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SHAREHOLDER VALUE CREATORS IN THE S&P 500:  
YEAR 2003

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## SHAREHOLDER VALUE CREATORS IN THE S&P 500: YEAR 2003

### **Abstract**

During 2003, 87% of the companies in the S&P 500 created value, compared to just 17% in 2002. The market value of the 500 companies in 2003 was \$10.1 trillion, compared to \$7.9 trillion in 2002.

The top shareholder value creators in 2003 were Intel, Cisco, Citigroup, General Electric and Exxon. We define created shareholder value and provide the ranking of created shareholder value for the 500 companies.

We also calculate the created shareholder value of the 500 companies over the eleven-year period 1993-2003. General Electric was the top shareholder value creator and AT&T, the top shareholder value destroyer during the period.

On the average, the small cap companies in the S&P 500 were more profitable than the large caps. The volatility of the S&P 500 fell over the period 1998 to 2003, but the volatility of its components increased on the average.

JEL Classification: G12, G31, M21

**Keywords:** shareholder value creation, created shareholder value, equity market value, shareholder value added, shareholder return, required return to equity, EVA.

## SHAREHOLDER VALUE CREATORS IN THE S&P 500: YEAR 2003

### Introduction

In this paper, we quantify shareholder value creation for the 500 companies in the S&P 500 in December 2003. We provide the created shareholder value for each and every company for the years 1993-2003. Only 412 companies (out of the 500) traded as of December 31, 1992.

In section 1, created shareholder value is defined and calculated for the S&P 500 as a whole. Section 2 has the ranking of created shareholder value for the 500 companies in the 11-year period 1993-2003. Section 3 shows the shareholder return of the ten most profitable and the ten least profitable companies during the period 1993-2003. Section 4 shows the relation between shareholder return in successive years, and section 5 shows the relation between shareholder return and size. In section 6 we can see that the volatility of the S&P 500 index fell over the period 1998 to 2003, while the volatility of its components increased (on the average).

**Appendix 1** contains the shareholder value creation in each year of the period 1993-2003 for the companies in the S&P 500 in December 2003. Appendix 2 has the ranking of created shareholder value for the 500 companies in the 11-year period 1993-2003. Appendix 3 has the ranking of shareholder return for the 500 companies in 2003.

### 1. Definition of created shareholder value

We define created shareholder value following Fernández (2002, chapter 1). To obtain the created shareholder value, we must first define the increase of equity market value, the shareholder value added, the shareholder return, and the required return to equity.

The equity market value of a listed company is the company's market value, that is, the price of the share multiplied by the number of shares. The *increase of equity market value* in a given year is the equity market value at the end of that year less the equity market value at the end of the previous year.

*Shareholder value added* is the term used for the difference between the wealth held by the shareholders at the end of a given year and the wealth they held the previous year.

The shareholder value added is calculated as follows:

Shareholder value added = Increase in equity market value + Dividends paid during the year – Outlays for capital increases + Other payments to shareholders (discounts on par value, share buy-backs....) – Conversion of convertible debentures
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The *shareholder return* is the shareholder value added in one year, divided by the equity market value at the beginning of the year. Shareholder return = Shareholder value added / Equity market value.

The *required return to equity* is the sum of the interest rate of long-term Treasury bonds plus a quantity which is usually called the company's risk premium and which depends on its risk.

$$\text{Required return to equity} = \text{return of long-term treasury bonds} + \text{risk premium}$$

A company creates value for the shareholders when the shareholder return exceeds the share cost (the required return to equity). In other words, a company creates value in one year when it outperforms expectations. The created shareholder value is quantified as follows:

$\text{Created shareholder value} = \text{Equity market value} \times (\text{Shareholder return} - K_e)$
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As the shareholder return is equal to the shareholder value added divided by the equity market value, the created value can also be calculated as follows:

$$\text{Created shareholder value} = \text{Shareholder value added} - (\text{Equity market value} \times K_e)$$

Consequently, the value created is the shareholder value added above expectations, which are reflected in the required return to equity.

**Table 1** shows in simplified form the relationship between three variables which are sometimes confused: increase of equity market value, shareholder value added, and created shareholder value.

**Table 2** contains the market value, the shareholder return, the shareholder value added and the created shareholder value of the S&P 500 for the years 1993-2003<sup>1</sup>.

<sup>1</sup> The shareholder value creation must be adjusted to dollars of a base year in order to sum and compare correctly the shareholder value creation of several years. We have adjusted the shareholder value creation of 1999 to dollars of 2003 in the following way:

$$1,819 = 1,282 \times (1+K_{e2000}) \times (1+K_{e2001}) \times (1+K_{e2002}) \times (1+K_{e2003}). K_e \text{ is the required return to equity.}$$

Table 1. Increase of equity market value, shareholder value added, and created shareholder value

<i>Increase of equity market value</i>	Equity market value <sub>t</sub> – Equity market value <sub>t-1</sub>
	↓
<i>Shareholder value added</i>	Increase of equity market value – payments from shareholders + dividends + repurchases – conversions
	↓
<i>Created shareholder value</i>	Shareholder value added – (Equity market value × Ke)

Table 2. S&amp;P 500. Market value, shareholder return, shareholder value added and created shareholder value (\$ billion)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
Market value	3,306	3,346	4,588	5,626	7,555	9,942	12,31	11,735	10,467	8,107	10,285	
Δ Market value	291	41	1,242	1,037	1,929	2,388	2,368	-575	-1,269	-2,359	2,178	7,271
Δ Shareholder value added	304	44	1,257	1,054	1,877	2,159	2,092	-1,121	-1,395	-2,313	2,326	6,283
Shareholder value creation:												
current dollars	-48	-300	828	600	1,257	1,431	1,282	-2,43	-2,463	-3,259	1,694	-1,408
constant dollars (2003)	-124	-695	1,699	1,121	2,115	2,195	1,819	-3,116	-2,895	-3,513	1,694	301
Shareholder return	10.1%	1.3%	37.6%	23.0%	33.4%	28.6%	21.0%	-9.1%	-11.9%	-22.1%	28.7%	11.0%
Index level	466	459	616	741	970	1,229	1,469	1,32	1,148	880	1,112	
% of companies with:												
Shareholder return > 0	74%	53%	93%	81%	89%	67%	53%	61%	49%	30%	94%	
Shareholder value creation > 0	53%	33%	82%	70%	79%	54%	47%	54%	36%	17%	87%	

## 2. Shareholder value creators

Table 3 shows the top ten value creators and value destroyers for the years 1993-2003.

Table 3. Top ten value creators and value destroyers for the years 1993-2003

Top shareholder value creators. Shareholder value created in \$ million 03										
	1	2	3	4	5	6	7	8	9	10
1993	General Motors 34,693	General Electric 26,548	Motorola 23,569	Ford Motor 22,291	Sears Roebuck 19,591	Intel 15,002	Humana 12,000	ChevronTexaco 11,165	Eastman Kodak 10,436	Oracle 10,332
1994	Microsoft 22,097	Intl.Bus.Mach. 16,427	Coca-Cola 10,017	Motorola 9,747	Johnson&Johnson 9,674	Oracle 8,738	Hewlett-Packard 8,335	Du Pont E I De Nemours 7,497	Micron Tech. 6,704	Archer-Danls-Midl 5,565
1995	Merck & Co. 60,288	General Electric 56,129	Altria Gp. 50,884	Coca-Cola 44,040	Exxon Mobil 38,667	Archer-Danls-Midl 36,523	Johnson&Johnson 32,053	AT&T 31,160	Hewlett-Packard 30,079	Bellsouth 29,184
1996	Intel 108,851	Microsoft 77,420	General Electric 66,670	SBC ommun. 60,063	Coca-Cola 56,652	Intl.Bus.Mach. 53,440	Exxon Mobil 30,721	Altria Gp. 28,639	Cisco Systems 23,590	Procter & Gamble 23,420
1997	General Electric 107,104	Microsoft 76,588	Pfizer 61,602	Bristol Myers Squibb 58,873	Lilly Eli 54,375	Wal-Mart Stores 54,197	AT&T 49,754	Procter & Gamble 47,730	Merck & Co. 38,918	Coca-Cola 37,560
1998	Microsoft 255,193	Lucent Tech 136,402	Wal-Mart Stores 129,658	Cisco Systems 123,835	General Electric 114,173	Intel 106,712	Dell 105,828	Intl.Bus.Mach. 103,877	Time Warner 89,601	Pfizer 85,712
1999	Microsoft 300,043	Cisco Systems 260,360	General Electric 212,247	Oracle 177,409	Wal-Mart Stores 156,671	Qualcomm 147,871	Sun Microsystems 123,031	Citigroup 97,044	Yahoo 95,066	EMC 94,123
2000	Altria Gp. 65,650	Lucent Tech 62,973	American Intl.Gp. 57,082	Pfizer 52,395	Wyeth 35,184	Citigroup 31,729	Medtronic 30,858	Sanmina-Sci 29,629	Lilly Eli 28,888	Tyco Intl. 27,805
2001	Microsoft 117,571	Intl.Bus.Mach. 60,055	Bank of America 29,994	Dell 24,363	AT&T 24,062	Lowe's Companies 19,890	Best Buy Co. 10,552	Ebay 9,872	First Data 9,786	Johnson&Johnson 9,646
2002	Boston Scientific 7,037	Bank of America 6,667	Wachovia 5,148	Lockheed Martin 3,613	Procter & Gamble 3,576	Newmont Mining 3,055	SLM 2,322	UnitedHealth Gp. 2,312	Halliburton 2,294	Apollo Gp.'A' 2,101
2003	Intel 101,152	Cisco Systems 72,969	Citigroup 62,648	General Electric 57,570	Exxon Mobil 32,095	Altria Gp. 29,750	SBC Commun. 25,319	Home Depot 23,387	Texas Insts. 22,863	FleetBoston Finl. 20,606

Top shareholder value destroyers. Shareholder value destroyed d in \$ million 03										
	1	2	3	4	5	6	7	8	9	10
1993	Altria Gp. -59,160	Wal-Mart Stores -56,812	Merck & Co -34,323	Home Depot -17,866	Bristol Myers Squibb -16,683	Johnson&Johnson -15,452	Apple Computers -13,021	Limited Brands -11,952	Amgen -10,704	Novell -10,645
1994	Wal-Mart Stores -30,078	General Motors -27,967	General Electric -17,932	AT&T -17,884	Exxon Mobil -14,587	Ford Motor -13,675	Pepsico -13,485	Verizon Comms. -11,779	PG&E -11,538	Bank One -10,549
1995	Motorola -9,472	Toys R Us Holding Co. -7,380	Wal-Mart Stores -6,308	Novell -4,769	EMC -4,420	Archer-Danis-Midl -4,096	Apple Computers -3,366	Home Depot -3,243	Advd.Micro Devc. -2,895	Reebok Intl. -2,869
1996	AT&T -24,961	Electronic Data Systems -10,652	BellSouth -9,548	SBC Commun. -9,468	Viacom 'B' -9,181	UnitedHealth Gp. -8,821	Micron Tech. -6,972	Kellogg -6,592	PG&E -6,228	Wal-Mart Stores -5,611
1997	HCA -17,196	Oracle -15,963	Eastman Kodak -14,295	Motorola -10,453	Boeing -10,338	Nike 'B' -8,512	First Data -7,921	Intel -7,809	Boston Scientific -6,591	3M -4,973
1998	Schlumberger -30,416	Boeing -30,108	Cendant -24,232	Du Pont E I De Nemours -18,731	Coca-Cola -18,425	Walt Disney -17,378	Citigroup -15,204	Computer Assocs. Intl. -14,634	Allstate -13,058	Kellogg -11,572
1999	Altria Gp. -112,275	Pfizer -64,673	Coca-Cola -45,012	Lilly Eli -43,205	Wachovia -42,443	Xerox -39,914	Wyeth -37,748	Merck & Co. -36,317	Bank One -35,340	Schering-Plough -33,870
2000	Microsoft -577,230	Lucent Tech. -286,986	Cisco Systems -188,232	Yahoo -156,902	AT&T -156,488	Time Warner -153,154	Intel -136,323	Dell -135,014	Wal-Mart Stores -125,912	Qualcomm -109,779
2001	Cisco Systems -195,598	EMC -157,583	General Electric -128,559	Oracle -126,531	Merck & Co. -110,630	American Int.Gp. -72,921	Sun Microsystems -72,078	Pfizer -69,871	Qwest Comms.Intl. -63,456	Bristol Myers Squibb -57,561
2002	General Electric -195,593	Intel -137,679	Microsoft -120,839	Time Warner -104,670	Tyco Intl. -102,217	Intl.Bus.Mach. -98,541	Citigroup -89,697	Pfizer -79,862	American Intl.Gp. -78,335	Home Depot -77,845
2003	Merck & Co. -23,169	Johnson&Johnson -14,524	Verizon Comms. -13,426	Schering-Plough -8,493	AT&T -5,327	Kohls -5,015	SBC Commun. -4,815	Lockheed Martin -4,440	Microsoft -3,287	Eastman Kodak -3,109

The top shareholder value creators in 2003 were Intel (\$101,152 million), Cisco Systems (\$72,969 million), Citigroup (\$62,648 million), General Electric (\$57,570 million), Exxon Mobil (\$32,095 million), Altria Group (\$29,750 million), SBC Communications (\$25,319 million), Home Depot (\$23,387 million), Texas Instruments (\$22,863 million) and FleetBoston Financial (\$20,606 million). In 2001 Microsoft was the top shareholder value creator and Cisco, the top shareholder value destroyer. In 2000 Altria (ex-Phillip Morris) was the top shareholder value creator and Microsoft, the top shareholder value destroyer; but in 1999 it was the other way around.

**Appendix 1** shows the ranking of created shareholder value for the years 1993-2003. In 2003, 87% of the 500 companies created value, while in 2002 only 17% (86 of the 498 companies) created value. The percentage of value creators was 36%, 54%, 47%, 54%, 79%, 70%, 82%, 33% and 53% in the years 2001, 2000, 1999, 1998, 1997, 1996, 1995, 1994 and 1993, respectively.

**Table 4** shows the ranking of created shareholder value for the biggest companies. As can be seen in this table, the top value creators and destroyers are always the large cap companies. Microsoft was the top value creator in four years and the top value destroyer in one year.

