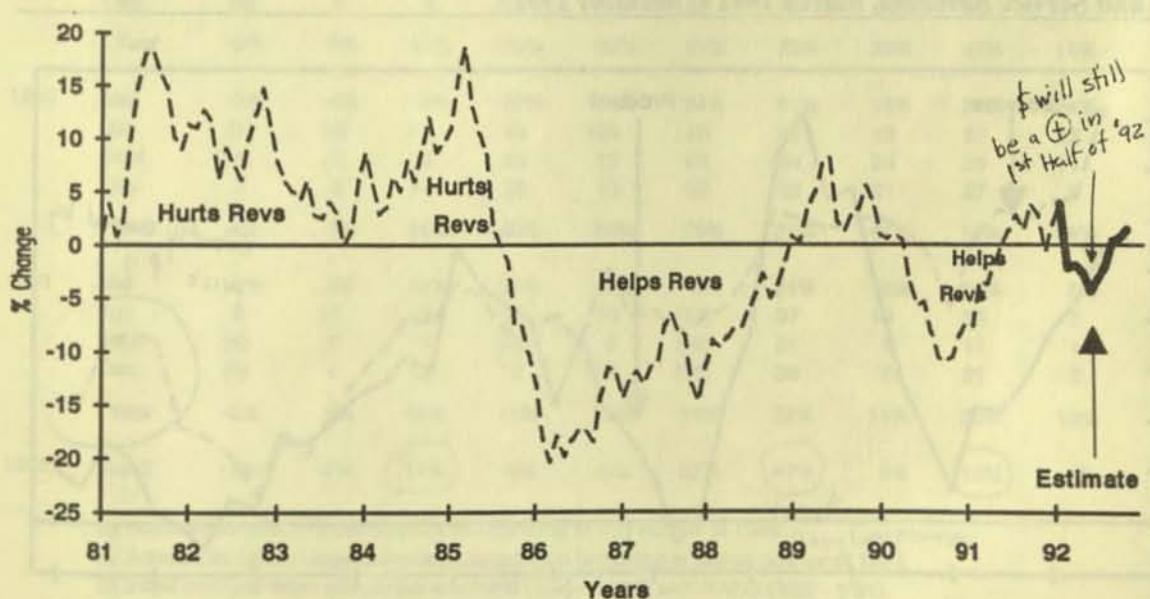
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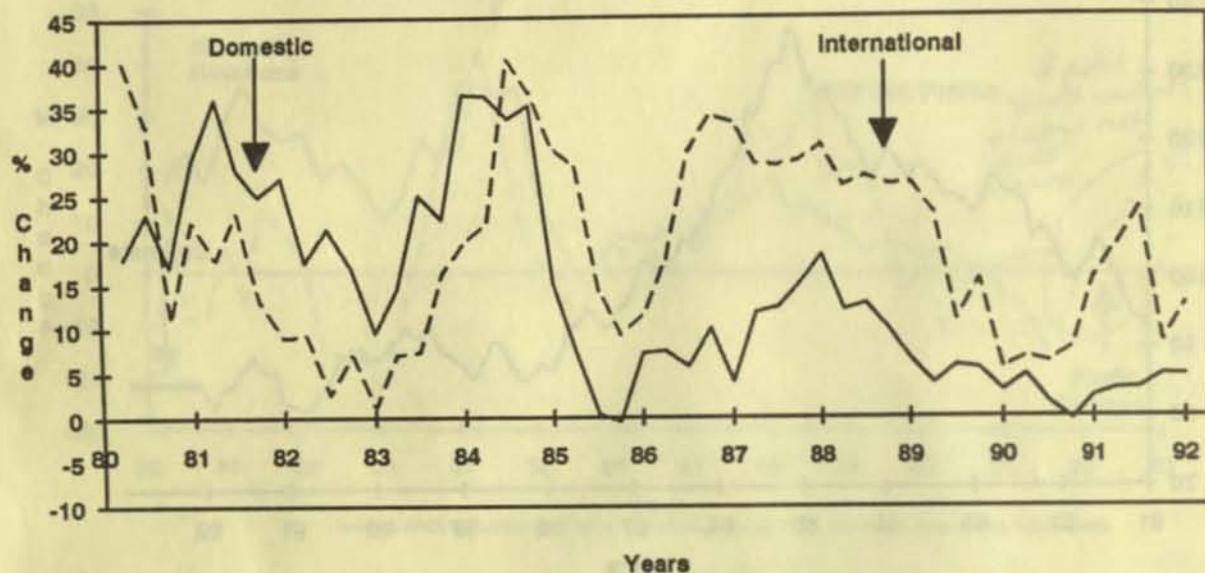
Figures 20 and 21**Midrange Domestic Revenues and S&P 500 Operating Earnings, Yr.-Yr. Percent Change****Midrange Computers: Year-to-Year Growth in Estimated Orders, Shipments and Book/Bill**

Figures 22a and 22b

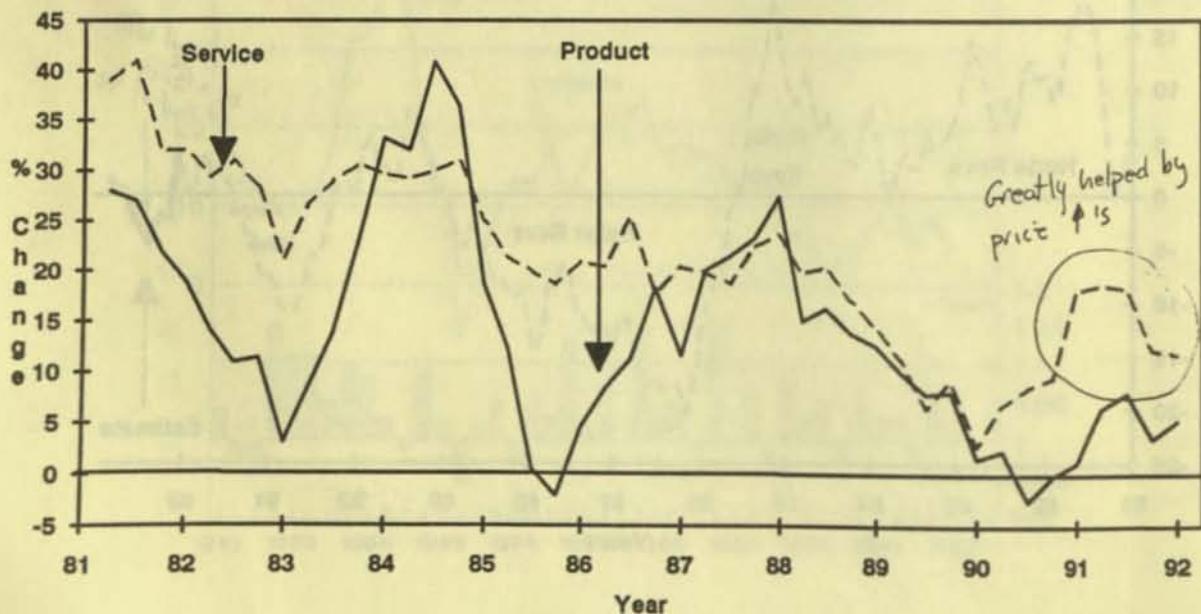
Trade Weighted U.S. Dollar Index

Source: Morgan Guaranty Trust Co., Month End Data

Fluctuating Dollar Impact on International Revenues, Year-to-Year Percent Change

Figures 23a and 23b**International and Domestic Revenues, March 1980 - December 1991**

Includes APCI, DEC, DGN, HWP, MIPS, PRM (through 12/89), PYRD, SQNT, SGI, SRA, SUNW, TDM, WANB

Product and Service Revenues, March 1981 - December 1991

Includes APCI, DGN, DEC, HWP, SQNT, SRA, TDM, WANB.

Table 14

Total Revenues, 1986 - 1992E, Year-to-Year Percent Increase

Year	Period	(a)							(b)			Avg \$ Wld(c)
		DGN	DEC	HWP	MIPS	PYRD	SQNT	SGI	SRA	SUNW	TDM	
1986	Mar	0%	14%	6%	NA	44%	NA	NA	77%	70%	20%	12%
	Jun	14	17	11	NA	8	NA	106	62	106	39	16
	Sept	10	26	15	NA	6	NA	108	52	172	27	20
	Dec	7	22	9	NA	5	NA	105	40	173	40	16
	Year	7%	20%	10%	NA	14%	NA	NA	55%	132%	32%	16%
1987	Mar	-1%	25%	13%	NA	14%	198%	116%	39%	146%	37%	19%
	Jun	(4)	23	14	NA	37	167	104	42	142	31	20
	Sept	1	24	18	NA	43	112	77	52	109	32	21
	Dec	9	22	26	NA	46	106	93	56	104	19	24
	Year	3%	23%	12%	NA	35%	143%	95%	48%	121%	29%	21%
1988	Mar	11%	17%	24%	NA	50%	117%	86%	45%	83%	21%	19%
	Jun	5	25	19	NA	48	112	59	47	96	13	20
	Sept	3	16	19	NA	47	111	53	41	103	16	18
	Dec	(10)	14	21	NA	40	100	86	44	91	23	16
	Year	2%	18%	21%	NA	46%	109%	71%	44%	94%	18%	18%
1989	Mar	-2%	11%	15%	273%	30%	83%	63%	41%	92%	17%	14%
	Jun	(7)	5	18	218	20	82	84	32	18	24	9
	Sept	5	6	18	144	32	97	95	22	39	19	11
	Dec	(6)	0	9	102	43	98	56	24	33	11	4
	Year	-3%	5%	15%	159%	32%	91%	73%	29%	41%	18%	9%
1990	Mar	-8%	4%	8%	57%	64%	94%	61%	14%	27%	24%	5%
	Jun	(1)	(4)	8	75	100	86	41	13	62	12	4
	Sept	(14)	(1)	6	38	82	65	34	24	26	11	5
	Dec	7	5	10	36	59	53	32	21	27	2	8
	Year	-5%	1%	10%	50%	50%	75%	71%	41%	18%	34%	12%
1991	Mar	2%	8%	13%	37%	44%	-6%	21%	16%	34%	8%	10%
	Jun	0	17	9	12	13	(14)	37	14	35	2	12
	Sept	(4)	6	7	(13)	6	(19)	31	8	11	1	6
	Dec	(5)	4	13	10	(11)	(16)	38	8	21	2	9
	Year	-2%	9%	10%	11%	11%	-14%	32%	11%	25%	10%	9%
1992	Mar-E	-7%	-2%	11%	-5%	-8%	27%	47%	9%	15%	1%	6%

(a) Adjusted to reflect Apollo acquisition beginning in July quarter of 1989. *Easy Comparison*
 (b) Adjusted to reflect Ungermann-Bass acquisition beginning in March quarter of 1988.
 (c) Index includes listed companies and PRM (3/85 - 12/90) and WANB (3/82 - 6/91).