**Table 4. Ranking of created shareholder value for the biggest companies in each year of the period 1993-2003 (\$ millions)**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
General Electric	11,217	-8,295	29,035	37,597	66,498	77,166	154,134	-80,072	-111,016	-182,82	57,57
Ranking	2	-3	2	3	1	5	3	-10	-3	-1	4
Microsoft	-4,055	9,476	10,987	40,968	44,95	163,964	208,401	-445,32	99,513	-111,89	-3,287
Ranking	-10	1	17	2	2	1	1	-1	1	-3	-9
Exxon Mobil	-2,022	-6,747	20,002	17,324	22,311	20,431	9,081	1,231	-48,035	-46,458	32,095
Ranking	-31	-5	5	7	11	22	45	170	-11	-15	5
Pfizer	-3,248	1,126	13,201	9,906	38,247	57,93	-46,965	41,776	-60,336	-74,647	20,298
Ranking	-17	20	11	14	3	9	-2	4	-7	-8	11
Citigroup	2,715	-2,446	8,809	7,257	20,009	-10,163	70,067	25,23	-19,411	-83,84	62,648
Ranking	13	-25	25	17	15	-7	8	6	-34	-7	3
Wal-Mart Stores	-23,689	-13,73	-3,23	-3,139	33,503	87,469	113,751	-100,393	1,511	-51,305	-2,807
Ranking	-2	-1	-3	-10	5	2	5	-9	56	-12	-12
Intel	5,603	-1,918	17,141	56,369	-4,515	67,817	60,687	-104,248	-9,812	-126,828	101,152
Ranking	6	-41	6	1	-8	7	10	-7	428	-2	1
American Intl.Gp.	805	761	9,393	3,702	20,858	18,878	33,187	45,513	-62,97	-73,2	12,133
Ranking	56	28	20	42	13	23	19	3	-	-	38
Cisco Systems	2,573	-62	8,907	12,269	8,162	79,071	179,802	-143,851	-167,864	-49,764	72,969
Ranking	16	170	23	10	39	4	2	-3	-1	-13	2
IBM	1,369	7,297	5,636	29,414	22,284	69,316	16,6	-60,014	51,545	-91,865	17,326
Ranking	32	2	34	6	12	6	30	-14	2	-6	15
Johnson & Johnson	-6,489	4,454	16,547	5,038	15,888	17,817	5,662	5,767	8,33	-29,033	-14,524
Ranking	-6	4	7	30	21	26	74	57	10	-21	-2
Procter & Gamble	-693	719	10,607	13,207	29,634	7,531	17,09	-53,111	-5,301	3,343	12,768
Ranking	336	34	18	9	8	51	29	-15	399	5	33
Coca Cola	-1,305	4,626	22,745	31,897	23,283	-12,433	-32,688	-5,484	-44,969	-16,112	12,09
Ranking	-47	3	4	4	10	-5	-3	408	-12	-42	39
Bank of America	-1,733	-2,022	5,897	6,677	4,938	-3,419	-22,55	-12,476	25,901	6,232	13,746
Ranking	-3	-3	31	22	61	-33	-12	-44	3	2	27
Altria Gp.	-24,339	-362	25,863	15,951	12,78	15,359	-81,185	52,214	780	-14,923	29,75
Ranking	-1	249	3	8	26	31	-1	1	100	-49	6
Merck	-14,443	2,355	31,061	12,082	24,142	41,234	-26,372	50,21	-95,533	-12,701	-23,169
Ranking	-3	10	1	11	9	13	-8	2	-5	438	-1
General Motors	14,128	-12,547	5,051	-442	3,685	5,271	8,567	-17,619	-2,736	-8,007	9,397
Ranking	1	-2	36	383	83	60	48	-30	352	411	51
AT&T	-3,674	-8,047	15,679	-13,692	30,106	16,933	-7,101	-122,691	20,552	-19,267	-5,327
Ranking	-14	-4	8	-1	7	29	-36	-4	4	-35	-5

**Table 5** shows the top ten value creators and destroyers during the eleven-year period 1993-2003. General Electric was the top shareholder value creator (\$197,930 million) and AT&T was the top shareholder value destroyer (-\$113,698 million). **Appendix 2** shows the created shareholder value of the companies in the S&P 500 during this period<sup>2</sup>.

<sup>2</sup> Only 412 companies (out of the 500) traded as of December 31, 1992.

**Table 5. The top ten value creators and destroyers during the period 1993-2003 (\$ millions 2003)**

<b>Top ten shareholder value creators</b>						
	Shareholder value creation		Shareholder return	Market Value (MV)		
	93-03			93-2003	1992	2003
	93-03	% of MV. 03				
1 GENERAL ELECTRIC	<b>197,93</b>	63.60%	16.70%	73,02	311,066	
2 MICROSOFT	<b>159,867</b>	54.00%	23.70%	23,483	295,937	
3 INTEL	<b>158,227</b>	75.60%	25.50%	18,109	209,35	
4 IBM	<b>150,999</b>	94.70%	21.20%	28,77	159,449	
5 CITIGROUP	<b>128,875</b>	51.50%	28.00%	5,313	250,402	
6 DELL	<b>88,349</b>	101.50%	41.40%	1,756	87,003	
7 CISCO SYSTEMS	<b>78,164</b>	46.70%	32.50%	4,791	167,268	
8 PROCTER & GAMBLE	<b>69,84</b>	53.90%	14.90%	36,449	129,517	
9 ORACLE	<b>67,574</b>	97.70%	30.60%	3,983	69,161	
10 JOHNSON & JOHNSON	<b>66,271</b>	43.20%	15.50%	33,063	153,334	

<b>Top ten shareholder value destroyers</b>						
1 AT&T	<b>-113,698</b>	-709.10%	-2.00%	68,116	16,034	
2 SBC COMMUNICATIONS	<b>-79,534</b>	-92.10%	6.50%	22,174	86,309	
3 TIME WARNER	<b>-66,238</b>	-84.80%	48.70%	164	78,105	
4 VERIZON COMMS.	<b>-50,087</b>	-51.70%	7.00%	22,187	96,875	
5 TYCO INTL.	<b>-35,216</b>	-66.50%	18.80%	850	52,976	
6 ELECTRONIC DATA S.	<b>-28,423</b>	-241.10%	-1.20%	6,779	11,788	
7 TOYS R US	<b>-28,386</b>	-1052.00%	-10.00%	11,681	2,698	
8 NOVELL	<b>-28,274</b>	-719.10%	-8.70%	8,505	3,932	
9 WALT DISNEY	<b>-26,928</b>	-56.40%	5.30%	22,541	47,718	
10 BANK ONE	<b>-25</b>	-49.10%	6.70%	12,296	50,965	

**Table 6** shows the ranking of shareholder value creators and destroyers as a percentage of their market value in 2003.

**Table 6. The top ten value creators and destroyers as a percentage of their market value during the period 1993-2003 (\$ millions 2003)**

Top ten shareholder value creators						
	Shareholder value creation		Shareholder return	Market Value (MV)		
	93-03	% of MV. 03		1992	2003	
	93-03	% of MV. 03	93-2003	1992	2003	
1 HUMANA	7,855	<b>213.40%</b>	11.10%	3,249	3,681	
2 SEARS ROEBUCK	22,01	<b>190.60%</b>	12.10%	15,711	11,546	
3 ITT INDUSTRIES	12,11	<b>176.90%</b>	19.20%	8,59	6,847	
4 FORD MOTOR	47,708	<b>169.40%</b>	10.80%	20,928	28,163	
5 ROCKWELL AUT.	10,092	<b>152.10%</b>	18.50%	6,416	6,637	
6 CIGNA	11,283	<b>139.70%</b>	13.20%	4,206	8,078	
7 DELL	88,349	<b>101.50%</b>	41.40%	1,756	87,003	
8 MEREDITH	1,937	<b>98.60%</b>	21.00%	420	1,965	
9 ORACLE	67,574	<b>97.70%</b>	30.60%	3,983	69,161	
10 IBM	150,999	<b>94.70%</b>	21.20%	28,77	159,449	

Top ten shareholder value destroyers						
1 TOYS R US	-28,386	<b>-1052.00%</b>	-10.00%	11,681	2,698	
2 DILLARDS	-12,698	<b>-972.70%</b>	-9.00%	5,149	1,305	
3 WINN-DIXIE STORES	-12,221	<b>-867.30%</b>	-9.00%	5,886	1,409	
4 GOODYEAR TIRE	-11,518	<b>-835.80%</b>	-10.30%	4,899	1,378	
5 DYNEGY	-9,492	<b>-791.80%</b>	-5.50%	1,674	1,199	
6 NOVELL	-28,274	<b>-719.10%</b>	-8.70%	8,505	3,932	
7 AT&T	-113,698	<b>-709.10%</b>	-2.00%	68,116	16,034	
8 GT. LAKES CHEM.	-9,098	<b>-661.30%</b>	-6.10%	4,937	1,376	
9 ALLEGHENY TECHS.	-6,043	<b>-566.80%</b>	-5.10%	1,144	1,066	
10 PARAMETRIC TECH.	-5,577	<b>-531.60%</b>	-4.60%	1,358	1,049	

As can be seen in **Table 6**, the shareholder value creation of seven companies was higher than their market value, due to dividend payments and share repurchases. **Table 7** shows Sears' evolution each year of the period. This company reduced the number of shares outstanding during 1998, 1999, 2000, 2001 and 2003.

**Table 7. Sears. Market value, shareholder return, shareholder value added and shareholder value creation (\$ millions)**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
Market value	18,542	16,176	15,204	18,01	17,738	16,282	11,48	11,613	15,052	7,567	11,546	
Δ Market value	2,832	-2,367	-971	2,806	-272	-1,456	-4,801	132	3,439	-7,485	3,979	-4,164
Δ Shareholder value added	9,686	-1,865	11,806	3,079	23	-792	-4,368	2,045	4,658	-7,315	7,21	24,168
Shareholder value creation:												
current dollars	7,976	-3,673	9,818	1,633	-1,953	-2,458	-5,65	896	3,674	-8,568	6,645	8,334
constant dollars (2003)	19,591	-8,22	19,567	2,972	-3,203	-3,685	-7,858	1,132	4,278	-9,208	6,645	22,01
Shareholder return	61.7%	-10.1%	73.0%	20.2%	0.1%	-4.5%	-26.8%	17.8%	40.1%	-48.6%	95.3%	12.1%
Shares (millions)	350.7	351.6	389.9	391.5	392	383.1	378	334.2	316	316	253.8	
Δ shares (millions)	5.4	1	38.2	1.7	0.5	-8.9	-5.1	-43.8	-18.2	0	-62.1	-91.5

**Table 8** shows the ranking of increase and decrease of equity market value (in absolute value) during the period 1992-2003. Microsoft had the highest increase and AT&T, the highest decrease.

**Table 8. Top ten companies with highest increase and decrease of equity market value during the period 1992-2003 (\$ millions 2003)**

Companies with highest increase of equity market value					
	Shareholder value creation		Shareholder return	Market Value (MV)	
	93-03			93-2003	1992
	93-03	% of MV. 03			
1 MICROSOFT	159,867	54.00%	23.70%	<b>23,483</b>	<b>295,937</b>
2 PFIZER	43,527	16.10%	19.30%	<b>23,901</b>	<b>269,622</b>
3 CITIGROUP	128,875	51.50%	28.00%	<b>5,313</b>	<b>250,402</b>
4 GENERAL ELECTRIC	197,93	63.60%	16.70%	<b>73,02</b>	<b>311,066</b>
5 EXXON MOBIL	56,994	21.00%	12.80%	<b>75,917</b>	<b>271,002</b>
6 INTEL	158,227	75.60%	25.50%	<b>18,109</b>	<b>209,35</b>
7 CISCO SYSTEMS	78,164	46.70%	32.50%	<b>4,791</b>	<b>167,268</b>
8 WAL-MART STORES	59,858	26.10%	12.20%	<b>73,56</b>	<b>229,589</b>
9 AMERICAN INTL.GP.	53,458	30.90%	17.00%	<b>24,541</b>	<b>172,855</b>
10 IBM	150,999	94.70%	21.20%	<b>28,77</b>	<b>159,449</b>

Companies with highest decrease of equity market value					
1 AT&T	-113,698	-709.10%	-2.00%	<b>68,116</b>	<b>16,034</b>
2 TOYS R US	-28,386	-1052.00%	-10.00%	<b>11,681</b>	<b>2,698</b>
3 EASTMAN KODAK	-6,53	-88.80%	1.30%	<b>13,171</b>	<b>7,356</b>
4 NOVELL	-28,274	-719.10%	-8.70%	<b>8,505</b>	<b>3,932</b>
5 WINN-DIXIE STORES	-12,221	-867.30%	-9.00%	<b>5,886</b>	<b>1,409</b>
6 SEARS ROEBUCK & CO.	22,01	190.60%	12.10%	<b>15,711</b>	<b>11,546</b>
7 DILLARDS	-12,698	-972.70%	-9.00%	<b>5,149</b>	<b>1,305</b>
8 GT.LAKES CHEM.	-9,098	-661.30%	-6.10%	<b>4,937</b>	<b>1,376</b>
9 GOODYEAR TIRE	-11,518	-835.80%	-10.30%	<b>4,899</b>	<b>1,378</b>
10 CENTERPOINT EN.	-6,583	-222.00%	0.10%	<b>5,941</b>	<b>2,966</b>

**Table 9** shows the ranking of the percentage of increase and decrease of equity market value during the period 1992-2003. Starwood had the highest increase and Toys R Us, the highest decrease.