Tables 15a and 15b

U.S. Revenues, 1989 - 1991 Year-to-Year Percent Increase

Year	Period	(a)								(b)		Avg \$ Wtd(c)	
		DGN	DEC	HWP	MIPS	PYRD	SQNT	SGI	SRA	SUNW	IDM		
1989	Mar	-10%	-6%	10%	NA	41%	83%	44%	-15%	72%	11%	4%	
	Jun	(13)		(2)	18	NA	2	144	66	27	16	31	6
	Sept	7		(1)	15	NA	(1)	108	99	(4)	23	25	5
	Dec	(7)		(1)	9	NA	33	66	45	9	21	21	3
	Year	-6%		-3%	13%	NA	18%	95%	61%	4%	30%	22%	10%
1990	Mar	-6%	4%	9%	NA	43%	139%	53%	36%	11%	21%	5%	
	Jun	0		(6)	7	NA	169	120	33	5	40	4	2
	Sept	(19)		(3)	1	NA	110	57	20	4	14	0	0
	Dec	(4)		0	2	NA	58	58	2	0	17	(15)	2
	Year	-8%		-1%	6%	NA	87%	84%	24%	9%	20%	-1%	2%
1991	Mar	2%	-6%	4%	48%	68%	-33% (32) (28) (31)	0% 14 20 38	4%	34%	13%	3%	
	Jun	1		(1)	1	16			23	32	(3)	3	
	Sept	4		(6)	11	11			59	14	7	5	
	Dec	11		(14)	16	(4)			7	23	27	5	
	Year	5%		-7%	8%	13%			22%	25%	10%	4%	

WOW! largely DEM-related

International Revenues, 1989 - 1991 Year-to-Year Percent Increase

Year	Period	(a)								(b)		Avg \$ Wtd(c)	
		DGN	DEC	HWP	MIPS	PYRD	SQNT	SGI	SRA	SUNW	IDM		
1989	Mar	6%	28%	19%	NA	13%	83%	105%	205%	120%	7%	23%	
	Jun	(2)		11	19	NA	38	29	126	19	21	17	11
	Sept	2		13	21	NA	113	69	88	45	64	13	15
	Dec	(5)		1	9	NA	64	173	85	84	49	3	5
	Year	1%		12%	17%	NA	52%	85%	99%	75%	58%	10%	13%
1990	Mar	-10%	5% (2) (8) 18	7%	NA	87%	31%	73%	18%	46%	39%	7%	
	Jun	(2)		9	NA	49	32	54	118	93	21	6	
	Sept	(8)		10	NA	38	86	63	77	40	23	8	
	Dec	18		9	16	NA	37	46	76	12	37	18	16
	Year	-1%		3% .13% DEC excluding acquisitions	NA	51%	48%	67%	48%	51%	25%	9%	
1991	Mar	1%	18% 24 16 17 15% 24 15 12	20%	48% (and 6%)	64%	50%	21%	34%	5%	19%		
	Jun	(2)		31	15	16	(5)	34	71	15	37	23	
	Sept	(12)		16	4	25	29	3	48	3	9	8	
	Dec	(18)		17	(1)	12	68	39	33	36	18	(12)	
	Year	-8%		21%	13%	37%	16%	22%	49%	18%	25%	-3%	

(a) Adjusted to reflect Apollo acquisition in July quarter of 1989.

(b) Adjusted to reflect Ungermann-Bass acquisition in March quarter of 1988.

(c) PRM removed 12/89.

Pick Up!

Tables 16a and 16b

Product Revenues, Year-to-Year Percent Increase, 1989 - 1991

Year	Period	(a)						(b)	Average(c) \$ Weighted
		DGN	DEC	HWP	PYRD	SQNT	SRA		
1989	Mar	0 %	9 %	15 %	25 %	NA %	37 %	6 %	10 %
	Jun	(8)	3	21	19	NA	26	27	8
	Sept	7	5	18	33	NA	18	19	8
	Dec	(5)	(2)	10	42	NA	20	11	2
	Year	(1) %	4 %	16 %	31 %	NA %	24 %	16 %	7 %
1990	Mar	(12) %	4 %	6 %	64 %	93 %	10 %	25 %	2 %
	Jun	(1)	(8)	4	103	90	13	10	(2)
	Sept	(21)	(6)	3	76	65	25	10	0
	Dec	7	(1)	5	50	43	20	(4)	1
	Year	(8) %	(3) %	6 %	71 %	67 %	18 %	10 %	0 %
1991	Mar	1 %	1 %	11 %	35 %	(14) %	14 %	6 %	6 %
	Jun	1	13	7	6	(23)	11	2	8
	Sept	(3)	0	7	3	(29)	3	(1)	3
	Dec	(7)	(3)	13	(17) <i>WANB</i>	(24)	6	7	5
	Year	(2) %	3 %	9 %	5 %	(23) %	8 %	3 %	6 % <i>rebound from '90</i>

Service Revenues, Year-to-Year Percent Increase, 1989 - 1991

Year	Period	(a)						(b)	Average(c) \$ Weighted
		DGN	DEC	HWP	PYRD	SQNT	SRA		
1989	Mar	(5) %	14 %	14 %	54 %	NA %	66 %	22 %	11 %
	Jun	(6)	8	11	26	NA	84	11	7
	Sept	(1)	9	19	31	NA	47	16	9
	Dec	(7)	4	7	46	NA	53	10	3
	Year	(5) %	9 %	13 %	38 %	NA %	61 %	14 %	7 %
1990	Mar	0 %	4 %	16 %	67 %	113 %	40 %	22 %	7 %
	Jun	(1)	5	24	89	52	11	21	9
	Sept	2	8	18	117	67	20	16	10
	Dec	8	16	29	105	71	24	31	18
	Year	2 %	8 %	23 %	96 %	72 %	23 %	23 %	11 %
1991	Mar	3 %	20 %	18 %	88 %	112 %	25 %	16 %	19 %
	Jun	(3)	23	15	45	116	28	2	18
	Sept	(7)	16	8	20	113	36	8	12
	Dec	(3)	13	14	11	89	21	for quad growth (12) <i>WANB</i>	12
	Year	(2) %	18 %	13 %	36 %	106 %	27 % <i>re-</i> growth	3 %	15 %

(a) Adjusted to reflect Apollo acquisition in July quarter of 1989.

(b) Adjusted to reflect Ungermann-Bass acquisition in March quarter of 1988.

(c) Dollar weighted average includes DGN, DEC, HWP, PRM (through Sept. 90), PYRD, SQNT, SRA, TDM, and WANB through 12/90.

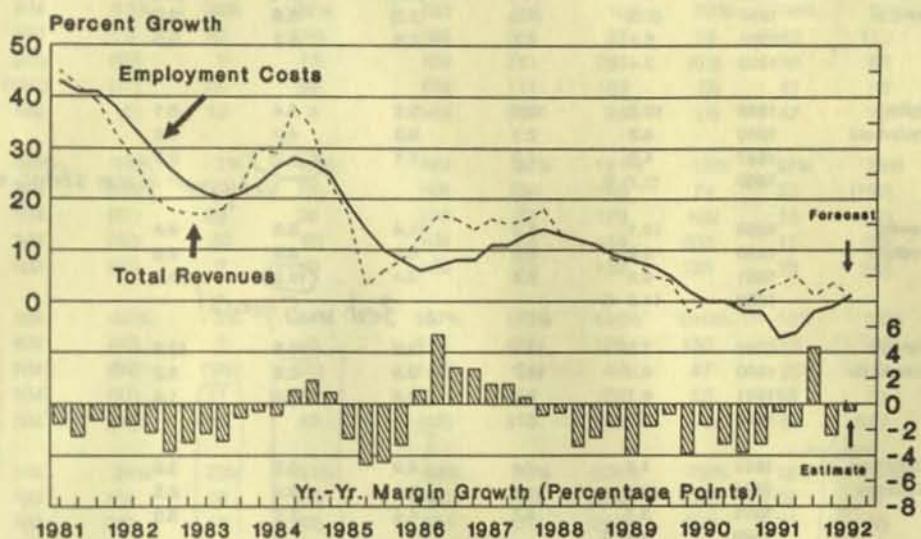
Table 17

Headcount Trends, 1988 - 1991E(a)

	Traditional Mini Vendors					Micro-Based Vendors							
	DGN	DEC	HWP	TDM	Total	MIPS	PYRD	SQNT	SGI	SRA	SUNW	Total	
1988 Mar	15,395	118,600	83,000	8,347	225,342	NA	453	389	955	1,293	6,165	9,255	
	Jun	15,565	121,475	85,000	8,457	230,497	NA	494	475	1,056	1,452	7,090	10,567
	Sept	15,420	123,125	87,000	8,624	234,169	NA	531	509	1,133	1,606	7,511	11,290
	Dec	14,810	124,375	87,000	8,745	234,930	NA	580	572	1,224	1,711	8,253	12,340
1989 Mar	14,895	125,400	89,000	9,019	238,314	364	614	630	1,356	1,850	9,346	14,160	
	Jun	14,220	125,700	95,000	9,382	244,302	455	651	744	1,483	1,986	10,208	15,527
	Sept	13,740	125,500	95,000	9,548	243,788	548	723	821	1,547	2,080	10,307	16,126
	Dec	13,015	125,900	94,000	8,790	242,705	603	894	1,072	1,708	2,150	10,580	16,987
1990 Mar	12,470	125,800	93,000	10,232	241,502	642	1,022	1,209	1,921	2,150	10,918	17,862	
	Jun	11,600	124,000	92,000	10,671	238,271	716	1,065	1,420	2,099	2,200	11,490	19,010
	Sept	10,650	123,500	92,000	10,936	237,086	761	1,126	1,564	2,198	2,300	12,136	20,085
	Dec	9,435	121,100	91,500	10,894	232,929	777	1,174	1,891	2,292	2,381	12,208	20,523
1991 Mar	9,195	122,700	91,500	10,862	234,257	771	1,170	1,684	2,449	2,421	12,233	20,728	
	Jun	8,615	121,000	91,300	11,404	232,319	780	1,179	1,705	2,568	2,381	12,480	21,093
	Sept	8,520	115,300	89,000	11,167	223,987	691	1,183	1,856	2,618	2,428	12,444	21,030
	Dec	8,130	119,500	89,700	11,190	228,520	694	1,250	1,352	2,756	2,492	12,371	20,915
1992 Mar-E	8,075	118,000	89,600	11,100	226,775	650	1,225	1,370	2,780	2,500	12,400	20,925	
<u>Sequential Employment Growth</u>													
1988 Mar	-2%	2%	1%	16%	2%	NA	6%	26%	22%	6%	13%	13%	
	Jun	1	2	2	1	2	NA	9	22	11	12	15	14
	Sept	(1)	1	2	2	2	NA	7	7	7	11	6	7
	Dec	(4)	1	0	1	0	NA	9	12	8	7	10	9
1989 Mar	1%	1%	2%	3%	1%	NA	6%	10%	11%	8%	13%	15%	
	Jun	(5)	0	7	4	3	25	6	18	9	7	9	10
	Sept	(3)	0	0	2	0	20	11	24	4	5	1	4
	Dec	(5)	0	(1)	3	0	10	24	16	10	3	2	5
1990 Mar	-4%	0%	-1%	5%	0%	6%	14%	13%	12%	0%	3%	5%	
	Jun	(7)	(1)	(1)	4	(1)	12	6	17	9	2	5	6
	Sept	(8)	0	0	2	0	6	4	10	5	5	6	6
	Dec	(11)	(2)	(1)	0	(2)	2	4	8	4	4	1	2
1991 Mar	-3%	1%	0%	0%	1%	-1%	0%	0%	7%	2%	0%	1%	
	Jun	(6)	(1)	0	5	(1)	1	1	1	5	(2)	2	2
	Sept	(1)	(5)	(3)	(2)	(4)	(11)	1	(3)	2	2	0	0
	Dec	(5)	④	1	0	2	0	Odd ⑤	(18)	5	3	(1)	(1)
1992 Mar-E	-1%	Acquisition-related	-1%	0%	-1%	-1%	-8%	-2%	BIG 1%	1%	0%	0%	
<u>Mar-E Year-Over-Year Growth</u>													
Employment	-14%	(7)	(1%)	(2%)	(-2%)	(3%)	(1%)	(-11%)	(6%)	(-20%)	(20%)	(5%)	
Revenues								-5	(8%)	27	47	9	

(a) Based on quarter-end data.

Figure 24

Midrange Computer Year-to-Year Percent Growth in Average Employment Costs and Total Revenue and Annual Changes in Operating Margins

Operating Margin Changes include DGN,
DEC, HWP, PRM, TDM, WANB when profitable
and data available

Table 18

Operating Margin Trends, 1989 - 1992E

		Period Ending				
		Mar	Jun	Sep	Dec	Year
Data General	1989	0.3	(9.4)	(0.6)	(6.3)	(3.7)
	1990	(2.3)	(6.2)	(5.3)	5.0	(2.2)
	1991	6.8	8.7	6.6	1.7	6.0
	1992	2.4 E				
Digital Equipment	1989	10.2	10.9	5.6	5.4	8.1
	1990	4.2	2.3	0.3	4.0	2.8
	1991	4.9	4.9	1.1	(4.2)	3.7
	1992	(3.7) E				
Traditional Minicomputer Vendors	Hewlett Packard	10.1	8.6	11.4	8.8	9.8
	1990	8.9	8.5	8.9	8.9	8.8
	1991	9.8	8.6	9.4	(12.3)	10.1
	1992	11.9 E				
Tandem Computers	1989	7.2	11.4	13.2	10.8	10.8
	1990	9.5	10.7	9.5	2.9	8.2
	1991	6.1	2.8	0.6	(3.4)	1.6
	1992	2.9 E				
Traditional Midrange	1989	4.4	2.4	4.9	3.5	3.9
	1990	2.1	1.8	3.1	3.9	2.5
	1991	3.7	6.3	4.4	1.6	5.3
	1992	3.4 E				
MIPS Computer Systems	1989	5.5	7.2	7.9	8.7	7.5
	1990	9.0	9.0	(2.7)	(3.4)	2.6
	1991	0.1	(4.1)	NM	4.7	(5.7)
	1992	(1.5) E				
Pyramid Technology	1989	10.2	4.4	11.4	12.7	10.1
	1990	13.2	11.6	12.0	11.7	12.1
	1991	11.0	0.6	5.5	(9.2)	2.5
	1992	(0.2) E				
Sequent Computer	1989	11.0	11.8	12.9	12.6	12.2
	1990	13.3	13.1	11.7	3.4	9.9
	1991	(19.4)	(23.4)	(15.5)	2.5	(13.1)
	1992	2.6 E				
Micro-Based Vendors	Silicon Graphics	5.6	7.7	8.3	10.5	8.3
	1990	12.1	13.0	11.6	10.0	11.6
	1991	2.8	7.7	7.7	9.7	7.3
	1992	7.9 E				
Stratus Computer	1989	15.3	16.3	15.3	15.8	15.7
	1990	10.9	10.4	12.1	16.1	12.6
	1991	10.5	12.1	14.9	(16.9)	13.8
	1992	10.8 E				
Sun Microsystems	1989	8.6	(8.1)	2.1	5.9	2.6
	1990	9.3	10.2	6.3	8.1	8.5
	1991	10.6	10.7	5.6	8.2	9.2
	1992	8.6 E				
Micro-Based Vendor Average	1989	9.4	6.6	9.7	11.0	9.4
	1990	11.3	11.2	8.5	7.7	9.6
	1991	2.6	0.6	3.6	5.5	2.3
	1992	4.7 E				

(a) Wang included through 3/91.

Tables 19 and 20

Operating Profit Growth, Year-to-Year Percent Increase, 1989 - 1991E

		Traditional Mini Vendors				Micro-Based Vendors					
		DGN	DEC	HWP	TDM	MIPS	PYRD	SQNT	SGI	SRA	SUNW
1988	Mar	NM	-13%	23%	22%	NM	NM	10%	70%	50%	28%
	Jun	NM	3	23	(34)	NM	326	32	15	62	112
	Sept	(32)	(19)	3	(7)	NM	251	250	(81)	39	63
	Dec	(199)	(11)	20	55	NM	111	185	(3)	41	99
	Year	NM	(9)	16	4	NM	250	99	(4)	47	76
1989	Mar	-94%	-16%	1%	-40%	NM	32%	191%	-18%	27%	78%
	Jun	NM	(25)	3	76	NM	(54)	145	74	33	(182)
	Sept	NM	(37)	23	36	NM	31	173	NM	10	(67)
	Dec	NM	(52)	(2)	(5)	NM	54	144	208	11	(23)
	Year	NM	(31)	7	10	NM	18	159	125	19	(63)
1990	Mar	NM	-57%	2%	64%	157%	113%	135%	246%	-19%	38%
	Jun	NM	(80)	7	5	118	424	106	138	(28)	NM
	Sept	NM	(94)	(18)	(20)	(147)	91	49	87	(2)	272
	Dec	NM	(21)	11	(73)	(152)	46	(59)	25	23	73
	Year	NM	(66)	15	15	(48)	110	38	96	(5)	330
1991	Mar	NM	24%	25%	-31%	-98%	20%	-238%	-72%	12%	53%
	Jun	NM	154	10	(73)	(152)	(94)	(254)	(18)	32	41
	Sept	NM	262	13	(93)	NM	(51)	(207)	(13)	33	(2)
	Dec	-68%	(209)	56	(221)	(252)	(170)	(38)	34	13	22
	Year	NM	(29)	26	(80)	(341)	(77)	(213)	(17)	22	31
1992	Mar-E	-67%	-175%	35%	-51%	NM	-101%	NM	576%	12%	-7%

?GREAT RECORD IN TOUGH ENVIRONMENT ?ONLY 3 W/UP QTRS

Earnings Per Share Growth, Year-to-Year Percent Increase, 1989 - 1991E

		Traditional Mini Vendors				Micro-Based Vendors					
		DGN	DEC	HWP	TDM	MIPS	PYRD	SQNT	SGI	SRA	SUNW
1988	Mar	NM	2%	30%	4%	NM	257%	4%	107%	58%	28%
	Jun	NM	8	40	(32)	NM	227	24	50	71	122
	Sept	NM	(16)	21	3	NM	215	134	(71)	48	48
	Dec	(291)	(11)	16	33	NM	82	113	(25)	37	94
	Year	NM	(3)	27	2	NM	126	84	1	49	66
1989	Mar	-52%	-12%	6%	-30%	NM	47%	102%	-28%	28%	98%
	Jun	NM	(18)	(1)	74	NM	(37)	95	34	31	(173)
	Sept	NM	(30)	1	22	NM	42	121	380	8	(75)
	Dec	NM	(43)	(13)	(9)	133	26	100	152	10	(37)
	Year	NM	(29)	(2)	10	NM	20	109	74	18	(61)
1990	Mar	NM	-90%	-10%	47%	107%	54%	85%	164%	-15%	9%
	Jun	NM	(184)	(8)	(3)	88	238	63	86	(22)	NM
	Sept	NM	(82)	(20)	(21)	(100)	47	25	53	15	293
	Dec	NM	(26)	15	(77)	(121)	16	(53)	25	28	68
	Year	NM	(47)	(7)	(20)	(23)	61	16	65	4	282
1991	Mar	NM	372%	19%	7%	-82%	8%	-240%	-69%	10%	37%
	Jun	NM	NM	4	(75)	(116)	(92)	(456)	(14)	40	23
	Sept	NM	7	(40)	(90)	NM	(61)	(504)	(31)	32	2
	Dec	-70%	(222)	46	NM	NM	(486)	(60)	0	24	22
	Year	NM	NM	10	(167)	NM	(156)	(359)	(16)	25	27
1992	Mar-E	-74%	-200%	36%	-38%	NM	-100%	NM	285%	20%	-3%

Tables 21 and 22

Doubtful Accounts as a Percent of Gross Accounts Receivable and Depreciation, 1988 - 1991 (a)

	Traditional Mini Vendors(b)				Micro-Based Vendors						
	DGN	DEC	TDM	Avg	MIPS	PYRD	SQNT	SGI	SRA	SUNW	Avg
1988 Mar	-	3.0%	-	-	-	-	-	-	-	-	-
	-	2.9	-	-	-	-	-	3.7	-	6.0	-
	7.8	3.1	2.6	-	-	4.5	-	-	-	-	-
	-	3.3	-	4.8	-	-	3.3	-	3.5	-	4.2
1989 Mar	-	2.9%	-	-	2.7%	-	-	-	-	-	-
	-	2.4	-	-	2.7	-	-	2.6	-	7.3	-
	7.5	2.3	2.7	-	2.7	3.1	-	-	-	-	-
	-	2.4	-	4.8	2.7	-	2.5	-	1.5	-	3.3
1990 Mar	-	2.6%	-	-	1.8%	-	-	-	-	-	-
	-	2.5	-	-	1.3	-	-	2.4	-	9.5	-
	6.9	2.7	2.6	-	1.8	2.1	-	-	-	-	-
	-	2.7	-	4.0	2.0	-	2.5	-	2.7	-	3.5
1991 Mar	-	2.8%	-	-	2.2%	-	-	-	-	-	-
	-	2.5	-	-	1.7	-	-	2.7	-	10.3	-
	7.5	2.8	2.9	-	1.9	2.7	-	-	-	-	-
	-	3.2	-	4.5	4.4	-	1.9	-	4.2	-	4.4

Hurt margins

(a) Allowance for Doubtful Accounts / (Accounts Receivable + Allowance for Doubtful Accounts).