**Table 9. Top ten companies with highest percentage of increase and decrease of equity market value during the period 1992-2003 (\$ millions 2003)**

Companies with highest percentage increase of market value 1992-2003						
	Shareholder value creation		Shareholder return	Market Value (MV)		
	93-03	% of MV. 03		1992	2003	Δ MV.
1 STARWOOD	-720	-9.90%	25.50%	12	7,237	59561%
2 TIME WARNER	-66,238	-84.80%	48.70%	164	78,105	47668%
3 CLEAR CHL. COMMS.	-6,842	-23.70%	35.80%	187	28,828	15329%
4 BIOGEN IDEC	2,307	19.20%	34.10%	80	12,023	14955%
5 WASTE MAN.	-20,706	-120.10%	6.70%	154	17,241	11118%
6 QUALCOMM	-4,96	-11.50%	38.70%	503	43,148	8485%
7 EXPRESS SCRIPTS	2,075	39.80%	28.90%	65	5,218	7896%
8 NORTH FORK BANC.	3,698	60.20%	31.20%	88	6,138	6845%
9 ALLIED WASTE INDS.	-3,51	-120.60%	10.30%	45	2,911	6411%
10 TYCO INTL.	-35,216	-66.50%	18.80%	850	52,976	6134%

Companies with highest percentage decrease of market value 1992-2003						
1 TOYS R US	-28,386	-1052.00%	-10.00%	11,681	2,698	-76.90%
2 AT&T	-113,698	-709.10%	-2.00%	68,116	16,034	-76.50%
3 WINN-DIXIE STORES	-12,221	-867.30%	-9.00%	5,886	1,409	-76.10%
4 DILLARDS 'A'	-12,698	-972.70%	-9.00%	5,149	1,305	-74.60%
5 GT. LAKES CHEM.	-9,098	-661.30%	-6.10%	4,937	1,376	-72.10%
6 GOODYEAR TIRE	-11,518	-835.80%	-10.30%	4,899	1,378	-71.90%
7 NOVELL	-28,274	-719.10%	-8.70%	8,505	3,932	-53.80%
8 HERCULES	-2,185	-161.50%	-3.10%	2,766	1,353	-51.10%
9 CENTERPOINT EN.	-6,583	-222.00%	0.10%	5,941	2,966	-50.10%
10 DELUXE	-3,77	-180.50%	5.70%	3,922	2,089	-46.70%

### 3. Shareholder return

Table 10 shows the shareholder return of the top ten most and least profitable companies during the period 1993-2003. It can be seen that Time Warner was the most profitable company (48.7%), and that Goodyear Tire was the least profitable company (-10.3%) in this period.

**Table 10. Top ten most and least profitable companies during the period 1993-2003**

The top ten most profitable companies during 1993-2003					
	Shareholder value creation 93-03		Shareholder return	Market Value (MV)	
	93-03	% of MV. 03	93-2003	1992	2003
1 TIME WARNER	-66,238	-84.80%	<b>48.70%</b>	164	78,105
2 DELL	88,349	101.50%	<b>41.40%</b>	1,756	87,003
3 QUALCOMM	-4,96	-11.50%	<b>38.70%</b>	503	43,148
4 CLEAR CHL. COMMS.	-6,842	-23.70%	<b>35.80%</b>	187	28,828
5 ALTERA	6,554	76.40%	<b>35.40%</b>	259	8,579
6 MAXIM INTEGR. PRDS.	9,995	61.30%	<b>35.00%</b>	398	16,292
7 BIOGEN IDEC	2,307	19.20%	<b>34.10%</b>	80	12,023
8 BEST BUY CO.	12,131	71.50%	<b>33.60%</b>	438	16,961
9 CISCO SYSTEMS	78,164	46.70%	<b>32.50%</b>	4,791	167,268
10 APPLIED MATS.	25,104	66.50%	<b>32.00%</b>	1,296	37,732

The top ten least profitable companies during 1993-2003					
1 GOODYEAR TIRE	-11,518	-835.80%	<b>-10.30%</b>	4,899	1,378
2 TOYS R US	-28,386	-1052.00%	<b>-10.00%</b>	11,681	2,698
3 WINN-DIXIE STORES	-12,221	-867.30%	<b>-9.00%</b>	5,886	1,409
4 DILLARDS	-12,698	-972.70%	<b>-9.00%</b>	5,149	1,305
5 NOVELL	-28,274	-719.10%	<b>-8.70%</b>	8,505	3,932
6 DELTA AIR LINES	-6,669	-457.40%	<b>-6.40%</b>	2,528	1,458
7 GT. LAKES CHEM.	-9,098	-661.30%	<b>-6.10%</b>	4,937	1,376
8 DYNEGY	-9,492	-791.80%	<b>-5.50%</b>	1,674	1,199
9 ALLEGHENY TECHS.	-6,043	-566.80%	<b>-5.10%</b>	1,144	1,066
10 PARAMETRIC TECH.	-5,577	-531.60%	<b>-4.60%</b>	1,358	1,049

#### 4. Shareholder return in successive years

**Table 11** shows the most and least profitable companies during 2003. It can be seen that Avaya was the most profitable and Winn-Dixie Stores (-33.69%), the least profitable company in 2003. But the most profitable companies in 2003 had a very low profitability in 2002. **Appendix 3** shows that 469 companies had positive return and 31 had negative return during that year. But the top ten most profitable companies in 2003 had negative shareholder return in 2002, and nine of them had negative return in 2001.

**Table 12** shows the correlation of the companies' return in one year and their return in the previous year (with and without five extreme values). It can be seen that the correlation is not constant. Only in 1998, 2001, 2002 and 2003 was the correlation significant.

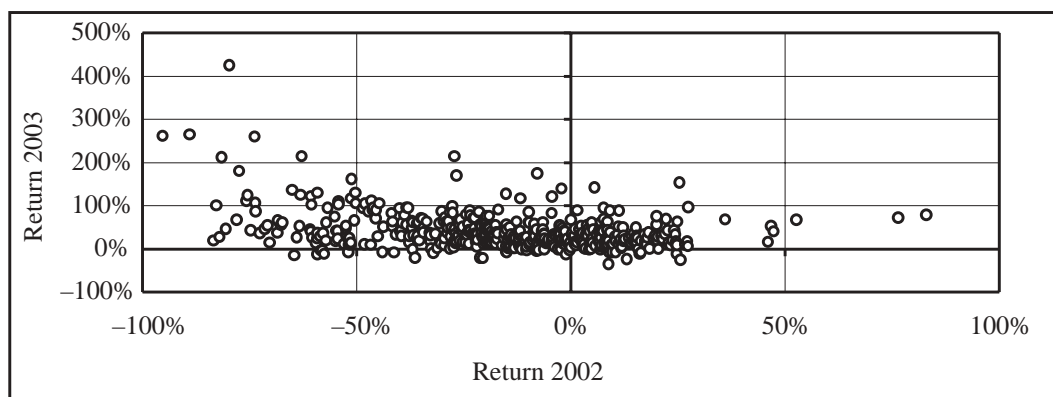
**Figure 1** shows shareholder return in 2002 and 2003. The correlation was negative.

**Table 11. Top ten most and least profitable companies during 2003**

The most profitable companies in 2003					
	Shareholder return			Shareholder return	
	2001	2002	2003	02-03	01-03
1 AVAYA	17.9%	-79.8%	<b>425.8%</b>	3.2%	83.7%
2 WILLIAMS COS.	-29.0%	-89.0%	<b>266.0%</b>	-36.6%	37.5%
3 DYNEGY	-54.2%	-95.3%	<b>262.8%</b>	-58.8%	18.4%
4 PMC-SIERRA	-73.0%	-73.8%	<b>261.5%</b>	-2.8%	-0.8%
5 NOVELL	-12.0%	-27.2%	<b>215.3%</b>	51.5%	40.5%
6 CORNING	-83.0%	-62.9%	<b>215.1%</b>	8.1%	-18.8%
7 AES	-70.5%	-81.5%	<b>212.6%</b>	-24.0%	-2.6%
8 SANMINA-SCI	-48.1%	-77.4%	<b>180.6%</b>	-20.4%	13.4%
9 YAHOO	-41.0%	-7.8%	<b>175.4%</b>	59.3%	17.6%
10 U.S. STEEL	4.1%	-26.7%	<b>170.5%</b>	40.8%	41.2%
The least profitable companies in 2003					
1 WINN-DIXIE STORES	-24.1%	8.7%	<b>-33.7%</b>	-15.1%	-20.4%
2 EASTMAN KODAK	-21.9%	25.5%	<b>-23.8%</b>	-2.2%	-15.9%
3 NEWELL RUBBERMAID	25.2%	12.9%	<b>-22.4%</b>	-6.4%	-1.0%
4 KOHLS	15.5%	-20.6%	<b>-19.7%</b>	-20.1%	-2.5%
5 SCHERING-PLOUGH	-35.9%	-36.4%	<b>-19.1%</b>	-28.3%	-19.7%
6 AT&T	40.7%	-21.3%	<b>-18.8%</b>	-20.1%	4.5%
7 QWEST COMMS. INTL.	-65.4%	-64.6%	<b>-13.6%</b>	-44.7%	-33.1%
8 MERCK	-35.9%	-1.3%	<b>-11.2%</b>	-6.4%	-17.2%
9 KING PHARMS.	8.7%	-59.2%	<b>-11.2%</b>	-39.8%	-1.2%
10 DTE ENERGY	13.1%	16.0%	<b>-10.4%</b>	2.0%	0.4%

**Table 12. Companies in the S&P 500. Correlation between the companies' return in one year and the return in the previous year**

Correlation ( $R_t ; R_{t-1}$ )	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
All companies	0.14	-0.01	0.12	0.17	0.46	0.15	-0.11	-0.24	0.19	-0.36
Without 5 extreme values	0.05	0.1	0.04	0.06	0.16	0.11	-0.01	-0.2	0.15	-0.29

**Figure 1. Relation of the return in 2003 and the return in 2002**

## 5. Shareholder return and size

**Table 13** shows the companies with the highest and the lowest market value in 1992. It shows their market value in 2003, the shareholder return and the shareholder value creation during the period 1993-2003. On the average, the small cap companies were more profitable.

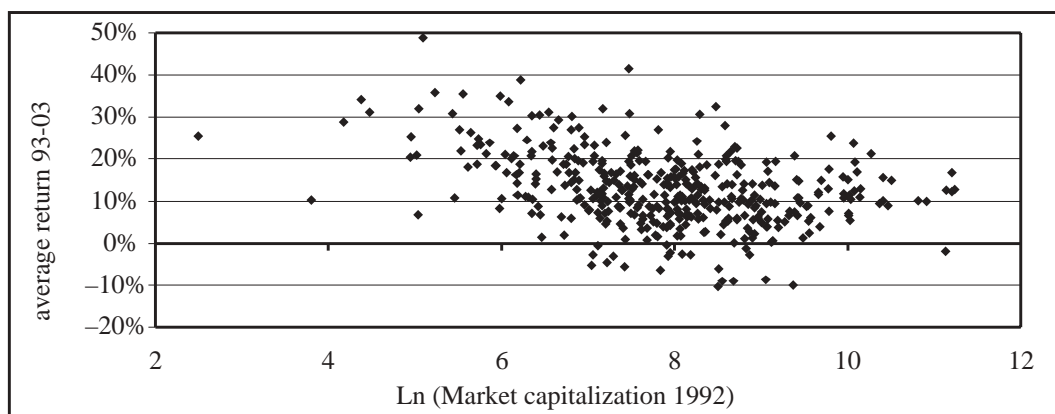
**Table 13. Top ten companies with highest and lowest market value during 1992**

	Companies with highest market value in 1992				
	Shareholder value creation 93-03		Shareholder return	Market Value (MV)	
	93-03	% of MV. 03	93-2003	1992	2003
1 EXXON MOBIL	56,994	21.00%	12.80%	75,917	271,002
2 WAL-MART STORES	59,858	26.10%	12.20%	73,56	229,589
3 GENERAL ELECTRIC	197,93	63.60%	16.70%	73,02	311,066
4 ALTRIA GP.	31,173	28.20%	12.60%	68,854	110,536
5 AT&T	-113,698	-709.10%	-2.00	68,116	16,034
6 COCA COLA	17,638	14.20%	9.90%	54,852	124,414
7 MERCK	31,838	31.00%	10.20%	49,751	102,795
8 PROCTER & GAMBLE	69,84	53.90%	14.90%	36,449	129,517
9 BRISTOL MYERS	10,154	18.30%	8.90%	34,968	55,464
10 JOHNSON & JOHNSON	66,271	43.20%	15.50%	33,063	153,334

Companies with lowest market value in 1992					
1 STARWOOD	-72	-9.90	25.50%	12	7,237
2 ALLIED WASTE INDS.	-3,5	-120.60%	10.30%	45	2,911
3 EXPRESS SCRIPTS	2,075	39.80%	28.90%	65	5,218
4 BIOGEN IDEC	2,307	19.20%	34.10%	80	12,023
5 NORTH FORK BANCORP.	3,698	60.20%	31.20%	88	6,138
6 AUTONATION	-11,587	-229.30%	20.40%	141	5,053
7 PMC-SIERRA	-2,18	-62.90%	25.30%	142	3,473
8 NOBLE	1,432	29.90%	20.90%	152	4,787
9 WASTE MAN.	-20,706	-120.10%	6.70%	154	17,241
10 ROBERT HALF INTL.	3,247	81.30%	32.00%	155	3,996

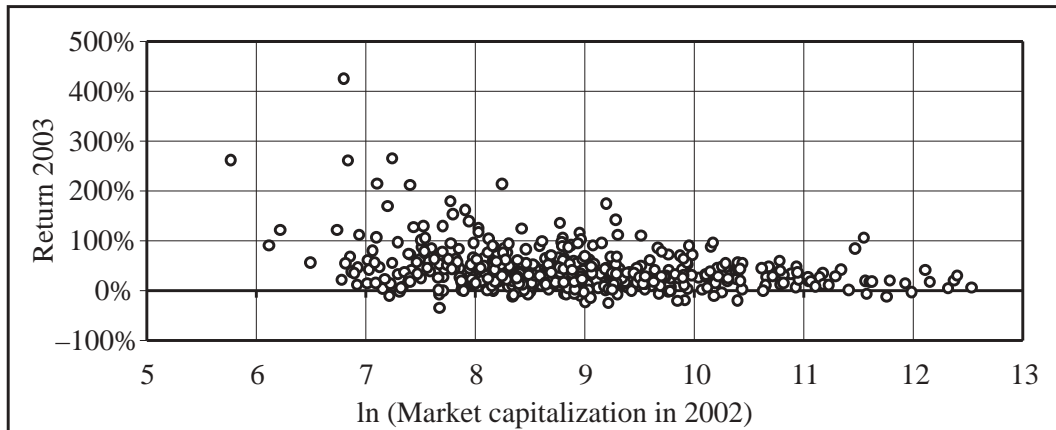
**Figure 2** shows the relation of shareholder return in the eleven-year period 1993-2003 and size (measured as the log of the market capitalization at the beginning of the period, in 1992). There is some relation. The correlation is -0.38 and the R-squared is 0.15 because the small companies were more profitable (on the average).