Fiscal yearend data only for DGN, PYRD, SQNT, SGI, SRA, SUNW, TDM.

(b) WANB included through 12/90.

Depreciation and Amortization as a Percent of Revenues, 1988 - 1991 (a)

	Traditional Mini Vendors					Micro-Based Vendors						
	DGN	DEC	HWP(a)	TDM	Avg(b)	MIPS	PYRD	SQNT	SGI	SRA	SUNW	Avg
1988 Mar	-	5.0%	-	6.5%	6.8%	-	6.2%	6.5%	4.2%	4.9%	5.1%	5.4%
	-	4.4	-	6.9	6.7	-	5.4	4.1	4.9	3.8	4.4	4.5
	7.2	5.0	3.8	6.6	7.2	-	5.9	3.5	5.9	4.5	5.1	5.0
	-	5.1	-	6.9	6.3	-	3.4	9.3	4.3	4.5	6.2	5.5
1989 Mar	-	5.7%	3.2	7.8%	6.8%	6.3%	4.4%	7.4%	5.2%	4.6%	5.7%	5.6%
	-	5.0	4.5	6.5	6.4	6.5	5.6	8.3	7.2	4.6	5.3	6.2
	8.4	5.8	4.3	6.6	7.3	6.2	10.2	6.1	5.7	5.7	4.8	6.4
	7.1	6.0	4.4	6.7	7.2	4.4	6.4	5.4	5.0	3.0	8.1	5.4
1990 Mar	7.5%	6.2%	4.0%	6.9%	7.1%	6.3%	7.0%	6.8%	5.0%	5.8%	8.0%	6.5%
	7.8	6.8	4.4	7.1	7.1	6.8	7.2	6.5	5.8	3.5	5.9	5.9
	8.5	6.0	4.3	6.9	6.4	8.2	13.0	7.3	5.8	8.7	8.3	8.5
	7.7	6.0	4.0	7.8	7.0	7.4	7.0	7.2	5.7	4.5	7.8	6.6
1991 Mar	7.5%	6.0%	4.4	7.9%	7.2%	10.0%	9.3%	13.8%	6.1%	7.9%	4.7%	8.6%
	7.4	5.8	4.6	8.4	6.7	10.7	10.6	14.1	5.4	8.5	5.8	9.2
	6.7	6.1	4.3	9.6	6.9	12.7	6.9	13.6	6.0	7.4	7.4	9.0
	8.7	5.8	3.8	9.7	7.8	9.2	15.3	11.5	5.5	2.7	6.2	8.4

(a) Fiscal year data for HWP.

(b) WANB included in Mini Average through 3/91.

*for too much capacity!**Helped**Eps growth
very much*

Table 23

Net Capitalized Software as a Percent of Gross R&D Expense, 1987-1991

	DGN (b)	DEC (b)	IBM	PYRD	SQNT	SRA (b)	IDM (b)
1987 Mar	-	-	5 %	-	25 %	-	-
Jun	-	3 %	4	-	35	-	-
Sept	4 %	-	8	-	15	-	5 %
Dec	-	-	(3)	-	25	4 %	-
1988 Mar	-	-	5 %	-	17 %	-	-
Jun	-	2 %	9	-	29	-	-
Sept	8 %	-	8	-	24	-	2 %
Dec	-	-	5	-	25	11 %	-
1989 Mar	-	-	4 %	-	26 %	-	-
Jun	-	2 %	6	-	15	-	-
Sept	- %	-	8	10 %	16	-	6 %
Dec	12	-	8	29	20	6 %	-
1990 Mar	10 %	-	9 %	27 %	19 %	-	-
Jun	10	1 %	10	41	22	-	-
Sept	16	-	9	39	26	-	2 %
Dec	23	-	14	38	25	8 %	-
1991 Mar	22 %	-	7 %	39 %	32 %	-	-
Jun	24	1 %	9	17	36	-	-
Sept	19	-	6	15	38	-	6 %
Dec	12	-	NA	14	39	down - (3) %	-

(a) Net software capitalized / (R+D Expense + Net Software Capitalization)

(b) Data for fiscal years only.

* Comparability among companies is very limited due to variability in methods for reporting the capitalization of software.

Capitalized software costs are "immaterial" for Hewlett-Packard.

Information unavailable for Sun Microsystems.

should
trend
down - (3) %
Related to
new products

Balance Sheet, Cash Flow, & Efficiency

<u>Diagram</u>	<u>Title</u>	<u>Page</u>
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Table 24

Receivable Turnover, Days, 1988 - 1991

		Period Ending				
		Mar	Jun	Sep	Dec	
Traditional Minicomputer Vendors	Data General	1988	80	76	76	82
	Digital Equipment	1989	82	87	80	86
		1990	79	83	85	92
		1991	84	80	84	93
	Hewlett Packard	1988	62	62	62	70
	Tandem Computers	1989	67	68	67	71
		1990	68	72	73	74
		1991	69	69	70	71
	Traditional Midrange	1988	76	70	73	76
	Average (a)	1989	76	76	78	81
		1990	77	83	83	85
		1991	79	79	82	86
Micro-Based Vendors	MIPS Computer	1989	75	NA	67	78
	Pyramid Technology	1990	73	91	107	84
		1991	99	97	114	76
	Sequent Computer	1988	99	84	84	90
		1989	85	84	75	73
		1990	79	84	90	101
		1991	121	108	102	101
	Silicon Graphics	1988	83	87	97	100
	Stratus Computer	1989	95	88	95	90
		1990	86	96	95	92
		1991	97	90	93	87
	Sun Micro-Systems	1988	91	91	91	85
		1989	87	93	104	105
		1990	107	100	99	93
		1991	87	86	95	94
	Micro-Based Vendor	1988	64	53	71	69
	Average	1989	67	71	85	77
		1990	70	67	80	71
		1991	70	49	60	53

(a) WANB included through 3/91.

Table 25

Inventory Turnover, 1988 - 1991

		Year	Period Ending			
			Mar	Jun	Sept	Dec
Traditional Minicomputer Vendors	Data General	1988	3.79	3.90	3.84	3.55
		1989	3.59	3.22	3.35	3.20
		1990	3.24	3.34	3.75	4.13
		1991	4.26	4.54	4.83	4.65
	Digital Equipment	1988	3.22	3.47	3.48	3.54
		1989	3.51	3.81	3.80	3.81
		1990	4.03	4.42	4.10	3.90
		1991	3.84	4.56	4.36	4.29
	Hewlett Packard	1988	3.30	3.15	3.20	3.12
		1989	3.12	2.88	3.13	3.16
		1990	3.27	3.22	3.34	3.46
		1991	3.52	3.34	3.44	3.34
	Tandem Computers	1988	2.92	3.10	3.77	4.04
		1989	3.96	4.24	4.21	4.15
		1990	3.95	3.59	3.55 <i>Good</i> ↗ <i>Improvement</i>	3.40
		1991	4.10	4.38	4.89	5.06
	Traditional Midrange Average (a)	1988	3.07	3.20	3.31	3.25
		1989	3.26	3.35	3.48	3.51
		1990	3.52	3.61	3.69	3.78
		1991	3.96	4.21	4.38	4.34
	MIPS Computer	1989	1.84	NA	2.63	2.34
		1990	1.97	2.11	1.77	2.07
		1991	2.33	2.11	1.77	3.54
					Wow!	
	Pyramid Technology	1988	3.13	3.14	3.33	2.71
		1989	2.52	3.03	3.45	2.81
		1990	2.70	2.87	2.98	2.40
		1991	2.87	3.16	3.53	3.19
	Sequent Computer	1988	2.13	1.95	1.72	1.71
		1989	1.88	2.21	2.40	2.21
		1990	1.92	2.00	2.56	2.85
		1991	2.38	2.56	3.21	3.20
Micro-Based Vendors	Silicon Graphics	1988	2.00	1.58	1.51	1.86
		1989	1.85	2.71	3.23	3.43
		1990	2.99	2.87	2.88	3.13
		1991	2.67	2.77	3.01	3.53
	Stratus Computer	1988	2.49	2.89	2.41	2.30
		1989	2.30	2.43	2.59	2.94
		1990	2.65	2.61	2.53	2.39
		1991	2.67	3.07	2.81	2.79
	Sun Micro- Systems	1988	3.91	3.84	4.24	3.37
		1989	3.67	3.27	3.22	3.98
		1990	5.03	6.83	6.36	6.30
		1991	6.67	7.85	5.52	7.20 <i>Great!</i>
	Micro-Based Vendor	1988	2.73	2.64	2.64	2.39
		1989	2.34	2.73	2.92	2.95
		1990	2.88	3.22	3.18	3.19
		1991	3.27	3.59	3.31	(3.91) <i>Record!</i>

(a) WANB included through 3/91.

Tables 26 and 27

Asset Turnover, 1988 - 1991 *

	Traditional Mini Vendors					Micro-Based Vendors						
	DGN	DEC	HWP	TDM	Avg (a)	MIPS	PYRD	SQNT	SGI	SRA	SUNW	Avg
1988 Mar	1.23	1.19	1.20	1.11	1.17	NA	1.05	0.89	1.19	1.44	1.47	1.21
	1.25	1.21	1.26	1.09	1.18	NA	1.11	1.00	1.10	1.46	1.61	1.26
	1.25	1.21	1.35	1.09	1.20	NA	1.16	1.13	1.03	1.48	1.73	1.31
	1.23	1.22	1.39	1.12	1.21	NA	1.19	1.21	1.05	1.50	1.82	1.35
1989 Mar	1.24	1.23	1.40	1.13	1.21	NA	1.21	1.26	1.05	1.52	1.87	1.38
	1.23	1.23	1.38	1.15	1.21	NA	1.22	1.21	1.12	1.51	1.74	1.36
	1.25	1.23	1.35	1.14	1.20	NA	1.26	1.21	1.17	1.47	1.63	1.35
	1.25	1.20	1.32	1.11	1.18	NA	1.31	1.23	1.24	1.44	1.59	1.36
1990 Mar	1.25	1.18	1.28	1.11	1.18	NA	1.21	1.23	1.30	1.39	1.54	1.33
	1.27	1.14	1.25	1.08	1.17	NA	1.17	1.19	1.34	1.36	1.57	1.33
	1.27	1.12	1.23	1.07	1.17	0.76	1.13	1.16	1.36	1.37	1.51	1.21
	1.32	1.13	1.24	1.04	1.18	0.79	1.09	1.14	1.35	1.39	1.45	1.28
1991 Mar	1.36	1.14	1.25	1.04	1.20	0.84	1.12	1.02	1.28	1.39	1.42	1.18
	1.36	1.18	1.25	1.03	1.21	0.86	1.10	0.98	1.18	1.37	1.44	1.16
	1.33	1.19	1.26	1.02	1.20	0.87	1.08	0.92	1.10	1.34	1.44	1.13
	1.28	1.19	1.26	1.02	1.19	0.92	1.04	0.88	1.05	1.31	1.44	1.14

* Trailing four-quarter revenue divided by average total assets.

(a) WANB included through 3/91.

Noncash Asset Turnover, 1988-1991 *

	Traditional Mini Vendors					Micro-Based Vendors						
	DGN	DEC	HWP	TDM	Avg (a)	MIPS	PYRD	SQNT	SGI	SRA	SUNW	Avg
1988 Mar	1.40	1.57	1.62	1.46	1.44	NA	1.78	1.45	1.91	1.82	2.10	1.81
	1.42	1.58	1.62	1.33	1.42	NA	1.83	1.45	1.67	1.85	2.12	1.78
	1.43	1.55	1.62	1.24	1.40	NA	1.85	1.48	1.48	1.83	2.09	1.75
	1.41	1.53	1.60	1.21	1.38	NA	1.81	1.41	1.43	1.82	2.04	1.70
1989 Mar	1.41	1.50	1.56	1.22	1.36	NA	1.73	1.37	1.39	1.79	2.02	1.66
	1.39	1.47	1.51	1.24	1.35	NA	1.65	1.36	1.48	1.75	1.82	1.61
	1.42	1.46	1.46	1.24	1.34	NA	1.64	1.40	1.59	1.68	1.71	1.60
	1.41	1.43	1.43	1.19	1.32	NA	1.61	1.49	1.69	1.63	1.66	1.62
1990 Mar	1.41	1.42	1.40	1.18	1.31	NA	1.60	1.49	1.78	1.58	1.67	1.62
	1.42	1.38	1.38	1.14	1.29	NA	1.59	1.47	1.78	1.57	1.79	1.64
	1.40	1.35	1.36	1.10	1.29	1.40	1.53	1.43	1.75	1.58	1.82	1.58
	1.44	1.34	1.35	1.07	1.30	1.32	1.44	1.38	1.74	1.61	1.86	1.61
1991 Mar	1.48	1.34	1.36	1.08	1.32	1.27	1.37	1.26	1.69	1.63	1.90	1.52
	1.56	1.38	1.36	1.07	1.34	1.24	1.30	1.16	1.61	1.66	2.02	1.50
	1.61	1.40	1.37	1.07	1.36	1.23	1.25	1.08	1.55	1.67	2.07	1.48
	1.64	1.41	1.38	1.07	1.38	1.31	1.19	1.03	1.53	1.70	2.18	1.49

7001

Bad Trends

Great!

*Trailing four-quarter revenue divided by average (total assets less cash and equivalents).

(a) WANB included through 3/91.

Tables 28 and 29

Return on Assets, 1988 - 1991 *

		Traditional Mini Vendors					Micro-Based Vendors						
Year	Period	DGN	DEC	HWP	TDM	Avg (a)	MIPS	PYRD	SQNT	SGI	SRA	SUNW	Avg
1988	Mar	-5%	14%	10%	10%	6%	NA	9%	8%	11%	15%	8%	10%
	Jun	1	14	11	8	7	NA	11	8	9	16	10	11
	Sept	(2)	13	11	8	6	NA	13	9	6	16	10	11
	Dec	(5)	12	11	8	5	NA	13	10	8	17	11	11
1989	Mar	-5%	11%	11%	7%	4%	NA	12%	11%	5%	17%	12%	11%
	Jun	(8)	10	10	8	1	NA	10	12	5	16	6	10
	Sept	(11)	10	9	8	(1)	NA	10	13	6	16	4	10
	Dec	(11)	8	9	8	(1)	NA	10	14	7	15	3	10
1990	Mar	-13%	6%	8%	8%	-3%	NA	10%	13%	9%	14%	3%	10%
	Jun	(14)	1	8	8	(2)	NA	11	12	10	12	7	11
	Sept	(15)	0	7	7	(2)	5	11	11	11	12	8	10
	Dec	(11)	(1)	7	5	(2)	4	10	9	11	13	8	9
1991	Mar	-9%	0%	7%	5%	-1%	2%	10%	3%	9%	13%	8%	8%
	Jun	(2)	(5)	7	3	1	0	7	(7)	7	13	8	5
	Sept	9	(5)	7	2	3	(20)	8	(19)	6	14	8	(1)
	Dec	8	(7)	7	(3)	1	(19)	(5)	(20)	6	14	9	(3)

* Trailing four quarter net income divided by average assets.

(a) WANB included through 3/91.

Good Great Good

Return on Equity, 1988 - 1991 *

		Traditional Mini Vendors					Micro-Based Vendors						
Year	Period	DGN	DEC	HWP	TDM	Avg (a)	MIPS	PYRD	SQNT	SGI	SRA	SUNW	Avg
1988	Mar	-9%	19%	15%	14%	10%	NA	11%	9%	22%	22%	19%	17%
	Jun	1	19	16	12	11	NA	13	10	16	23	22	17
	Sept	(3)	17	17	12	10	NA	16	12	11	23	22	17
	Dec	(8)	16	18	12	7	NA	16	14	9	24	23	17
1989	Mar	-9%	15%	18%	11%	5%	NA	15%	15%	7%	23%	23%	17%
	Jun	(14)	14	17	12	(1)	NA	13	15	8	23	12	14
	Sept	(20)	13	16	13	(4)	NA	13	17	10	22	8	14
	Dec	(21)	11	15	12	(5)	NA	13	17	14	21	6	14
1990	Mar	-26%	8%	14%	13%	-10%	NA	12%	17%	17%	19%	6%	14%
	Jun	(27)	1	14	12	(6)	NA	14	16	18	17	14	16
	Sept	(29)	(1)	12	11	(7)	7	13	14	18	17	15	14
	Dec	(24)	(1)	12	8	(9)	5	12	11	17	18	15	13
1991	Mar	-18%	0%	13%	7%	-5%	3%	13%	4%	13%	17%	15%	11%
	Jun	(5)	(8)	12	5	1	0	9	(10)	10	18	18	7
	Sept	19	(8)	11	3	6	(26)	7	(27)	8	18	15	(1)
	Dec	16	(11)	12	(5)	3	(25)	(7)	(30)	8	18	16	(3)

Good

* Trailing four quarter net income divided by average equity.

(a) WANB included through 3/91.

Tables 30 and 31

Revenue per Employee, 1988-1991 *

	Traditional Mini Vendors					Micro-Based Vendors						
	DGN	DEC	HWP	IDM	Avg (a)	MIPS	PYRD	SQNT	SGI	SRA	SUNW	Avg
1988 Mar	\$85	\$94	\$110	\$157	\$109	NA	\$156	\$153	\$179	\$163	\$169	\$164
Jun	87	97	113	158	111	NA	162	149	175	171	179	167
Sept	88	99	117	161	113	NA	168	152	171	173	190	171
Dec	87	101	120	167	115	NA	169	156	182	175	201	177
1989 Mar	\$87	\$102	\$123	\$170	\$116	NA	\$167	\$161	\$189	\$174	\$211	\$180
Jun	88	102	125	174	118	NA	162	166	203	172	200	181
Sept	91	103	130	178	121	NA	162	170	218	169	201	184
Dec	93	103	132	178	122	NA	159	173	225	169	204	186
1990 Mar	\$95	\$104	\$136	\$181	\$125	\$202	\$158	\$173	\$231	\$168	\$209	\$190
Jun	100	103	139	181	126	208	166	171	231	169	228	195
Sept	102	103	143	180	128	207	174	170	227	174	231	197
Dec	112	106	147	176	131	210	182	169	227	179	236	201
1991 Mar	\$122	\$109	\$152	\$176	\$135	\$216	\$192	\$155	\$224	\$180	\$248	\$202
Jun	131	114	156	174	144	208	193	142	231	182	263	203
Sept	137	118	160	173	147	207	193	132	236	183	267	203
Dec	141	119	165	173	150	228	185	132	246	183	279	209

Good improvement Still poor

* Trailing four-quarter revenue divided by average employees.

(a) WANB included through 3/91.

Great

Revenue per Net Property, Plant and Equipment, 1988-1991 *

	Traditional Mini Vendors					Micro-Based Vendors						
	DGN	DEC	HWP	IDM	Avg (a)	MIPS	PYRD	SQNT	SGI	SRA	SUNW	Avg
1988 Mar	3.39	3.82	3.91	2.95	3.61	NA	6.36	4.96	6.21	6.53	5.92	5.99
Jun	3.44	3.71	3.92	3.12	3.62	NA	6.36	5.54	6.00	6.58	6.10	6.11
Sept	3.66	3.65	3.91	3.14	3.68	NA	6.74	6.13	6.12	6.24	6.05	6.26
Dec	3.76	3.63	4.05	3.36	3.74	NA	6.74	5.29	6.35	6.35	6.36	6.22
1989 Mar	3.94	3.57	4.11	3.48	3.81	NA	7.07	5.15	6.33	6.43	6.73	6.34
Jun	4.15	3.49	4.10	3.60	3.87	NA	6.52	4.94	7.12	6.05	6.00	6.13
Sept	4.51	3.50	4.11	3.65	4.05	NA	6.06	5.22	7.94	5.58	6.17	6.20
Dec	4.47	3.47	4.19	2.91	3.90	NA	5.29	5.11	8.43	5.08	5.89	5.96
1990 Mar	4.46	3.45	4.24	2.93	3.89	4.87	5.02	4.28	8.98	6.28	6.44	5.98
Jun	4.61	3.35	4.24	2.93	3.92	4.57	5.04	4.11	8.38	6.22	7.05	5.89
Sept	4.52	3.36	4.13	2.91	3.94	4.46	5.50	4.06	8.44	6.26	7.16	5.98
Dec	4.81	3.43	4.23	2.92	4.03	4.46	5.54	3.90	8.27	6.31	7.53	6.00
1991 Mar	5.29	3.48	4.33	3.08	4.19	4.85	5.41	3.65	8.04	6.50	8.53	6.16
Jun	6.15	3.68	4.38	3.14	4.34	4.57	5.06	3.47	7.26	6.61	9.17	6.02
Sept	6.01	3.81	4.33	3.01	4.29	4.46	4.72	3.37	7.50	6.78	9.56	6.07
Dec	6.02	3.87	4.43	3.11	4.36	5.88	4.56	3.33	7.56	6.81	9.95	6.35

one of the lowest. No real improvement in

*Trailing four-quarter revenue divided by net PP&E, years despite big outsourcing push.

low

WOW

Tables 32 and 33

Cash Less Total Debt, 1988-1991 *

		Traditional Mini Vendors				Micro-Based Vendors					
Year	Period	DGN	DEC	HWP	TDM	MIPS	PYRD	SQNT	SGI	SRA	SUNW
1988	Mar	\$26	\$1,946	\$1,138	\$4	NA	\$26	\$13	(\$8)	\$25	(\$53)
	Jun	41	1,885	601	(45)	NA	25	11	41	22	(33)
	Sept	41	1,823	1	(24)	NA	24	8	22	17	(116)
	Dec	18	1,393	(436)	(11)	NA	20	(4)	7	15	(137)
1989	Mar	\$4	\$1,294	(\$293)	\$5	\$30	\$20	(\$9)	\$0	\$12	(\$165)
	Jun	0	1,489	(1,047)	12	NA	15	24	5	1	(215)
	Sept	(9)	1,692	(796)	(a) 32	22	17	24	10	(3)	(354)
	Dec	(19)	1,837	(895)	(120)	92	10	25	(41)	(2)	(388)
1990	Mar	(\$20)	\$2,019	(\$741)	(\$94)	\$100	\$59	\$3	\$9	\$18	(\$251)
	Jun	(26)	1,846	(770)	(144)	84	50	46	47	16	14
	Sept	(45)	1,435	(708)	(124)	67	41	36	52	17	63
	Dec	(68)	1,406	(409)	(183)	59	28	21	51	23	110
1991	Mar	(\$48)	\$1,397	\$34	(\$114)	\$49	\$19	\$11	\$49	\$42	\$236
	Jun	51	1,751	(171)	(68)	56	28	(5)	166	63	360
	Sept	71	1,889	211	(26)	51	28	(9)	186	72	314
	Dec	82	1,567	(272)	(19)	54	21	(14)	208	91	395

should + as severance payments made

Low!