**Figure 2. Relation of shareholder return and size of the companies in the S&P 500 in the period 1993-2003**

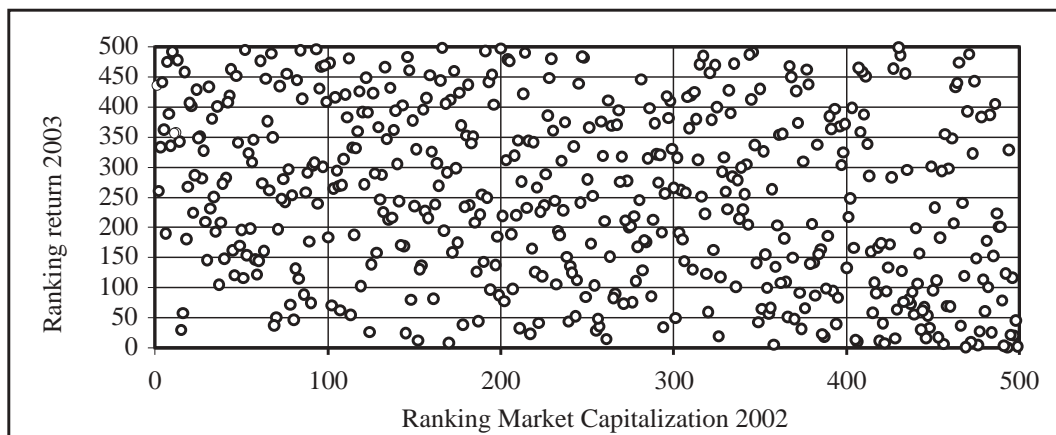


**Figure 3** shows the relation of shareholder return in 2003 and size (measured as the log of the market capitalization) in 2002. The slope of the regression is  $-0.086$  and the R-squared is  $0.098$  (that is, the difference in size explained only 9.8% of the return). **Figure 4** plots the relation of the ranking of shareholder return and the ranking of size. The slope of the regression is  $-0.26$  and the R-squared  $0.069$ .

**Figure 3. Relation of shareholder return and size of the companies in the S&P 500 in 2003**



**Figure 4. Relation of shareholder return and size of the companies in the S&P 500 in 2003**



## 6. Volatility of the S&P 500 and its components

As seen in **Table 14**, the volatility of the S&P fell over the period 1998 to 2003, but the volatility of its components increased. The reason was that the correlation between the companies declined.

**Table 14. Annual volatility of the S&P 500 and its components**

<b>500 companies:</b>	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Average	30%	29%	27%	25%	26%	29%	32%	36%	39%	40%	39%
Median	27%	27%	24%	22%	23%	26%	29%	34%	36%	36%	35%
Maximum	83%	80%	75%	67%	63%	65%	74%	79%	85%	93%	93%
Minimum	10%	13%	12%	12%	12%	14%	16%	17%	17%	19%	18%
<b>S&amp;P 500:</b>											
monthly data	6%	11%	5%	11%	16%	21%	13%	17%	20%	21%	11%
daily data	8%	10%	8%	12%	18%	20%	18%	22%	21%	25%	17%

## Appendix 1

## SHAREHOLDER VALUE CREATORS IN THE S&amp;P 500: YEAR 2003

## Shareholder value creation of the companies in the S&amp;P 500 in December 2003 (\$ millions 2003)

	2003		2002		2001		2000		1999		1998		1997		1996		1995		1994		1993	
	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank
Inel	101,152	1	-137,679	497	-11,693	429	-136,323	478	88,126	12	106,712	6	-7,809	451	108,851	1	36,523	6	-4,634	396	15,002	6
Cisco Systems	72,969	2	-53,999	486	-199,998	493	-188,232	482	260,360	2	123,835	4	14,053	36	23,590	9	18,913	20	-150	171	6,822	14
Citigroup	62,648	3	-89,697	492	-22,499	459	31,729	6	97,044	8	-15,204	458	17,577	24	13,200	18	17,577	24	-5,505	405	6,757	15
General Electric	57,570	4	-195,593	498	-128,559	491	-100,425	474	212,247	3	114,173	5	107,104	5	66,670	3	56,129	3	-17,932	427	26,548	2
Exxon Mobil	32,095	5	-49,703	484	-55,626	483	1,543	170	12,506	48	30,230	23	35,934	12	30,721	7	38,667	5	-14,587	425	-4,785	381
Altria Gp.	29,750	6	-16,006	450	905	100	65,650	1	-112,275	475	22,870	31	20,716	26	28,659	8	50,884	3	-801	252	-59,160	412
JP Morgan Chase & Co.	25,319	7	-30,589	477	-18,164	449	-16,664	442	3,107	122	16,335	43	10,066	49	12,712	21	9,826	39	-4,003	382	-1,225	321
Home Depot	23,387	8	-77,845	489	-4,629	21	-85,875	473	81,171	13	63,556	12	25,902	20	-1,589	415	-3,243	431	2,626	20	-17,866	409
Texas Invs.	22,863	9	-29,649	476	-49,957	480	-13,575	437	57,727	17	22,661	33	6,470	80	2,851	96	3,935	86	1,236	45	2,697	44
FleetBoston Finl.	20,606	10	-15,787	447	-3,064	348	723	214	-9,656	438	3,695	106	9,480	56	3,331	86	1,573	171	-1,050	274	-726	301
Pfizer	20,298	11	-79,862	491	-69,871	486	52,395	4	-64,673	474	85,712	10	61,602	10	17,621	14	25,654	11	2,460	22	-7810	396
ChevronTexaco	20,184	12	-32,085	479	627	122	-6,615	403	-61	227	1,609	161	8,223	62	11,799	24	5,834	69	-1,633	320	11,165	8
Wells Fargo & Co	17,890	13	-1,591	19	-31,470	470	25,680	11	-3,879	391	-1,717	373	18,704	29	5,515	50	4,743	79	-1,749	329	679	130
Morgan Stanley	17,490	14	-24,177	469	-39,999	476	1,020	195	55,585	18	6,095	70	12,931	40	5,133	56	3,423	100	-1,400	300		
Int'l Bus. Mach.	17,326	15	-98,541	493	60,055	2	-75,822	471	23,073	31	103,877	8	36,510	11	53,440	6	11,266	32	16,427	2	3,388	32
Ebay	17,019	16	-1,380	232	9,872	8	-11,835	434	6,591	88												
Merrill Lynch & Co.	16,207	17	-16,456	453	-20,426	454	21,334	14	6,086	94	-6,492	439	15,926	34	8,920	32	4,587	83	-4,711	399	4,961	22
3M	16,187	18	-922	196	-4,483	379	8,092	48	13,225	44	-9,889	451	-4,973	449	12,110	22	7,203	49	-4,042	384	400	165
Yahoo	16,138	19	-2,371	283	-11,459	426	-156,902	481	95,066	9	29,100	24	4,168	115								
Tyco Intl.	16,113	20	-102,217	494	-2,506	339	27,805	10	-2,708	358	21,367	34	4,221	114	1,550	160	777	268	303	102	78	209
Time Warner	16,036	21	-104,670	495	-18,579	450	-153,154	479	92,119	11	89,601	9	9,285	58	-1,301	407	3,134	109	875	57	416	162
US Bancorp	15,583	22	-1,407	235	-3,983	370	755	212	-10,740	446	4,063	99	3,525	132	1,566	158	1,199	217	-52	151	-280	260
American Express	14,408	23	-4,111	344	-36,213	437	-9,388	425	35,693	24	4,045	100	21,515	24	10,969	27	8,786	45	1,087	51	4,849	23
Nexel Comms. A	14,190	24	-594	167	-14,760	474	-31,127	462	31,905	26	-2,165	387	4,339	112	-1,222	403	-268	384	-4,092	386	2,513	45
United Technologies	14,146	25	-3,529	329	-10,732	424	4,995	85	4,572	109	10,735	53	408	322	6,846	40	6,536	56	-832	255	3,170	35
Hewlett-Packard	13,843	26	-10,135	422	-32,256	471	-59,766	468	60,767	16	1,105	187	12,500	42	9,036	30	30,079	9	8,335	7	1,262	88
Bank Of America	13,746	27	6,667	2	29,994	3	-15,651	440	-31,122	464	-5,081	432	8,011	64	11,956	23	11,511	31	-4,442	389	-4,221	377
EMC	13,616	28	-21,259	465	-157,583	492	16,308	22	94,123	10	43,902	17	7,328	72	7,284	38	-4,420	434	1,610	34	4,354	27
Applied Mats.	13,579	29	-16,233	451	-2,068	323	-33,192	464	43,871	22	5,512	79	6,460	81	-2,862	425	5,863	67	-209	180	4,381	26
Dell	12,856	30	-8,965	413	24,363	4	-135,014	477	41,378	23	105,828	7	35,042	13	12,873	20	1,994	148	1,538	37	-3,544	372
Amgen	12,834	31	-14,584	444	-15,857	442	-3,228	371	45,373	21	18,090	40	-2,831	441	-5,474	438	13,983	27	1,198	47	-10,704	404
Goldman Sachs Gp.	12,768	32	-16,307	452	-11,679	427	2,225	148														
Procter & Gamble	12,768	33	3,576	5	-6,139	399	-66,611	470	23,533	30	11,143	52	47,730	8	23,420	10	20,504	18	1,554	36	-1,640	334
Walt Disney	12,446	34	-12,862	437	-25,134	461	-7,702	412	-7,731	429	-17,378	459	24,997	22	5,344	54	7,802	47	-565	220	-6,145	390
Caterpillar	12,434	35	-3,463	326	1,023	92	-1,213	314	-697	265	-3,228	406	4,860	102	4,450	62	-805	405	2,970	17	7,389	12
Wachovia	12,313	36	5,148	3	2,406	42	-8,113	415	-42,443	471	6,333	67	10,913	48	7,934	35	3,917	88	-833	256	-1,814	342
Alcoa	12,149	37	-14,130	442	-350	221	-11,052	432	22,730	32	-176	273	346	274	3,967	69	-2,374	428	-1,823	331	3,994	28
American Intl. Gp.	12,133	38	-78,335	490	-72,921	488	57,082	3	45,699	20	27,931	26	33,595	14	6,564	43	18,158	22	1,646	31	1,906	59
Coca Cola	12,090	39	-17,238	457	-52,076	481	-6,878	407	-45,012	473	-18,425	460	37,560	10	56,652	5	44,040	4	10,017	3	-3,094	365
Lowe's Companies	11,959	40	-10,613	426	19,890	6	-10,286	427	2,223	137	13,308	47	2,381	177	-355	354	-1,886	420	582	76	6,182	17
Ford Motor	11,559	41	-14,020	441	-19,277	451	-20,140	452	-12,675	452	64,447	11	27,603	19	1,912	358	3,453	98	-13,675	424	22,291	4
Dendant	11,346	42	-11,901	433	7,814	12	-19,021	450	6,838	86	-24,232	462	5,257	97	-4,617	358	3,453	98	-1,823	331	3,994	28
Motorola	11,267	43	-18,270	458	-17,777	448	-79,725	472	69,940	14	-967	333	-10,453	455	-915	388	-9,472	438	9,747	4	23,569	3
Boston Scientific	11,227	44	7,037	1	4,364	24	-5,745	396	-4,162	396	943	200	-6,591	450	1,988	127	6,131	60	847	58	-2,800	360
Qualcomm	10,827	45	-17,112	456	-38,948	475	-109,779	475	147,871	6	-380	292	672	289	-1,183	400	2,099	141	-704	239	1,677	68
ConocoPhillips	10,739	46	-6,308	387	43	176	2,186	152	905	177	-3,504	414	589	304	3,925	71	-640	400	1,221	46	1,416	80
Dow Chemicals	10,447	47	-5,379	369	-3,567	363	-9,044	422	12,182	49	-5,414	435	7,477	71	2,210	119	-1,103	407	4,597	13	-2,522	354
Comcast A	10,265	48	-359	137	-252	205	-390	278	1,740	151	1,072	190	686	288	-1,29	330	19	359	-1,547	313	1,491	75