(a) This & future quarters include Puerto Rico bonds classified as long-term assets and treated here as cash.

Cash Less Total Debt/Equity, 1988-1991 *

		Traditional Mini Vendors					Micro-Based Vendors						
Year	Period	DGN	DEC	HWP	TDM	Avg	MIPS	PYRD	SQNT	SGI	SRA	SUNW	Micro Avg
1988	Mar	4%	28%	23%	1%	4%	NA	47%	28%	-13%	22%	-18%	13%
	Jun	6	25	13	(5)	1	NA	44	24	29	19	(9)	21
	Sept	7	24	0	(3)	(1)	NA	40	16	15	14	(29)	11
	Dec	3	18	(9)	(1)	(6)	NA	32	(7)	5	11	(29)	2
1989	Mar	1%	17%	-6%	1%	-6%	62%	31%	-16%	0%	8%	-27%	10%
	Jun	0	19	(20)	1	(12)	NA	23	24	3	1	(37)	3
	Sept	(2)	21	(15)	(a) 3	(12)	47	25	23	6	(1)	(52)	8
	Dec	(4)	22	(16)	(12)	(14)	72	14	23	(33)	(1)	(55)	3
1990	Mar	-4%	24%	-13%	-9%	-11%	68%	45%	3%	5%	9%	-33%	16%
	Jun	(5)	23	(13)	(12)	(23)	56	34	25	19	8	2	24
	Sept	(11)	18	(11)	(10)	(23)	45	26	19	21	8	5	21
	Dec	(16)	17	(6)	(15)	(22)	39	17	11	19	10	9	18
1991	Mar	-11%	17%	0%	-9%	-20%	32%	11%	6%	18%	17%	18%	17%
	Jun	11	23	(2)	(5)	7	36	16	(3)	33	24	30	23
	Sept	14	25	3	(2)	10	42	16	(6)	36	26	25	23
	Dec	16	21	4	(2)	10	42	13	(9)	39	26	30	24

* Excludes SQNT, SGI before 1987 and PRM after 1987, and WANB after 3/91.

(a) This & future quarters include Puerto Rico bonds classified as long-term assets and treated here as cash.

Tables 34 and 35

Estimated Production 1988-1991, Year-to-Year Percent Increase *

Year	Period	Traditional Mini Vendors					Micro-Based Vendors					
		DGN	DEC	HWP	TDM	Avg	MIPS	PYRD	SQNT	SGI	SRA	SUNW
1988	Mar	0%	11%	32%	39%	21%	NA	47%	91%	79%	57%	65%
	Jun	5	21	29	28	21	NA	67	147	143	50	94
	Sept	3	15	26	42	22	NA	8	150	75	55	111
	Dec	(13)	21	32	17	14	NA	55	120	88	54	127
	Year	(2)	19	30	31	20	NA	41	128	93	54	102
1989	Mar	6%	21%	18%	19%	16%	NA	12%	60%	61%	56%	97%
	Jun	10	(9)	37	34	18	NA	29	50	25	19	57
	Sept	(7)	7	31	39	17	NA	35	37	52	3	63
	Dec	(9)	4	15	12	6	NA	44	87	57	26	16
	Year	1	5	25	19	13	NA	31	59	48	23	52
1990	Mar	4%	1%	23%	22%	12%	NA	95%	116%	52%	21%	5%
	Jun	(11)	8	(1)	12	2	NA	101	91	37	35	14
	Sept	(3)	5	7	17	6	NA	80	46	14	44	7
	Dec	(4)	8	11	4	5	NA	87	45	11	35	29
	Year	(4)	6	10	13	6	NA	91	67	26	34	14
1991	Mar	-13%	12%	12%	1%	3%	48%	22%	34%	38%	-17%	52%
	Jun	(16)	(1)	16	5	1	11	51	7	36	(10)	38
	Sept	(11)	8	10	6	3	(16)	3	(2)	26	6	26
	Dec	14	18	NA	7	13	7	(9)	(5)	52	(1)	11
	Year	(7)	9	NA	5	3	8	13	11	39	(5)	30

* Year-over-year change in quarterly cost of sales plus quarterly growth in finished goods and work in process inventories.

Capital Spending on Property, Plant and Equipment 1988-1991, Year-to-Year Percent Increase

Year	Period	Traditional Mini Vendors					Micro-Based Vendors					
		DGN	DEC	HWP	TDM	Avg	MIPS	PYRD	SQNT	SGI	SRA	SUNW
1988	Mar	-27%	155%	26%	18%	42%	NA	31%	176%	158%	47%	90%
	Jun	(38)	45	75	(15)	20	NA	63	64	54	81	11
	Sept	(13)	12	5	(10)	22	NA	46	18	37	163	259
	Dec	18	(21)	58	(72)	(2)	NA	(27)	176	39	37	42
	Year	(21)	32	34	(35)	10	NA	16	123	65	75	70
1989	Mar	-6%	-31%	50%	6%	1%	NA	-20%	46%	11%	31%	38%
	Jun	(13)	(26)	13	42	1	NA	36	424	(30)	111	64
	Sept	(22)	(23)	20	(7)	(19)	NA	104	271	16	18	(23)
	Dec	(27)	(19)	34	564	95	NA	256	29	(5)	121	76
	Year	(16)	(25)	29	115	13	NA	96	102	(2)	68	36
1990	Mar	-17%	-18%	20%	68%	-8%	112%	494%	224%	-18%	25%	-27%
	Jun	(3)	(5)	(6)	11	(1)	73	46	121	177	(26)	(3)
	Sept	48	(26)	(1)	8	(10)	52	37	80	56	(29)	50
	Dec	(7)	(21)	(9)	(79)	(29)	69	(12)	73	70	(25)	(31)
	Year	(1)	(16)	0	(35)	(13)	76	59	127	56	(18)	(8)
1991	Mar	-13%	-27%	-11%	-61%	-28%	-47%	-66%	-35%	43%	2%	-47%
	Jun	(25)	(37)	(12)	(13)	(22)	(69)	158	(44)	65	12	(8)
	Sept	41	(21)	(3)	7	6	(61)	(18)	(36)	5	31	(38)

Table 36

Total Operating Cash Flow, 1988-1991(a)

Company	Year	Period Ending				Year
		Mar	Jun	Sept	Dec	
Data General	1988	21	11	(13)	(33)	(14)
	1989	(23)	(6)	(18)	(15)	(61)
	1990	(7)	(10)	(27)	(25)	(70)
	1991	23	104	11	4	141 Great
Digital Equipment	1988	229	(14)	(84)	64	195
	1989	87	85	184	180	535
	1990	159	(239)	(191)	(153)	(424)
	1991	(26)	215	114	(264)	39
Traditional Minicomputer Vendors	Hewlett Packard	1988	149	(43)	129	(341)
		1989	68	(781)	173 (b)	(114)
		1990	74	(40)	(10)	273
		1991	343	(222)	375	54 (550) Big + Acquisition - related
Tandem Computers	1988	NA	(53)	13	2	(39)
	1989	18	(1)	23	(173)	(133)
	1990	(6)	(76)	6	(67)	(143)
	1991	77	40	39	(2)	154
MIPS Computer	1989	(8)	NA	(6)	(9)	NA
	1990	(7)	(15)	(17)	(10)	(49)
	1991	(10)	3	(6)	0	(13)
Pyramid Technology	1988	2	(1)	(2)	(4)	(4)
	1989	0	(4)	1	(8)	(11)
	1990	(6)	(20)	(11)	(13)	(50)
	1991	(10)	6	(4)	(7)	(15)
Micro-Based Vendors	Sequent Computer	1988	(4)	(2)	(4)	(11)
		1989	(4)	(6)	(1)	(1)
		1990	(24)	(16)	(11)	(18)
		1991	(9)	(19)	(6)	(6) (40) Poor
Silicon Graphics	1988	(12)	(26)	(19)	(16)	(73)
	1989	(8)	2	3	(1)	(5)
	1990	7	(21)	3	(4)	(15)
	1991	(7)	(54)	(2)	9	(54)
Stratus Computer	1988	(2)	(4)	(7)	(4)	(16)
	1989	(4)	(15)	(5)	(4)	(27)
	1990	14	(5)	0	2	11
	1991	15	15	3	1	34
Sun Micro-Systems	1988	(52)	(24)	(94)	(66)	(237)
	1989	(122)	(56)	(228)	(38)	(444)
	1990	115	152	(167)	42	142 (370) Big +
	1991	82	293	(79)	74	

(a) Total cash flow from operations & investment activities. Excludes only external sources of capital & dividend

(b) This & future quarters include Puerto Rico bonds and other financial assets classified as long-term assets & treated here as cash.