## Appendix 1 (continued)

	2003		2002		2001		2000		1999		1998		1997		1996		1995		1994		1993		
	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	
McDonalds	10,207	49	-16,985	455	-15,393	439	-17,050	445	-14,430	304	25,745	28	-2,116	431	434	17,187	25	-2,612	360	3,013	39		
Bristol Myers Squibb	9,882	50	-63,976	488	-57,561	484	-11,678	31	-18,792	457	47,457	16	58,873	4	17,795	13	23,673	16	-2,192	344	-16,683	408	
General Motors	9,397	51	-8,596	410	-3,190	351	-22,290	455	11,924	52	7,883	61	6,010	85	-796	382	9,884	38	-27,967	428	34,693	1	
Bank One	8,817	52	-6,176	385	295	145	4,148	97	-35,340	467	-1,338	357	5,927	87	5,564	49	8,601	46	-10,549	420	-4,949	382	
Guidant	8,397	53	-7,556	402	-3,157	350	784	210	-5,221	411	9,449	67	7,532	169	1,436	369	3,369	102					
Best Buy Co.	8,253	54	-10,951	430	10,552	7	-7,690	411	5,169	102	6,108	69	2,046	197	-7,19	377	-2,109	424	561	80	911	109	
UnitedHealth Grp.	8,212	55	2,312	8	10,552	63	13,663	27	1,671	153	-3,295	408	-178	376	-8,821	443	4,975	77	1,044	53	2,102	53	
Veritas Software	8,144	56	-15,213	445	-26,698	466	-10,941	431	26,886	241	1,718	158	566	308	619	287	536	287	-15	144			
Fannie Mae	8,010	57	-22,036	466	-15,626	440	25,455	12	-22,686	462	20,480	37	29,505	18	9,188	28	24,354	15	-6,662	411	-3,254	366	
Carnival	7,917	58	-3,335	320	-5,568	393	-16,963	444	-2,970	372	16,533	42	7,874	65	2,840	97	351	312	-2,402	354	3,203	34	
Corning	7,729	59	-7,125	395	-54,919	482	5,245	81	29,195	27	2,022	147	-2,710	440	5,651	48	-437	395	-84	156	-6,952	392	
Abbott Labs.	7,682	60	-32,358	480	7,608	14	18,201	20	-33,009	465	31,852	20	13,531	39	9,070	29	9,484	42	1,837	26	-6,398	391	
Oracle	7,279	61	-27,533	473	-126,531	490	-19,608	451	177,409	4	30,492	21	-15,963	457	14,171	16	8,788	44	1,837	26	-6,398	391	
Computer Assocs. Intl.	7,235	62	-15,894	448	9,432	11	-43,493	466	19,501	35	-14,634	457	16,214	33	5,868	47	11,215	33	1,737	28	8,470	11	
Analog Devices	7,077	63	-10,273	424	-5,568	393	-658	285	14,729	42	192	239	-189	377	1,888	131	1,527	178	1,000	54	886	110	
Honeywell Intl.	6,932	64	-10,820	428	-16,257	445	-15,875	441	8,587	73	2,331	136	2,310	179	8,392	33	5,841	68	-5,442	403	4,597	25	
Sears Roebuck & Co.	6,645	65	-9,208	419	4,278	26	1,132	189	-3,288	430	-3,685	417	-3,203	445	2,972	92	19,567	19	-8,220	417	19,591	5	
Progressive Ohio	6,606	66	-1,068	209	3,126	34	2,126	154	-11,372	447	4,254	95	5,482	94	1,886	132	1,424	187	-1,580	314	1,419	79	
Capital One Finl.	6,484	67	-6,839	392	-4,209	374	3,204	117	1,910	148	5,798	74	1,695	212	1,286	180	843	260					
MBNA	6,339	68	-8,393	409	-4,504	381	7,330	57	725	181	5,744	75	5,877	89	6,321	44	3,490	97	-82	155	1,719	65	
Newmont Mining	6,214	69	3,055	6	87	171	-2,239	352	1,137	167	-3,554	415	-3,543	447	-804	383	1,006	243	-2,997	369	2,288	50	
Boeing	6,176	70	-7,160	396	-33,168	472	25,030	13	9,531	62	-30,108	463	-10,338	454	13,690	17	17,966	23	539	83	-84	234	
Schlumberger	6,151	71	-10,319	425	-20,500	455	13,096	28	10,464	60	-30,416	464	21,169	25	11,371	25	6,908	52	-7,069	412	-1,789	341	
Bank Of New York	6,091	72	-15,489	446	-15,704	441	11,184	33	-2,842	366	10,512	54	13,931	37	5,888	46	6,260	59	-304	192	-345	269	
Target	5,997	73	-13,743	439	6,572	15	-8,705	417	9,452	63	11,577	51	8,787	60	4,906	58	-353	392	-140	169	-2,776	359	
Electronic Arts	5,969	74	-2,322	281	2,017	50	-695	289	2,005	146	1,318	176	383	329	88	304	418	305	-1,735	328	919	107	
Countrywide Finl.	5,890	75	1,023	27	-1,748	314	3,292	115	-4,466	399	583	218	1,329	202	943	200	1,329	198	-1,176	291	-248	254	
Gap	5,657	76	325	54	-14,051	435	-28,083	459	7,022	84	28,093	25	9,535	55	3,965	70	2,412	129	-4,469	391	1,039	102	
Walgreen	5,470	77	-7,789	404	-13,451	432	12,457	29	-2,913	371	18,160	39	7,526	70	3,588	71	2,848	116	-93	158	-2,016	348	
Intl Game Tech.	5,449	78	151	70	1,360	73	2,773	126	-893	279	-564	304	1,031	252	1,540	161	-1,946	422	-4,928	400	251	182	
Xilinx	5,417	79	-8,326	408	-4,863	385	-2,154	347	12,016	50	3,214	118	-853	410	415	265	1,259	206	417	93	1,295	87	
AT&T Wireless Svcs.	5,330	80	-26,840	472	-1,827	318																	
Gillette	5,318	81	-5,848	377	-6,070	397	-11,423	433	-15,046	454	-10,642	452	11,393	45	17,249	15	9,293	43	5,024	12	-1,411	328	
Lucent Technologies	5,216	82	-20,599	463	-34,864	473	-286,986	483	62,598	15	136,402	2	32,306	17									
Emerson Electric	5,205	83	-4,261	350	-13,306	431	9,622	38	-3,843	389	152	243	3,091	144	3,984	68	6,126	61	-952	262	476	153	
Kimberly-Clark	5,091	84	-9,151	418	-9,779	418	1,20	255	6,043	95	1,608	162	-1,992	428	3,565	79	9,709	41	-1,661	323	-4,420	378	
Zimmer Hdg.	5,055	85	1,754	15																			
PG&E	5,029	86	-2,927	308	-1,127	270	-872	301	-6,646	423	-184	274	5,914	88	-6,228	440	2,708	120	-11,538	421	429	160	
Lehman Bros. Hdg.	4,953	87	-5,083	363	-2,146	328	6,441	69	6,307	91	-2,109	385	2,910	158	1,687	147	1,093	228					
Occidental Ptl.	4,933	88	293	57	528	128	755	213	2,194	139	-7,220	442	2,525	173	608	244	527	289	1,071	52	-691	298	
Prudential Finl.	4,852	89	-2,278	278																			
Illinois Tool Wks.	4,799	90	-2,461	287	1,459	67	-5,202	390	1,991	147	-2,611	394	6,688	76	3,423	83	2,381	131	436	91	911	108	
Agilent Techs.	4,686	91	-6,403	388	-16,152	444	-16,803	443															
Linear Tech.	4,589	92	-5,837	376	-4,364	377	2,633	132	5,048	104	3,196	119	1,161	242	113	301	1,774	161	593	74	984	104	
Wyeth	4,488	93	-39,907	483	-9,853	420	35,184	5	-37,748	469	30,454	22	14,176	35	8,254	34	18,159	21	-3,345	373	-5,146	384	
Maxim Integrated Prds.	4,486	94	-8,673	411																			
Washington Mutual	4,462	95	156	67	-4,486	380	19,244	17	-12,161	450	-4,234	423	2,002	199	1,531	162	1,295	204	-1,237	293	-62	231	
Paccar	4,420	96	41	79	1,420	79	285	240	241	205	-1,680	372	2,161	191	1,757	144	-303	389	-1,008	269	-48	227	
Lilly Eli	4,353	97	-24,373	470	-27,938	468	28,888	9	-43,205	472	22,802	32	54,375	5	12,972	19	24,730	14	2,271	23	-3,551	373	
Starbucks	4,349	98	-176	115	-2,261	333	4,044	101	-1,626	316	1,852	154	843	273	785	219	818	263	202	113	120	202	

## Appendix 1 (continued)

	2003		2002		2001		2000		1999		1998		1997		1996		1995		1994		1993	
	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank
Clear Chl Comms.	4,211	99	-11,704	431	-1,188	276	-2,512	454	11,305	117	3,243	117	5,005	165	1,508	165	1,085	232	394	94	811	119
Golden West Finl.	4,142	100	1,435	20	-2,559	340	6,301	70	194	207	-1,212	351	2,661	168	332	277	1,882	155	-1,077	279	-1,462	330
National Semicon.	4,125	101	-3,805	334	1,851	55	-6,645	404	7,214	82	-4,253	425	-404	388	-24	320	-52	368	393	95	1,350	83
Frank Res.	4,095	102	-1,142	217	-1,751	315	892	200	-871	277	-6,054	437	7,606	66	2,044	126	1,747	162	-2,817	366	1,396	82
Deere & Co.	4,093	103	-1,131	108	-1,431	285	-2,15	272	2,942	125	-11,206	454	6,100	83	1,264	182	5,757	70	-2,429	355	5,080	20
Samminia-Sci	4,043	104	-10,208	423	-29,073	469	29,629	8	25,301	29	43,301	18	5,359	96	60,063	4	24,828	13	-2,633	361		
Exelon	3,939	105	962	29	-9,829	419	7,784	52	-2,883	370	5,573	78	-944	395	-2,318	421	1,985	149	-3,432	375	1,488	76
Sysco	3,917	106	1,366	21	-4,639	382	7,139	60	4,819	107	1,535	166	2,994	149	-692	374	1,492	182	-2,353	352	1,68	195
Ingersoll-Rand	3,837	107	-303	127	-586	237	-3,786	381	1,076	170	908	205	2,269	184	1,374	172	88	350	-2,387	353	1,677	67
CVS	3,825	108	1,628	17	-1,592	309	-2,240	353														
United Parcel Ser. 'B'	3,817	109	-2,871	305	-15,906	443	8,107	47	-10,215	443	10,421	55	3,250	137	2,803	99	-489	397	-2,810	364	-4,162	375
PepsiCo	3,780	110	-18,571	460	-7,328	406	21,123	15	-16,570	456	4,201	96	19,475	28	-2,198	420	24,913	12	-13,485	423	-8,370	397
Avaya	3,758	111	-3,291	319	142																	
KLA Tencor	3,752	112	-4,055	342	2,726	37	-7,116	408	8,511	74	41	250	-149	374	684	232	-214	378	955	55	786	121
NatCity	3,748	113	-2,063	266	-468	228	3,391	113	-13,281	453	940	202	6,610	77	2,780	100	1,663	167	80	127	-721	300
Phelps Dodge	3,729	114	-306	128	-2,564	341	-1,539	323	1,218	164	-1,359	358	-1,139	419	186	293	-716	402	1,616	33	-594	294
Genzyme	3,708	115	-8,276	407	2,224	46	4,357	93	-911	281	2,425	134	465	320	-1,438	413	1,385	192	48	133	-1,398	327
Xerox	3,670	116	-2,816	302	4,376	23	-18,287	447	-39,914	470	20,624	36	9,815	51	2,562	107	6,597	55	886	56	1,135	93
Suntrust Banks	3,628	117	-2,901	306	-1,360	288	-4,331	384	-3,450	383	-27	256	6,573	78	5,192	55	3,831	91	-52	150	-680	296
Nike 'B'	3,614	118	-2,958	309	-814	252	345	233	1,614	154	-502	300	-8,512	453	7,537	36	5,402	72	2,830	18	-5,806	388
Gannett	3,601	119	-19	90	-36	182	-8,941	420	5,127	103	-836	324	9,786	52	2,362	116	903	252	-2,537	357	818	117
Marathon Oil	3,591	120	-3,445	324	287	147	578	220	-3,033	374	-2,567	392	3,923	119	1,746	145	1,082	234	-666	234	-1,361	326
State Street	3,585	121	-5,947	380	-5,511	392	8,943	41	-444	252	1,694	159	5,989	86	2,435	113	2,073	144	-2,079	337	-2,009	347
Symantec	3,583	122	574	40	2,683	38	-2,533	361	2,909	126	-248	280	554	311	-1,260	405	254	330	-251	183	225	186
Apollo Gp. 'A'	3,581	123	2,101	10	1,218	80	2,595	133	-1,864	323	-50	258	874	271	1,306	178	1,410	189				
Williams Cos.	3,573	124	-14,352	443	-7,948	409	3,950	102	-1,551	312	379	227	4,525	109	1,866	137	3,151	107	-204	178	771	123
Omnicom Gp.	3,568	125	-6,304	386	90	169	-5,864	398	8,994	69	3,013	123	4,650	105	793	218	1,291	205	168	116	120	203
Staples	3,560	126	-1,023	207	3,088	35	-6,679	405	-7,004	427	8,927	59	2,039	198	20	313	1,092	229	720	63	-442	277
Aetna	3,554	127	837	33	-1,873	319																
Freeport-Mcmor.Cpr.&.Gd.'B'	3,543	128	201	62	432	134	-1,911	335	1,426	157	-1,174	347	-3,313	446	19	314						
MetLife	3,512	129	-5,461	370	-5,308	389																
Altera	3,505	130	-4,681	356	-3,755	367	-778	293	4,734	108	3,492	111	-1,296	422	1,495	166	2,462	127	272	105	1,106	96
Apache	3,492	131	446	48	-3,080	349	4,311	95	1,376	159	-1,787	374	-551	396	431	261	193	339	-86	157	312	172
Broadcom 'A'	3,490	132	-6,091	382	-9,313	416	-9,031	421	6,226	92												
Georgia Pacific	3,487	133	-3,424	323	-1,557	306	-5,415	392	4,977	105	-984	334	1,275	233	-206	338	-1,907	421	-536	217	185	190
Fortune Brands	3,475	134	735	36	1,471	66	-1,070	309	-25	224	-2,023	382	1,456	223	1,077	191	1,888	154	1,452	40	-4,585	380
PNC Finl.Svs.Gp.	3,466	135	-5,319	366	-7,118	405	9,948	36	-5,025	409	-2,928	401	9,635	54	1,730	146	4,721	80	-5,034	401	-1,130	317
Centex	3,385	136	-754	182	1,125	88	791	209	-1,984	332	959	196	1,007	255	-20	318	547	286	-1,712	325	498	150
St.Jude Med.	3,335	137	-435	147	1,070	91	2,918	124	66	220	-769	320	-2,208	434	-626	369	1,832	156	1,145	49	-2,426	353
Forest Labs.	3,328	138	1,814	12	1,999	51	6,827	64	440	195	3,166	120	946	261	-1,404	411	-651	401	-586	222	273	178
Sun Microsystems	3,315	139	-37,299	482	-72,078	487	-64,410	469	123,031	7	25,313	30	7,318	73	360	274	10,678	36	735	62	-2,548	356
Intl.Paper	3,311	140	-4,039	340	-1,636	311	-10,596	428	3,977	114	-592	309	-328	384	98	303	-1,651	417	817	59	-1,251	322
AES	3,311	141	-9,043	416	-25,399	462	7,786	128	6,355	90	-1,186	348	5,716	91	3,092	89	345	313	-983	265	651	133
Danaher	3,290	142	68	76	-2,287	334	2,742	121	-1,920	329	3,484	112	1,139	244	1,275	181	287	322	655	69	639	134
Federated Dept.Strs.	3,270	143	-3,224	317	657	120	-5,537	394	1,075	171	-1,101	343	1,796	206	1,628	153	1,443	186	-975	264	-341	267
Costco Wholesale	3,258	144	-9,671	421	540	126	-5,749	397	4,101	112	7,453	64	5,440	95	2,967	93	324	316	-3,894	381		
Allstate	3,238	145	1,034	25	-10,849	425	18,412	19	-19,100	458	-13,058	456	20,082	27	11,209	26	13,559	28	-7,645	415		
Chiron Corp	3,123	146	-2,064	267	-997	264	-581	281	3,525	121	2,009	150	-1,101	416	-3,795	432	1,301	202	-1,023	272	1,670	69
Network Appliance	3,094	147	-5,520	371	-20,554	456	14,951	25	13,270	43	2,999	124	480	317	252	284						
Wellpoint Hth.Net.	3,039	148	1,081	24	-614	239	3,401	112	-2,831	365	4,320	94	510	314	1,342	173						
Waste Man.	3,017	149	-7,973	405	1,186	83	6,895	63	-27,248	463	1,195	181	884	270	1,263	183	274	325	-44	147	-156	244
Edison Intl.	2,992	150	-1,596	245	-718	247	-5,444	393	-1,423	303	-385	293	4,556	106	1,678	148	1,826	157	-6,016	408	-3,326	367



## Appendix 1 (continued)

	2003		2002		2001		2000		1999		1998		1997		1996		1995		1994		1993	
	\$ mill.	ranking	\$ mill.	ranking	\$ mill.	ranking	\$ mill.	ranking	\$ mill.	ranking	\$ mill.	ranking	\$ mill.	ranking	\$ mill.	ranking	\$ mill.	ranking	\$ mill.	ranking	\$ mill.	ranking
Cigna	2,080	201	-9,078	417	-8,816	413	10,714	34	-384	247	5,255	82	3,001	148	3,727	74	5,017	76	-379	196	146	199
Apple Computers	2,071	202	-3,780	333	2,179	48	-18,423	448	11,802	53	5,502	80	-2,346	435	-3,644	430	-3,366	432	2,064	24	-13,021	406
Marshall & Ilsley	2,068	203	-1,464	239	1,151	85	-2,282	355	1,41	211	-1,232	353	3,689	126	1,197	188	1,010	242	-850	257	102	204
Burlington Res.	2,066	204	537	43	-4,252	375	4,058	100	-1,256	297	-3,370	410	-2,108	429	1,873	136	1,38	342	-3,163	370	-447	278
Humana	2,041	205	-537	159	-990	262	1,335	176	-2,732	359	-1,334	356	-134	372	-3,579	428	593	280	1,192	48	12,000	7
Teradyne	2,035	206	-4,127	345	-2,485	338	-8,941	419	11,248	55	944	199	719	284	-663	370	1,024	240	271	106	1,052	100
Allergan	2,014	207	-2,959	310	-4,419	378	7,244	58	2,762	129	2,876	127	-570	397	50	309	209	336	539	84	-951	310
Rohm & Haas	2,008	208	-1,005	201	-1,009	265	-2,091	343	2,076	142	-1,118	345	795	277	1,614	154	263	328	-1,043	273	233	185
Nordstrom	1,958	209	-402	143	111	167	-1,841	332	-2,216	342	434	223	2,940	154	-1,338	409	-1,126	411	1,088	50	-2,201	351
Burl.Nlhn.Santia Fe C	1,956	210	-1,830	261	-757	249	1,307	177	-7,858	431	703	212	-221	379	614	242	4,375	84	-2,795	363	2,261	51
MBIA	1,944	211	-2,157	271	121	165	2,131	153	-2,316	347	-850	326	1,676	214	1,583	155	1,096	227	-1,110	284	-712	299
Cooper Inds.	1,944	212	1	86	-1,491	303	405	231	-1,382	301	-795	322	689	287	645	238	-27	364	-4,636	397	-570	291
Eaton	1,892	213	-41	93	520	129	-248	274	-1,677	234	-2,835	397	1,780	207	1,820	140	-27	365	-706	240	1,089	97
Zions Bancorp.	1,875	214	-1,657	252	-1,444	299	-1,71	268	-798	269	1,189	182	1,677	213	470	258	1,206	215	-98	159	-127	242
Dover	1,874	215	-2,271	276	-1,496	304	-2,252	354	2,005	145	-762	319	3,177	139	2,213	118	1,904	153	-1,726	327	1,774	63
Air Prods. & Chems.	1,860	216	-1,761	258	885	103	1,425	172	-2,812	363	-1,426	363	1,336	229	2,574	106	857	257	-710	241	-1,765	340
Limited Brands	1,836	217	-864	193	-1,790	317	-3,588	377	4,827	106	954	168	2,561	172	-53	326	-2,185	425	-307	194	-11,952	405
RadioShack	1,827	218	-2,725	298	-3,667	366	-2,920	367	7,738	78	-117	268	2,915	157	-122	329	-1,877	419	-616	224	2,850	43
Bed Bath & Beyond	1,815	219	-760	184	3,133	33	1,104	190	-452	253	2,758	129	1,327	230	400	268	369	310	-609	223	1,202	90
Kinder Morgan Kans	1,814	220	-2,260	275	-1,47	193	4,350	94	-535	259	-1,054	341	618	301	453	259	208	337	-117	164	217	189
Symbol Techs.	1,812	221	-2,355	282	-2,849	346	-2,025	341	2,307	136	3,513	109	341	338	27	312	240	332	634	70	233	184
Amer.Standard Co.	1,783	222	-210	117	1,175	84	-1,113	267	703	182	-614	311	-485	393	1,054	195						
Amsouth Banc.	1,782	223	-168	112	1,402	69	-2,549	363	-3,141	377	1,288	178	2,753	163	654	236	1,501	180	-734	244	-344	268
Textron	1,773	224	-90	98	-1,302	282	-6,844	406	-801	270	2,198	140	3,128	141	3,425	82	2,200	136	-2,312	348	2,096	54
Constellation En.	1,748	225	10	84	-3,789	368	2,882	125	-500	254	-999	335	1,605	217	-706	375	1,592	170	-1,299	298	339	171
Jabil Circuit	1,721	226	-1,544	244	-1,313	283	-3,621	379	3,657	117	1,877	152	1,237	236	1,027	197	229	333	-143	170		
Nvidia	1,716	227	-9,420	420	7,728	13	540	225														
Bear Stearns	1,701	228	-368	139	507	131	570	221	1,157	166	-2,531	391	3,816	124	1,801	141	952	247	-1,935	335	1,130	94
Jefferson Pilot	1,692	229	-1,761	257	-1,181	273	203	246	-1,617	314	3,140	121	1,997	201	938	201	1,311	201	255	108	-593	293
Equity Off. Props. Tst.	1,691	230	-2,534	292	-1,162	272	2,400	141	186	208	-3,232	407										
Reynolds R J Tob.	1,687	231	-1,628	247	821	108	4,830	87														
Pitney-Bowes	1,678	232	-1,833	262	1,099	89	-6,284	400	-8,191	432	7,676	63	7,572	68	1,339	174	3,911	89	-4,371	388	-749	302
Watson Pharms.	1,672	233	-658	172	-2,901	347	1,406	173	-4,040	393	3,606	107	947	260	-562	364	673	275	-51	149		
Union Pacific	1,664	234	-267	123	824	107	1,185	183	-1,375	300	-8,163	447	-735	406	6,727	41	6,836	54	-9,648	418	-264	257
Micron Tech.	1,646	235	-16,482	454	-6,103	398	-6,094	399	8,423	75	7,899	60	-2,899	442	-6,972	442	7,291	48	6,704	9	3,074	37
May Dept.Stores	1,639	236	-5,113	364	865	106	-625	283	-4,736	404	1,460	170	1,010	254	3,030	90	2,669	122	-4,600	393	651	132
Soletron	1,628	237	-7,734	403	-20,797	457	-15,293	439	16,170	38	8,964	58	2,244	185	452	260	1,192	219	-438	206	724	126
Keycorp	1,626	238	-15	89	-2,369	335	2,998	120	-6,960	426	-3,647	416	6,277	82	5,398	52	4,721	81	-1,650	322	-1,313	325
Lexmark Intl.Gp.A	1,619	239	-632	171	1,568	64	-9,601	426	7,052	83	6,608	66	889	269	1,022	198						
Novellus Systems	1,618	240	-2,516	291	-1,23	191	-1,686	327	3,617	118	777	209	96	360	-227	341	-147	376	453	87	581	139
Amer.Power Conv.	1,617	241	-160	111	191	156	-4,368	385	-44	225	3,412	114	-1,240	421	3,161	87	-1,983	423	-2,455	356	2,005	57
Supervalu	1,574	242	-998	200	1,194	81	-1,337	319	-1,591	313	1,040	191	1,284	232	-605	367	733	271	-2,262	345	452	156
Hasbro	1,567	243	-1,098	211	972	98	-2,447	357	-1,865	325	407	224	664	293	833	212	-267	383	-2,105	340	-3	222
Kroger	1,562	244	-6,114	383	-8,000	410	6,614	67	-9,616	437	7,729	62	4,502	110	1,212	187	2,308	134	441	90	819	116
Anheuser-Busch Cos.	1,547	245	167	65	-3,481	358	8,567	45	1,001	175	13,902	46	811	275	4,797	59	5,977	64	-794	249	-9,353	401
Automation	1,532	246	-287	126	2,425	41	-1,886	334	-5,030	410	-8,275	448	-4,776	448	2,743	102	2,158	138	25	140	-218	250
Lincoln Nat.	1,504	247	-4,043	341	-296	211	1,181	184	-828	270	-1,74	272	3,860	122	-746	378	3,109	111	-2,319	349	812	118
Biomet	1,492	248	-1,349	230	711	114	2,221	180	-522	258	2,060	146	1,699	210	-932	390	443	303	680	67	-2,346	352
Viacom 'B'	1,485	249	-12,345	435	-10,593	423	-13,726	438	15,772	40	12,056	49	1,169	241	-9,181	444	713	272	-1,296	297	-249	255
Archer-Danls.-Midl.	1,453	250	-2,067	268	-702	244	2,089	158	-4,485	400	-4,485	428	-1,077	414	3,451	80	-4,096	433	5,565	10	-4,190	376

## Appendix 1 (continued)

	2003		2002		2001		2000		1999		1998		1997		1996		1995		1994		1993	
	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank
Manor Care	1,433	251	-840	191	117	166	387	232	-2,584	355	-1,036	339	671	292	265	281	89	349	442	89	350	169
Gen.Dynamics	1,433	252	-1,238	225	-833	254	5,432	78	-1,716	318	2,397	135	1,097	247	910	203	1,536	176	-813	254	2,922	41
Equity Resd.Tst.Props. Shbi	1,394	253	-1,405	234	153	161	1,953	162	395	197	-1,385	360	634	296	658	234	-33	366	-112	162		
Hilton Hotels	1,351	254	369	51	-185	200	20	261	-1,766	321	-5,021	431	341	337	3,432	81	-1,395	414	201	114	1,640	72
KB Home	1,348	255	-22	91	189	157	448	230	-370	246	258	236	553	312	-194	336	33	358	-915	260	436	159
Mercury Interactive	1,329	256	-774	186	-6,659	401	3,119	118	4,068	113	956	197	385	328	-229	342	101	347	-176	176		
Unocal	1,325	257	-2,018	265	-1,402	292	849	203	980	176	-4,536	429	-2,130	432	4,376	65	-238	381	-1,288	296	218	188
Unisys	1,323	258	-1,393	233	-1,368	289	-8,808	418	-2,216	341	5,497	81	2,001	200	197	292	-1,798	418	-2,550	358	450	158
Devon Energy	1,311	259	574	41	-4,049	372	2,548	134														
Navistar Intl.	1,309	260	-1,210	223	756	112	-2,152	346	1,520	156	87	246	1,859	204	-380	357	-1,107	408	-2,024	336	-118	240
Parker-Hannifin	1,307	261	-366	138	-175	198	-1,663	325	2,544	133	-2,849	398	3,290	136	259	282	124	345	563	79	716	128
CSX	1,303	262	-2,109	270	1,950	53	-1,961	338	-3,708	387	-5,236	434	2,934	155	-2,458	422	3,111	110	-4,173	387	1,835	60
Sumoco	1,302	263	-511	156	187	159	1,033	193	-1,864	324	-944	330	1,933	203	-619	368	-744	403	-401	199	69	211
Magic Invnt	1,297	264	-2,973	311	-1,443	298	1,46	251	2,669	130	-5,683	436	4,820	104	1,801	142	2,041	146	168	117	177	191
NCR	1,296	265	-1,718	253	-1,883	320	934	199	-965	285	1,779	156	-1,531	425								
Plum Creek Timber	1,293	266	-1,133	215	257	151	85	256	-56	226	-331	287	306	344	149	298	255	329	-643	232	1,129	95
Provident Finl.	1,286	267	791	34	-21,426	458	2,728	129	2,140	140	10,059	56	7,295	74	1,553	159	1,536	175	-2,327	350	-625	295
Goodrich	1,284	268	-1,012	203	-1,435	296	1,021	194	-1,075	288	-917	328	-194	378	409	266	1,144	224	77	128	-775	305
JDS Uniphase	1,283	269	-10,658	427	-45,189	478	-30,976	461	34,497	25	1,376	173	776	280	879	209	199	338	51	132		
Citrix Sys.	1,278	270	-2,736	300	-707	245	-12,488	435	9,998	61	3,081	122	1,697	211	1,037	196						
McGraw-Hill Co.	1,263	271	-949	197	-345	218	-1,965	339	2,131	141	3,415	113	4,016	118	1	315	1,449	185	-518	215	253	181
Whirlpool	1,259	272	-1,866	264	1,920	54	-2,111	345	727	180	-3,68	289	597	303	-1,376	410	-261	382	-3,382	374	3,090	36
Waters	1,257	273	-2,924	307	-8,018	411	8,753	43	533	188	2,101	142	229	350	561	247						
Converse Tech.	1,244	274	-2,991	312	-19,516	453	5,710	75	9,253	66	1,130	185	-134	373	659	233	278	324	-205	179	-243	252
PPL	1,238	275	-239	119	-2,221	331	3,940	103	-1,336	299	840	208	134	356	-713	376	1,733	164	-2,956	368	-567	290
Sprint	1,231	276	-6,609	390	-1,402	293	-53,786	467	22,024	33	16,912	41	9,001	59	7,018	39	6,874	53	-7,528	414	3,979	29
Prologis Tst.Shbi	1,230	277	646	37	-217	203	523	226	-299	240	-753	318	466	319	517	253	-55	369				
Wendy'S Intl.	1,226	278	-482	154	133	164	555	224	-416	250	-809	323	358	331	-452	359	1,058	237	-1,005	268	847	113
TXU	1,211	279	-9,031	415	517	130	2,982	122	-4,901	406	1,427	172	-334	385	-749	379	3,833	90	-5,964	407	-408	273
Clorox	1,202	280	-169	113	556	125	-5,727	395	-3,380	382	4,933	86	4,306	113	2,328	117	847	258	199	115	621	137
Sempra En.	1,201	281	-415	144	88	170	1,619	169	-2,822	364	-394	295	695	285	-305	346	898	253	-1,637	321	-63	232
Computer Scis.	1,197	282	-3,523	328	-3,356	356	-9,263	423	5,730	97	4,483	90	-931	412	551	248	1,339	196	1,670	30	516	145
Qlogic	1,166	283	-1,741	256	-5,228	388	-1,580	324	7,377	81	1,522	167	13	362	219	290	1	361				
Monster Worldwide	1,164	284	-4,270	352	-2,074	324	-2,396	356	3,956	115	345	230	374	330								
Pull	1,162	285	-1,175	220	241	153	-258	275	-858	275	651	216	-1,322	423	-684	371	1,407	191	-287	190	-1,055	315
Aon	1,159	286	-5,577	374	-2,84	209	-3,001	370	437	196	-1,910	379	3,851	123	1,865	138	3,238	105	-457	208	-1,550	332
Quest Diagnostics	1,150	287	-2,208	274	-643	240	6,037	73	483	192	-25	255	11	363								
Amer.Elec.Pwr.	1,134	288	-6,166	384	-1,661	312	3,509	110	-4,316	398	-1,877	377	2,810	159	-205	337	2,366	132	-2,085	338	1,309	86
Health Man.As.A	1,130	289	-580	165	-1,258	278	1,921	163	-3,702	386	1,221	180	2,333	178	654	235	1,087	231	337	99	534	143
Express Scripts - A	1,124	290	-273	124	-857	255	941	198	-249	238	992	195	310	342	-165	333	89	348	106	125	57	214
Charter One Finl.	1,116	291	32	80	-128	192	2,745	127	-2,108	338	-912	327	1,591	218	932	202	450	300	-116	163	-106	238
Anthem	1,091	292	1,030	26																		
Delphi Autv.Svs.	1,082	293	-3,916	337	1,136	86	-4,089	382														
Sealed Air	1,081	294	-779	187	792	110	-2,995	369	-408	249	-1,128	346	1,179	239	895	208	645	277	67	130	160	196
Tektronix	1,064	295	-1,014	204	-1,298	281	1,495	171	471	193	-1,101	344	170	353	-153	332	745	270	688	66	133	200
Perkinelmer	1,063	296	-4,030	339	-2,667	342	3,630	108	833	179	406	225	-74	370	-539	362	1,057	238	-742	246	-418	274
Kellogg	1,063	297	1,178	22	1,921	75	-3,305	372	-2,798	362	-11,572	455	9,897	50	-6,592	441	5,960	65	-1,235	292	-9,079	400
Autodesk	1,052	298	-729	177	532	127	-871	300	-876	278	162	241	478	318	-922	389	-1,118	410	1,822	27	-439	276
Band C R	1,050	299	-594	166	894	102	-692	288	48	221	1,375	174	96	359	-686	372	263	327	-21	145	-1,421	329
Robert Half Intl.	1,044	300	-2,455	286	-468	229	2,461	138	-2,547	353	81	247	2,211	187	1,189	189	838	262	547	81	347	170