Appendix

<u>Diagram</u>	<u>Title</u>	<u>Page</u>
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Appendix B	Relative Price-to-Revenues Data, Month End Prices	51
Appendix C	Relative Price-to-Book Data, Month End Prices	52

Appendix A

Relative Price-to-Earnings Data; ** Trailing 4Q Earnings, Month End Prices

													Min
	DGN	DEC	HWP	MIPS	PYRD	SQNT	SGI	SRA	SUNW	TDM	Avg(a)	IBM	
1988	Jan	NM	0.94	1.66	NA	1.83	2.63	1.78	1.63	1.83	1.38	1.65	0.94
	Feb	NM	0.90	1.55	NA	1.92	2.56	1.67	1.99	1.70	1.41	1.65	0.94
	Mar	NM	0.78	1.58	NA	2.28	2.95	2.00	1.92	1.91	1.25	1.71	0.88
	Apr	NM	0.82	1.68	NA	2.19	3.12	1.94	1.98	1.86	1.34	1.72	0.95
	May	NM	0.82	1.46	NA	1.90	3.27	2.16	2.01	1.80	1.32	1.69	0.95
	Jun	NM	0.87	1.38	NA	2.43	2.90	2.12	1.98	1.91	1.43	1.71	1.03
	Jul	NM	0.84	1.35	NA	1.73	2.95	1.43	1.60	1.61	1.20	1.51	1.14
	Aug	NM	0.77	1.20	NA	1.63	3.15	1.38	1.63	1.77	1.18	1.50	1.06
	Sep	NM	0.75	1.24	NA	1.91	2.90	1.58	1.70	1.56	1.23	1.52	1.05
	Oct	NM	0.80	1.27	NA	1.67	2.34	1.80	1.35	1.17	1.24	1.40	1.12
	Nov	NM	0.80	1.18	NA	1.68	2.39	1.78	1.48	1.15	1.42	1.45	1.10
	Dec	NM	0.82	1.27	NA	1.84	2.64	2.14	1.65	1.35	1.41	1.58	1.11
1989	Jan	NM	1.00	1.35	NA	1.57	2.80	2.32	1.61	1.31	1.48	1.68	1.11
	Feb	NM	0.97	1.29	NA	1.60	2.65	2.15	1.68	1.26	1.47	1.63	1.06
	Mar	NM	0.84	1.17	NA	1.20	2.78	1.90	1.54	1.13	1.31	1.48	0.94
	Apr	NM	0.84	1.29	NA	1.18	2.53	2.17	1.53	1.02	1.36	1.49	0.97
	May	NM	0.78	1.17	NA	1.09	2.61	2.45	1.65	1.27	1.43	1.55	0.90
	Jun	NM	0.79	1.14	NA	0.86	2.15	2.19	1.42	0.99	1.33	1.38	0.93
	Jul	NM	0.81	1.10	NA	0.99	2.04	2.01	1.31	1.37	1.36	1.38	0.83
	Aug	NM	0.84	1.06	NA	1.10	2.18	2.22	1.42	1.46	1.44	1.46	0.83
	Sep	NM	0.77	1.02	NA	1.21	2.72	2.51	1.09	1.44	1.48	1.53	0.78
	Oct	NM	0.86	1.00	NA	1.32	2.16	2.02	1.01	2.17	1.49	1.50	0.78
	Nov	NM	0.78	0.93	NA	1.25	2.41	1.98	0.94	2.09	1.44	1.48	0.74
	Dec	NM	0.73	0.95	NA	1.40	2.45	2.29	0.98	2.17	1.39	1.54	0.70
1990	Jan	NM	0.84	0.95	1.76	1.52	2.05	1.91	0.92	3.36	1.83	1.67	1.14
	Feb	NM	0.82	0.94	1.77	1.87	2.24	2.07	1.04	3.85	1.78	1.83	1.19
	Mar	NM	0.78	0.96	1.62	1.98	2.59	2.20	0.93	3.77	1.75	1.87	1.18
	Apr	NM	0.92	0.90	1.12	1.80	2.28	1.62	0.89	3.87	1.47	1.72	1.16
	May	NM	0.94	0.93	1.14	1.81	2.59	1.68	1.09	4.36	1.49	1.86	1.16
	Jun	NM	0.87	0.92	0.98	1.55	2.48	1.73	1.05	4.89	1.28	1.85	1.14
	Jul	NM	1.06	0.84	0.81	1.08	1.96	1.38	0.97	1.68	1.02	1.25	1.06
	Aug	NM	1.02	0.76	0.68	0.94	1.94	1.31	0.79	1.69	0.92	1.17	1.07
	Sep	NM	0.87	0.77	0.54	0.81	1.37	1.22	0.75	1.36	0.68	0.98	1.18
	Oct	NM	1.28	0.61	0.35	0.64	1.30	0.90	0.84	1.22	0.63	0.93	1.11
	Nov	NM	1.32	0.70	0.41	0.60	1.26	1.11	1.03	1.10	0.79	0.99	1.13
	Dec	NM	1.38	0.74	0.36	0.56	1.36	1.15	1.01	1.11	0.73	1.00	1.11
1991	Jan	NM	1.29	0.85	0.54	0.73	1.20	1.24	1.04	1.24	1.00	1.07	0.81
	Feb	NM	1.23	0.92	0.56	0.76	1.19	1.38	1.00	1.31	0.92	1.09	0.76
	Mar	NM	1.13	0.96	0.65	0.88	1.34	1.36	1.19	1.27	0.92	1.13	0.66
	Apr	NM	1.23	0.95	0.64	0.87	3.02	1.36	1.04	1.27	1.08	1.35	0.63
	May	NM	1.21	0.92	0.56	0.83	2.77	1.24	1.04	1.22	1.18	1.30	0.62
	Jun	NM	1.09	0.91	0.56	0.43	2.17	1.11	0.97	0.97	1.00	1.08	0.60
	Jul	NM	0.94	0.86	NM	0.63	NM	1.37	0.99	0.88	1.07	0.96	0.73
	Aug	NM	0.85	0.83	NM	0.69	NM	1.47	1.08	0.91	1.11	0.99	0.69
	Sep	NM	0.77	0.79	NM	0.65	NM	1.56	1.05	0.87	1.16	0.98	0.75
	Oct	0.35	0.80	0.75	NM	0.79	NM	1.56	1.00	0.67	1.75	0.96	0.86
	Nov	0.30	0.84	0.83	NM	0.71	NM	1.69	1.11	0.68	1.52	0.96	0.84
	Dec	0.31	0.66	0.79	NM	0.58	NM	1.51	1.12	0.72	1.56	0.91	0.73
1992	Jan	0.24	1.21	0.79	NM	NM	NM	1.51	0.97	0.72	NM	0.91	1.11
	Feb	0.25	1.47	0.97	NM	NM	NM	1.71	1.08	0.80	NM	1.05	1.06

** Relative to the S&P 400.

(a) PRM removed from average 1/89.

Appendix B

Relative Price-to-Revenue Data; ** Trailing 4Q Earnings, Month End Prices

		DGN	DEC	HWP	MIPS	PYRD	SQNT	SGI	SRA	SUNW	TDM	Min	Avg(s)	IBM
1988	Jan	0.89	2.37	2.71	NA	1.73	4.86	2.80	3.50	2.57	2.68	2.44	1.88	
	Feb	0.85	2.28	2.58	NA	1.81	4.73	2.64	4.26	2.38	2.74	2.46	1.87	
	Mar	0.71	1.96	2.62	NA	2.15	5.43	3.16	4.11	2.68	2.41	2.52	1.76	
	Apr	0.75	1.88	2.65	NA	2.45	4.81	3.06	4.14	2.34	2.32	2.43	1.80	
	May	0.73	1.88	2.30	NA	2.13	5.04	3.42	4.20	2.25	2.29	2.40	1.80	
	Jun	0.76	1.99	2.18	NA	2.72	4.47	3.35	4.14	2.40	2.48	2.41	1.95	
	Jul	0.61	1.78	2.03	NA	2.21	3.89	2.51	3.30	2.03	1.70	1.98	1.94	
	Aug	0.60	1.61	1.81	NA	2.09	4.15	2.41	3.36	2.23	1.67	1.96	1.80	
	Sep	0.62	1.57	1.88	NA	2.45	3.83	2.77	3.49	1.97	1.74	2.01	1.79	
	Oct	0.56	1.54	1.87	NA	2.39	3.04	2.33	2.71	1.36	1.61	1.72	1.86	
	Nov	0.54	1.53	1.70	NA	2.39	3.10	2.30	2.97	1.33	1.85	1.77	1.83	
	Dec	0.56	1.57	1.84	NA	2.62	3.44	2.77	3.32	1.57	1.83	1.94	1.85	
1989	Jan	0.54	1.72	1.92	NA	2.42	3.70	2.31	3.19	1.52	1.92	1.91	1.81	
	Feb	0.57	1.67	1.81	NA	2.46	3.51	2.13	3.32	1.47	1.91	1.88	1.74	
	Mar	0.46	1.45	1.65	NA	1.81	3.68	1.88	3.01	1.31	1.70	1.69	1.53	
	Apr	0.55	1.33	1.79	NA	1.81	3.36	1.79	2.95	1.20	1.61	1.64	1.55	
	May	0.57	1.24	1.61	NA	1.71	3.47	2.02	3.20	1.49	1.68	1.88	1.44	
	Jun	0.53	1.25	1.56	NA	1.39	2.86	1.80	2.75	1.17	1.58	1.50	1.49	
	Jul	0.50	1.21	1.54	NA	1.41	3.25	1.61	2.61	0.87	1.77	1.46	1.41	
	Aug	0.44	1.26	1.41	NA	1.56	3.48	1.77	2.83	0.92	1.86	1.53	1.41	
	Sep	0.44	1.15	1.37	NA	1.72	4.35	2.00	2.16	0.91	1.93	1.84	1.33	
	Oct	0.44	1.24	1.37	NA	2.00	4.00	2.09	2.04	1.09	2.10	1.68	1.27	
	Nov	0.42	1.13	1.22	NA	1.90	4.45	2.04	1.89	1.05	2.02	1.65	1.22	
	Dec	0.37	1.05	1.24	NA	2.12	4.53	2.37	1.96	1.09	1.95	1.71	1.15	
1990	Jan	0.32	1.10	1.28	6.84	2.37	4.05	2.56	1.82	1.25	2.57	2.23	1.30	
	Feb	0.28	1.07	1.19	6.89	2.91	4.43	2.77	2.06	1.44	2.50	2.36	1.36	
	Mar	0.29	1.02	1.22	6.30	3.09	5.10	2.94	1.84	1.41	2.46	2.38	1.35	
	Apr	0.32	1.14	1.21	6.01	3.09	4.59	2.58	1.76	1.53	2.24	2.26	1.40	
	May	0.38	1.17	1.18	6.11	3.11	5.22	2.67	2.18	1.72	2.26	2.39	1.41	
	Jun	0.36	1.07	1.17	5.25	2.67	4.99	2.76	2.07	1.93	1.94	2.23	1.39	
	Jul	0.24	0.94	1.09	4.83	2.51	4.34	2.51	1.82	1.68	1.54	1.99	1.31	
	Aug	0.22	0.90	0.96	4.02	2.20	4.28	2.38	1.48	1.69	1.39	1.81	1.32	
	Sep	0.20	0.77	0.97	3.20	1.88	3.03	2.22	1.41	1.36	1.02	1.49	1.46	
	Oct	0.17	0.74	0.79	2.20	1.42	2.82	1.61	1.59	1.00	0.87	1.23	1.48	
	Nov	0.17	0.76	0.85	2.56	1.34	2.74	2.00	1.94	1.24	1.09	1.36	1.50	
	Dec	0.17	0.80	0.89	2.25	1.25	2.95	2.06	1.91	1.25	1.01	1.35	1.48	
1991	Jan	0.33	0.98	1.06	2.91	1.55	2.08	2.24	2.11	1.54	1.14	1.48	1.55	
	Feb	0.29	0.93	1.17	3.08	1.60	2.08	2.50	2.05	1.63	1.05	1.52	1.47	
	Mar	0.44	0.86	1.23	3.53	1.87	2.33	2.46	2.42	1.57	1.06	1.65	1.27	
	Apr	0.58	0.86	1.28	3.88	1.83	2.01	2.04	2.27	1.78	1.16	1.64	1.18	
	May	0.56	0.85	1.28	3.40	1.73	1.85	1.86	2.28	1.71	1.28	1.56	1.17	
	Jun	0.53	0.76	1.25	3.36	0.90	1.45	1.66	2.13	1.36	1.07	1.35	1.12	
	Jul	0.62	0.80	1.28	2.43	1.10	1.19	2.21	2.46	1.34	0.90	1.43	1.15	
	Aug	0.69	0.73	1.22	1.93	1.20	1.11	2.36	2.67	1.38	0.93	1.42	1.08	
	Sep	0.71	0.67	1.17	2.24	1.14	1.15	2.52	2.80	1.33	0.98	1.45	1.19	
	Oct	0.78	0.74	1.17	1.93	1.11	1.81	2.51	2.81	1.00	0.88	1.48	1.13	
	Nov	0.66	0.78	1.15	1.80	1.00	1.46	2.72	3.14	1.01	0.77	1.45	1.11	
	Dec	0.68	0.62	1.23	1.75	0.81	1.76	2.43	3.17	1.08	0.78	1.43	0.96	
1992	Jan	0.42	0.55	1.29	2.37	0.99	2.35	2.55	3.05	1.11	0.92	1.56	1.00	
	Feb	0.43	0.67	1.54	1.92	1.04	2.33	2.88	3.38	1.24	0.95	1.64	0.95	