## Appendix I (continued)

	2003		2002		2001		2000		1999		1998		1997		1996		1995		1994		1993	
	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank	\$ mill.	rank
Tribune	1,041	301	1,726	16	-2,842	345	-5,326	391	6,575	89	-196	275	3,921	120	1,529	163	131	344	-1,455	305	1,224	89
Rockwell Collins	1,030	302	492	46																		
Ambac Financial	1,028	303	-682	173	-602	238	2,710	130	-1,161	290	1,092	189	1,114	245	1,001	199	398	306	-631	226	-427	275
Ashland	1,028	304	-1,507	243	682	116	271	241	-1,872	326	-1,001	336	671	291	754	224	-284	385	-263	186	868	112
Molex	1,021	305	-1,137	216	-893	258	-1,844	333	1,683	152	365	228	589	305	426	264	81	332	298	103	464	154
Brunswick	1,004	306	-323	134	446	133	-901	302	-555	260	-1,231	352	691	286	-328	352	625	279	-155	173	67	212
Brown-Forman 'B'	1,002	307	-45	94	-370	222	259	244	-1,253	296	1,003	193	395	324	509	255	266	326	-42	146	-54	229
Southwest Airlines	1,001	308	-4,994	362	-4,976	387	10,012	35	-159	232	2,299	137	2,953	152	-900	387	1,157	223	-7,924	416	5,478	19
Norfolk Southern	999	309	155	68	1,841	56	-4,101	383	-6,806	424	-393	294	-617	402	896	206	3,670	94	-4,456	390	1,599	74
Nitor	984	310	-1,305	228	1,013	94	-2,213	350	1,067	172	-1,206	349	-1,122	418	-1,815	418	-842	406	-551	219	2,049	55
Campbell Soup	977	311	-3,565	330	-3,299	355	-3,635	380	-12,005	448	-3,443	412	11,385	412	7,322	37	5,733	71	386	98	-3,085	364
St.Paul	972	312	-2,829	303	-3,549	362	5,377	80	-864	276	-2,265	390	2,673	167	-23	319	1,212	214	-519	216	779	122
McKesson	967	313	-4,157	346	-502	233	4,092	98	-8,861	435	2,929	126	3,376	135	149	297	1,347	194				
Southern	959	314	1,772	13	6,095	16	7,734	53	-6,266	420	2,456	420	2,772	161	-3,476	427	4,652	82	-4,039	383	2,985	40
LNA Pacific	957	315	-130	107	-298	213	-672	286	-807	271	-323	286	-715	405	-1,014	392	-1,398	415	-4,606	395	2,323	49
Autozone	937	316	-823	189	5,392	17	-1,276	316	-699	266	253	237	-408	389	-1,182	399	522	290	-2,333	351	2,412	48
Donnelley R R	928	317	-1,167	219	206	155	133	253	-4,037	392	894	206	861	272	-2,958	426	2,123	140	-1,320	299	-1,668	335
LSI Logic	924	318	-4,856	360	-1,276	279	-8,669	416	10,989	58	-1,387	361	-2,605	438	-2,707	423	2,652	123	3,081	16	512	146
ITT Industries	924	319	623	38	937	99	309	237	-1,246	295	1,100	188	968	259	-223	340	5,081	75	-229	182	3,866	30
North Fork Bancorp.	923	320	4	85	1,277	76	1,068	191	-1,546	311	14	253	1,188	238	389	271	291	320	-12	143	100	205
Knight-Ridder	921	321	-536	158	390	138	-790	295	604	185	-591	308	1,641	215	788	211	788	266	-1,593	316	-395	272
Harrub Entm.	903	322	-53	95	1,133	87	-455	279	1,332	162	-772	321	-579	399	-1,337	408	-172	377	-4,601	394	6,919	13
First Ten.Nat.	888	323	-311	129	873	104	-207	271	-2,104	337	487	221	2,960	150	697	228	1,097	226	18	141	-45	226
Temple Inland	886	324	-818	188	1	180	-1,212	313	274	203	305	232	-575	398	762	223	626	399	-1,133	287	-768	304
Vulcan Materials	884	325	-1,467	240	-349	220	621	216	-896	280	1,137	184	2,096	195	-10	316	182	340	54	131	-470	282
Meadwestvaco	869	326	-851	192	-297	212	-2,063	342	1,815	149	-91	264	-607	401	232	287	-142	375	26	139	504	148
Duke Energy	865	327	-18,395	459	-4,972	386	15,209	24	-8,318	433	3,327	115	2,286	181	-1,234	404	2,811	118	-2,785	362	2,132	52
Heinz' HJ	863	328	-2,161	272	-3,470	357	2,483	137	-9,848	440	1,443	171	7,596	67	551	249	4,900	78	-576	221	-7,026	395
Dana	843	329	-551	160	-380	223	-3,605	378	-3,119	376	-1,619	369	2,195	189	312	280	771	269	-1,856	332	1,089	98
Cummins	840	330	-578	164	-83	187	-766	292	656	184	-1,844	375	613	302	496	256	-1,116	409	-1,137	288	932	106
Fluor	838	331	-1,023	206	189	158																
Engelhard	833	332	-1,010	202	895	101	18	262	-348	241	190	240	-838	409	-1,169	396	1,546	173	-923	261	-175	246
Torchmark	824	333	-739	179	-284	208	1,163	187	-1,653	317	-2,149	386	3,411	134	337	276	989	245	-2,139	342	-3,040	363
Dynegy 'A'	803	334	-7,232	398	-10,408	422	7,019	61	1,026	173	-370	290	-242	381	-591	365	1,083	233	-262	185	-318	263
Peoplesoft	797	335	-8,960	412	-488	230	4,935	86	347	202	-9,155	450	4,849	103	5,093	57	2,401	130	1,237	44	0	221
Travelers Pr.Cliy. 'B'	796	336																				
Sherwin-Williams	793	337	-152	110	-58	186	811	205	-2,411	350	-96	265	-746	407	1,873	135	688	274	-995	267	503	149
Cinergy	778	338	-100	100	-490	231	2,253	146	-2,523	351	-1,272	354	940	263	544	251	1,923	151				
Huntington Besh.	778	339	197	63	135	163	-2,184	348	-1,544	310	-1,483	366	2,698	165	907	205	1,728	165	-742	245	298	176
Sprint PCS	750	340	-24,162	468	2,553	40	-40,256	465	46,667	19												
Bausch & Lomb	738	341	-252	122	-339	217	-2,509	359	384	199	1,509	168	176	352	-790	381	316	317	-2,908	367	-1,205	320
McComick & Co. Nv.	716	342	110	73	259	150	330	234	-511	257	382	226	350	336	-319	350	650	276	-1,500	308	-1,676	336
Baxter Intl.	704	343	-18,622	461	4,345	25	9,026	40	-2,035	333	4,436	91	2,781	160	30	311	6,350	58	1,626	32	-6,967	393
Sungard Data Systems	703	344	-2,319	280	1,019	93	3,380	114	-2,796	361	772	210	1,245	235	577	246	517	291	-297	191	299	174
Hershey Foods	683	345	-519	157	-94	189	1,854	164	-2,875	368	-728	317	2,927	156	2,500	112	1,744	163	-642	231	-339	266
TJX Cos.	683	346	-1,190	221	3,209	32	2,090	157	-4,965	407	5,036	84	2,138	193	3,673	76	292	319	-2,811	365	-377	271
Ryder System	679	347	-66	97	320	139	-778	294	-285	239	-1,031	338	312	341	244	285	109	346	-1,103	281	76	210
Ameren	666	348	-241	120	-828	253	2,360	253	-2,051	334												
FPL Group	665	349	297	56	-3,911	369	6,256	71	-5,400	413	-206	276	3,225	138	-870	385	3,343	103	-2,287	347	708	129
V F	643	350	-630	170	99	168	679	215	-3,248	379	-529	302	2,100	194	1,317	176	-48	367	-120	165	-1,680	338