** Relative to the S&P 400.

(a) PRM included in average through 8/89, WANB through 6/91.

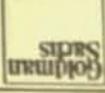
** Relative to the S&P 400. (a) PRM included in average through 6/89, WANB through 6/91.

	DG	DEC	HWP	MIPS	PYRD	SQNT	SGI	SRA	SUNW	TDM	Avg(2)	IBM
1988 Jan	0.54	1.06	1.33	N/A	0.60	1.25	1.70	1.92	2.13	1.15	1.21	0.81
Feb	0.57	1.03	1.39	N/A	0.63	1.22	1.60	2.33	1.97	1.17	1.23	0.80
Mar	0.46	0.88	1.41	N/A	0.74	1.40	1.92	2.25	2.22	1.03	1.25	0.76
Apr	0.47	0.87	1.42	N/A	0.89	1.45	2.05	2.26	2.05	1.01	1.26	0.80
May	0.46	0.87	1.29	N/A	0.77	1.52	2.30	2.25	2.30	1.87	1.99	1.22
Jun	0.48	0.92	1.22	N/A	0.99	1.35	2.21	2.26	2.10	1.08	1.26	0.87
July	0.48	0.80	1.13	N/A	0.84	1.35	1.88	1.82	1.82	1.72	1.76	0.87
Aug	0.46	0.87	1.12	N/A	0.79	1.44	0.82	1.84	1.84	0.78	1.89	0.87
Sept	0.37	0.70	1.16	N/A	0.95	1.20	0.82	1.51	1.51	0.90	1.51	0.81
Oct	0.39	0.69	1.09	N/A	0.93	1.33	0.90	1.96	1.96	0.78	1.99	0.81
Nov	0.36	0.70	1.15	N/A	0.95	1.20	0.82	1.51	1.51	0.90	1.51	0.81
Dec	0.37	0.70	1.16	N/A	0.93	1.33	0.90	1.96	1.96	0.78	1.99	0.81
1989 Jan	0.35	0.81	1.21	N/A	0.97	1.51	0.98	1.76	1.76	1.00	1.01	0.83
Feb	0.37	0.71	1.18	N/A	1.04	1.36	0.98	1.85	1.85	0.83	1.83	0.82
Mar	0.36	0.69	1.09	N/A	0.95	1.23	0.81	1.65	1.65	0.82	1.64	0.81
Apr	0.39	0.71	1.12	N/A	0.79	1.44	0.78	1.84	1.84	0.78	1.87	0.81
May	0.46	0.87	1.29	N/A	0.89	1.45	2.05	2.26	2.05	1.01	1.26	0.80
Jun	0.48	0.92	1.22	N/A	0.99	1.35	2.21	2.26	2.10	1.08	1.26	0.87
July	0.48	0.80	1.13	N/A	0.84	1.35	1.88	1.82	1.82	1.72	1.76	0.87
Aug	0.46	0.87	1.12	N/A	0.79	1.44	0.82	1.84	1.84	0.78	1.89	0.87
Sept	0.37	0.70	1.16	N/A	0.95	1.20	0.82	1.51	1.51	0.90	1.51	0.81
Oct	0.39	0.69	1.09	N/A	0.93	1.33	0.90	1.96	1.96	0.78	1.99	0.81
Nov	0.36	0.70	1.15	N/A	0.95	1.20	0.82	1.51	1.51	0.90	1.51	0.81
Dec	0.37	0.70	1.16	N/A	0.93	1.33	0.90	1.96	1.96	0.78	1.99	0.81
1990 Jan	0.22	0.81	1.21	N/A	0.97	1.51	0.98	1.76	1.76	1.00	1.01	0.83
Feb	0.22	0.70	1.00	1.22	1.55	2.08	1.02	1.52	2.01	1.02	1.12	0.59
Mar	0.20	0.42	0.72	9.61	1.30	1.78	2.21	0.91	1.10	1.10	1.25	0.59
Apr	0.22	0.47	0.72	3.41	0.81	1.77	1.52	0.70	1.08	1.08	0.72	0.57
May	0.25	0.48	0.68	3.76	0.81	2.02	1.57	1.06	1.31	0.96	0.97	0.62
Jun	0.24	0.44	0.67	3.74	0.70	1.93	1.62	1.01	1.47	0.83	0.93	0.61
July	0.25	0.48	0.68	3.76	0.81	2.02	1.57	1.06	1.31	0.96	0.97	0.62
Aug	0.16	0.39	0.62	4.92	0.70	1.23	1.14	0.86	1.18	0.84	0.78	0.57
Sept	0.15	0.38	0.54	4.92	0.70	1.22	1.14	0.86	1.18	0.84	0.78	0.57
Oct	0.13	0.31	0.44	3.61	0.43	0.66	0.73	0.74	0.58	0.35	0.51	0.63
Nov	0.13	0.32	0.48	3.57	0.40	0.84	0.91	0.90	0.71	0.44	0.56	0.64
Dec	0.13	0.33	0.48	3.44	0.38	0.90	0.93	0.89	0.72	0.41	0.56	0.63
1991 Jan	0.25	0.40	0.56	4.45	0.49	0.67	1.02	0.94	0.99	0.44	0.62	0.63
Feb	0.22	0.35	0.61	2.49	0.51	0.67	1.14	0.91	0.94	0.41	0.60	0.60
Mar	0.33	0.32	0.64	2.90	0.59	0.75	1.12	1.07	0.91	0.41	0.65	0.52
Apr	0.41	0.32	0.66	2.68	0.61	0.66	0.93	0.98	1.01	0.45	0.64	0.52
May	0.40	0.32	0.65	2.24	0.59	0.61	0.97	0.97	0.97	0.41	0.51	0.51
Jun	0.38	0.32	0.64	2.50	0.30	0.48	0.76	0.92	0.77	0.42	0.51	0.49
July	0.41	0.32	0.65	2.50	0.37	0.42	0.62	0.92	0.77	0.42	0.51	0.49
Aug	0.46	0.29	0.61	1.96	0.40	0.39	0.66	1.12	1.03	0.36	0.55	0.48
Sept	0.48	0.26	0.59	2.12	0.38	0.41	0.71	1.09	0.88	0.38	0.55	0.53
Oct	0.49	0.29	0.60	1.94	0.37	0.71	1.03	1.13	0.66	0.38	0.55	0.50
Nov	0.42	0.31	0.59	1.98	0.33	0.57	1.28	1.26	0.67	0.38	0.55	0.49
Dec	0.43	0.31	0.59	1.98	0.27	0.57	1.28	1.26	0.67	0.38	0.55	0.49
1992 Jan	0.26	0.22	0.62	2.09	0.36	0.86	1.12	0.74	0.39	0.57	0.42	0.45
Feb	0.22	0.24	0.62	2.10	0.27	0.57	1.28	0.71	0.31	0.55	0.42	0.45
Mar	0.21	0.22	0.60	2.09	0.33	0.57	1.28	0.67	0.36	0.55	0.42	0.45
Apr	0.21	0.22	0.60	2.09	0.33	0.57	1.28	0.67	0.36	0.55	0.42	0.45
May	0.21	0.22	0.60	2.09	0.33	0.57	1.28	0.67	0.36	0.55	0.42	0.45
Jun	0.21	0.22	0.60	2.09	0.33	0.57	1.28	0.67	0.36	0.55	0.42	0.45
July	0.21	0.22	0.60	2.09	0.33	0.57	1.28	0.67	0.36	0.55	0.42	0.45
Aug	0.21	0.22	0.60	2.09	0.33	0.57	1.28	0.67	0.36	0.55	0.42	0.45
Sept	0.21	0.22	0.60	2.09	0.33	0.57	1.28	0.67	0.36	0.55	0.42	0.45
Oct	0.21	0.22	0.60	2.09	0.33	0.57	1.28	0.67	0.36	0.55	0.42	0.45
Nov	0.21	0.22	0.60	2.09	0.33	0.57	1.28	0.67	0.36	0.55	0.42	0.45
Dec	0.21	0.22	0.60	2.09	0.33	0.57	1.28	0.67	0.36	0.55	0.42	0.45

Relative Price-to-Book Data: ** Trailing Book Value, Month End Prices

Appendix C

Investment Research



Goldman, Sachs & Co. has managed or comanaged a public offering of Sequent Computer, Sun Microsystems, and IBM securities in the past several years. Goldman, Sachs & Co. or an affiliate makes an over-the-counter market in Data General convertible debentures, Mentor Graphics common stock, MIPS Computer Systems common stock, Pyramid Technology common stock, Sequent Computer Systems common stock, Sun Microsystems common stock and convertible debentures, Autodesk common stock, and IBM convertible debentures. Goldman, Sachs & Co. or an affiliate has rendered significant corporate finance services to Hewlett-Packard and Sun Microsystems within the past six months. Goldman, Sachs & Co. or an affiliate may deal as principal in the listed securities mentioned.

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other
will be
to do
leverage
and could be used to
the advantage of the
company. And this plan
is to be followed by
the new board members to
ensure that it is done

properly and in accordance
with the law.