## Appendix 1 (continued)

	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993												
	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03												
	ranking	ranking	ranking	ranking	ranking	ranking	ranking	ranking	ranking	ranking	ranking												
Regions Finl.	637	351	510	44	394	137	287	239	5,302	412	153	254	792	265	-264	187	258						
Thermo Electron	606	352	-1,118	214	-966	261	2,651	131	-760	268	-7,305	443	390	-129	167	717	127						
Fiserv	595	353	-2,464	288	1,712	59	802	208	243	204	1,856	298	314	279	456	297	32	217					
Crane	579	354	-476	153	-336	216	583	219	-1,074	287	266	894	268	220	289	301	36	230					
Allied Waste Inds.	575	355	-1,199	222	-496	232	1,175	185	-4,697	403	-379	291	1,391	227	81	306	49	220					
Allegheny En.	576	356	-4,261	351	-1,884	321	2,996	121	-1,478	306	209	208	291	1,476	183	-1,438	303	460					
Allegheny Techs.	569	357	-1,021	205	23	178	-1,002	306	-2,875	369	-1,932	381	309	343	428	263	314	114					
SLM	567	358	2,322	7	2,094	49	4,510	91	-2,079	335	1,328	175	3,548	129	2,588	105	5,310	73	-3,235	371	-7,001	394	
Union Planters	560	359	-697	175	1,358	74	-913	303	-1,393	302	-2,937	402	2,647	169	406	267	475	295	-260	184	-49	228	
Penney Jc	556	360	-1,651	251	4,880	20	-3,488	376	-10,662	445	-6,556	440	3,533	130	-469	360	-217	380	-6,203	410	6,480	16	
Applied Micro Circuits	554	361	-3,075	315	-26,395	465	11,909	30	7,672	79	662	215											
ADC Telecom.	548	362	-2,601	295	-14,501	436	-1,822	330	7,021	85	-2,572	393	1,629	216	2,827	98	1,029	239	748	61	754	124	
Janus Capital Gp.	545	363	-3,872	335	-3,985	371																	
El Paso	499	364	-22,913	467	-8,967	415	8,855	42	383	200	-115	267	1,142	243	1,308	177	-293	387	-649	233	255	180	
Family S.Srs.	486	365	-180	116	1,393	71	808	206	-1,747	319	1,576	163	2,057	196	596	245	-7	362	-775	247	-1,291	324	
Centerpoint En.	483	366	-5,938	379	-6,462	400	7,713	54	-4,109	395	2,074	144	1,424	226	-1,089	394	3,164	106	-3,846	380	4	219	
Loews	479	367	-3,065	314	-27	181	5,131	84	-6,958	425	-2,758	396	631	297	2,086	124	6,954	51	-1,930	334	-6,010	389	
Pharmacia West Cap.	478	368	-871	194	-811	251	1,699	167	-1,623	315	-316	285	1,262	234	240	286	1,347	195	-804	253	-172	245	
Firstenergy	473	369	-1,081	210	676	119	2,516	136	-3,618	385	918	204	1,463	222	-346	353	1,326	199	-1,600	317	-502	283	
Nabors Inds.	470	370	-384	141	-5,410	391	4,409	92	2,403	134	-3,486	413	1,559	220	1,144	190	704	273	-425	204	121	201	
Principal Finl.Gp.	462	371	1,769	14																			
Reebook Intl.	456	372	19	83	-250	204	1,343	175	-659	263	-1,509	367	-1,757	426	1,658	149	-2,869	429	1,329	42	-1,972	346	
Nisource	456	373	-824	190	-2,174	330	2,007	159	-2,279	345	857	207	783	279	-28	321	846	259	-680	236	790	120	
Calpine	441	374	-5,362	368	-11,690	428	9,631	37	3,107	123	299	233	380										
Visteon	437	375	-1,277	226	428	135																	
Conagra	433	376	151	69	-2,099	327	1,401	174	-7,098	428	-2,695	395	4,938	101	2,500	111	3,521	96	1,730	29	-5,608	386	
Cincinnati Fin.	431	377	-502	155	-716	246	1,260	179	-1,758	320	-3,428	411	6,481	79	-86	328	1,237	211	-636	227	-1,580	333	
Circuit City Stores	424	378	-4,162	347	3,355	31	-10,909	430	5,559	98	1,812	155	391	326	-41	323	548	285	-443	207	-1,962	345	
Liz Cluiboone	422	379	319	55	292	146	39	260	357	201	-1,421	362	-97	371	1,214	186	1,409	190	-1,440	304	-5,026	383	
Sigma Aldrich	413	380	509	45	-256	206	850	202	-166	233	-2,025	383	917	266	778	220	1,237	210	-2,110	341	-1,838	343	
EOG Res.	401	381	-315	130	-2,819	344	5,411	79	-215	235	-1,432	365	-1,839	427	-314	348	959	246	-1,017	270	1,399	81	
Cooper Tire Rub.	399	382	-129	106	415	136	-605	282	-625	261	-685	313	387	327	-1,063	393	-302	388	-715	242	-2,675	357	
Boise Cascade	387	383	-687	174	-117	190	-735	290	599	186	-131	269	-360	386	-496	361	379	308	130	121	62	213	
Toys R Us Holdings Co.	376	384	-2,733	299	574	124	2,666	243	-1,473	305	-7,811	446	-773	408	3,149	88	-7,380	437	-9,805	419	-2,776	358	
Gateway	367	385	-2,091	269	-4,790	384	-27,454	458	21,316	34	3,876	102	942	262	4,024	67	54	353	26	138			
Applera Appd.Bios.	359	386	-5,961	381	-16,306	446	7,466	55	11,972	51	1,461	169	495	316	1,517	164	887	254	-1,708	324	95	207	
Power-One	352	387	-557	162	-3,272	353	2,099	156	1,008	174	-225	278											
UST	346	388	-456	151	1,256	78	615	218	-2,793	360	-955	332	991	257	-868	384	1,424	188	-618	225	-3,349	368	
Intuit	340	389	-114	103	-284	207	-7,629	410	9,131	68	2,100	143	577	307	-4,934	436	3,751	93	570	78			
Satco	333	390	246	58	-526	236	1,244	180	-3,824	388	-1,865	376	1,369	228	694	230	1,551	172	-798	251	-1,013	313	
Black & Decker	331	391	211	61	-423	226	-1,948	337	-942	283	1,960	151	905	267	-1,283	406	1,492	181	432	92	-43	225	
Ciena	330	392	-4,168	348	-27,040	467	19,213	18	6,640	87	-8,519	449											
Sabre Hdg.	328	393	-4,063	343	-720	248	-205	270	108	108	465	222	160	368									
Ecobab	312	394	894	30	-878	256	131	254	121	214	1,237	179	1,542	221	640	239	948	249	-461	209	375	167	
Albergo Culver 'B'	312	395	81	75	-49	184	618	217	-118	229	-396	296	317	340	326	278	135	343	76	129	-204	247	
Millipore	310	396	-1,409	236	-422	225	1,190	182	533	187	-567	305	-853	411	-285	345	1,455	184	322	101	93	208	
Ball	304	397	782	35	709	115	137	252	-393	248	356	229	380	335	-187	334	-409	393	-60	154	-207	248	
Parametric Tech.	303	398	-1,791	259	-2,438	336	-6,414	401	3,911	116	-4,400	426	-2,373	436	3,858	73	3,585	95	-1,254	295	1,436	78	
Citizens Comms.	299	399	-318	132	-1,110	269	815	298	2,028	143	-314	284	-290	383	-265	344	-76	371	-700	238	305	173	
Amer.Greetings 'A'	295	400	50	77	273	149	-1,235	315	-1,861	322	-88	263	1,012	253	-132	331	-288	386	-1,503	309	1,143	92	

## Appendix 1 (continued)

	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03	\$ mill. 03
	ranking	ranking	ranking	ranking	ranking	ranking	ranking	ranking	ranking	ranking	ranking
Dow Jones & Co.	293	401	-1,029	208	-429	227	-1,466	321	1,764	150	1,600
Hercules	292	402	-251	121	-1,382	291	-1,532	322	-85	228	210
Federated Invs. 'B'	288	403	-1,113	213	72	172	2,279	144	91	217	73
Progress En.	286	404	-756	183	-1,436	297	3,778	105	-3,870	390	1,600
Thomas & Betts	275	405	-382	140	281	148	-1,327	317	-1,110	289	1,600
Compuware	272	406	-3,447	325	2,180	47	-17,575	446	-3,070	375	1,600
Genuine Parts	264	407	-1,455	238	1,952	52	70	258	-2,533	352	1,600
Office Depot	229	408	-1,844	263	3,883	29	-2,220	351	-8,595	434	1,600
Charles Schwab	228	409	-8,990	414	-25,805	463	-17	263	8,949	71	1,600
Worthington Inds.	212	410	45	78	623	123	-1,080	310	490	190	1,600
Cintas	211	411	-1,143	218	-1,923	322	3,052	119	-3,367	381	1,600
Meredit	206	412	120	72	52	175	-673	287	70	219	1,600
BB&T	205	413	-445	148	-1,519	305	3,506	111	-6,154	419	1,600
Convergys	195	414	-4,718	357	-2,087	325	2,231	147	1,422	158	1,600
Stanley Works	194	415	-1,364	231	1,383	72	-102	266	137	212	1,600
Snap-On	194	416	-459	152	312	143	-20	264	-821	272	1,600
Centurytel	188	417	-913	195	-952	260	-2,875	366	-149	231	1,600
Tellabs	174	418	-4,232	349	-23,725	460	-8,050	414	15,604	41	1,600
Eastman Chemicals	173	419	-328	135	-1,093	267	-178	269	133	213	1,600
Interpublic Gp.	154	420	-7,239	399	-5,907	395	-7,302	409	5,969	96	1,600
Keyspan	146	421	-58	96	-1,483	302	3,285	116	-1,876	327	1,600
BJ Svcs.	136	422	-598	168	-1,128	271	2,207	151	2,594	131	1,600
Tupperware	133	423	-319	133	-151	194	205	245	3	223	1,600
Metricom	133	424	-12,327	434	-19,369	452	30,858	7	-4,531	401	1,600
Gt.Lakes Chm.	104	425	-112	102	-990	263	-315	277	-365	243	1,600
Peoples Energy	104	426	-7	87	-349	219	476	228	-366	244	1,600
Kenn-McGee	103	427	-1,433	237	-1,769	316	85	257	1,525	155	1,600
Pactiv	80	428	452	47	796	109	147	250			1,600
Goodyear Tire	78	429	-3,345	321	-37	183	-1,343	320	-5,641	417	1,600
Andrew	37	430	-1,228	224	-194	201	64	259	113	215	1,600
Biogen Idex	26	431	-7,361	401	-291	210	4,519	110	4,529	110	1,600
Anadarko Petroleum	23	432	-3,648	331	-5,966	396	5,460	70	157	210	1,600
Nitor	-18	433	-447	149	-170	197	564	222	-750	267	1,600
Equifax	-24	434	-454	150	1,681	60	560	223	-2,647	356	1,600
Big Lots	-24	435	218	60	-180	199	-1,120	311	-957	284	1,600
Marsh & McLennan	-32	436	-6,406	389	-5,383	390	4,647	89	12,512	47	1,600
Dillard's 'A'	-41	437	-131	109	326	140	-1,335	318	-1,502	307	1,600
BMC Software	-58	438	-317	131	219	154	-25,272	457	10,531	59	1,600
Cons.Edison	-65	439	325	53	246	152	871	201	-6,597	422	1,600
New York Times 'A'	-80	440	-91	99	65	173	-2,865	365	3,099	124	1,600
Bemis	-97	441	-169	114	865	105	-244	273	-358	242	1,600
Albertsons	-118	442	-4,881	361	1,721	58	-4,387	386	-12,088	449	1,600
Rowan Cos.	-134	443	161	66	-1,182	274	295	238	1,349	161	1,600
Deluxe	-139	444	-109	101	2,365	43	-306	276	-1,172	291	1,600
Darden Restaurants	-144	445	-959	198	1,538	65	491	227	-221	236	1,600
Delta Air Lines	-151	446	-2,628	296	-3,622	365	-746	291	-1,206	293	1,600
Maytag	-167	447	-399	142	-327	215	-2,189	349	-2,402	349	1,600
Teco Energy	-175	448	-1,727	255	-1,099	268	2,260	145	-1,926	330	1,600
Intl.Flav.& Frag.	-185	449	364	52	975	97	-2,637	364	-1,213	294	1,600
Apartment Inv.Man.'A'	-239	450	-718	176	-395	227	1,601	207	1,601	207	1,600



## Appendix 2

## SHAREHOLDER VALUE CREATORS IN THE S&amp;P 500: YEAR 2003

## Created shareholder value (CSV) in the eleven-year period 1993-2003 of the companies in the S&amp;P 500 as of December 2003 (million dollars 03)

rank	Company	1993-2003		rank	Company	1993-2003		rank	Company	1993-2003	
		CSV	Return			CSV	Return			CSV	Return
1	General Electric	197,930	17%	79	Bristol Myers Squibb	10,154	9%	157	Avery Dennison	3,632	16%
2	Microsoft	159,867	24%	80	Rockwell Automation	10,092	19%	158	Kinder Morgan Kans	3,546	18%
3	Intel	158,227	25%	81	Maxim Integrated Prds.	9,995	35%	159	Marshall & Ilsley	3,531	15%
4	Intl. Bus. Mach.	150,999	21%	82	SLM	9,953	19%	160	Charter One Finl.	3,494	18%
5	Citigroup	128,875	28%	83	Marsh & McLennan	9,928	14%	161	Textron	3,473	11%
6	Dell	88,349	41%	84	Deere & Co.	9,909	17%	162	Radioshack	3,286	15%
7	Cisco Systems	78,164	33%	85	Linear Tech.	9,891	27%	163	Robert Half Intl.	3,247	32%
8	Procter & Gamble	69,840	15%	86	Dow Chemicals	9,883	12%	164	Sungard Data Systems	3,100	20%
9	Oracle	67,574	31%	87	Carnival	9,506	17%	165	Eaton	3,077	13%
10	Johnson & Johnson	66,271	16%	88	Danaher	9,371	27%	166	MGIC Invt	3,019	15%
11	Wal-Mart Stores	59,858	12%	89	Fleet Boston Finl.	9,124	13%	167	Providian Finl.	3,009	8%
12	Exxon Mobil	56,994	13%	90	Starbucks	8,951	27%	168	PNC Finl.Svs.Gp.	2,946	10%
13	American Intl. Gp.	53,458	17%	91	McGraw-Hill Co.	8,752	18%	169	Family S. Strs.	2,918	17%
14	American Express	51,639	21%	92	State Street	8,728	17%	170	Pulte Homes	2,859	19%
15	Lilly Eli	51,327	18%	93	Electronic Arts	8,364	22%	171	Autzone	2,796	14%
16	Ford Motor	47,708	11%	94	Cardinal Health	8,208	22%	172	Nike 'B'	2,751	13%
17	Fannie Mae	46,729	16%	95	Humana	7,855	11%	173	Exelon	2,726	14%
18	Pfizer	43,527	19%	96	Xilinx	7,838	30%	174	Nat. City	2,680	14%
19	Amgen	38,799	19%	97	TJX Cos.	7,778	20%	175	Genzyme	2,589	15%
20	United Technologies	36,316	23%	98	Southtrust	7,385	21%	176	BJ Svs.	2,495	22%
21	Wells Fargo & Co	35,987	20%	99	Countrywide Finl.	7,373	20%	177	AmsouthBanc.	2,484	13%
22	Hewlett-Packard	34,769	13%	100	Paccar	7,096	21%	178	Equifax	2,469	14%
23	Lowe's Companies	33,384	31%	101	Pepsico	6,971	10%	179	Novellus Systems	2,444	27%
24	3M	32,907	15%	102	Charles Schwab	6,817	28%	180	Harrahs Entm.	2,317	13%
25	Medtronic	32,018	22%	103	Bear Stearns	6,799	21%	181	Biogen Idec	2,307	34%
26	Merck & Co.	31,838	10%	104	Allergan	6,794	19%	182	Zions Bancorp.	2,124	21%
27	Altria Gp.	31,173	13%	105	Fedex	6,745	16%	183	Express Scripts 'A'	2,075	29%
28	Merrill Lynch & Co.	29,937	23%	106	JP Morgan Chase & Co.	6,722	14%	184	Chiron Corp	2,067	14%
29	Abbott Labs.	27,501	13%	107	Altera	6,554	35%	185	Lincoln Nat.	2,061	11%
30	Texas Insts.	27,258	24%	108	Washington Mutual	6,510	17%	186	Meredith	1,937	21%
31	Applied Mats.	25,104	32%	109	Symantec	6,491	23%	187	Symbol Techs.	1,880	23%
32	Freddie Mac	25,065	17%	110	Suntrust Banks	6,423	14%	188	Pitney-Bowes	1,848	10%
33	MBNA	24,567	27%	111	Johnson Controls	6,372	19%	189	FPL Group	1,819	10%
34	Walgreen	23,786	20%	112	Tribune	6,331	16%	190	Entergy	1,789	11%
35	Caterpillar	23,721	21%	113	Schering-Plough	6,320	10%	191	Vulcan Materials	1,783	13%
36	Unitedhealth Gp.	23,323	21%	114	Emerson Electric	6,296	11%	192	KB Home	1,765	16%
37	Anheuser-Busch Cos.	23,143	15%	115	Adobe Sys.	5,922	24%	193	H&R Block	1,717	13%
38	Sears Roebuck & Co.	22,010	12%	116	KLA Tencor	5,920	31%	194	Baxter Intl.	1,675	10%
39	Target	21,574	19%	117	Nthn.Trust	5,898	16%	195	Brown Forman 'B'	1,672	14%
40	Bank Of America	21,368	15%	118	Clorox	5,716	17%	196	Kroger	1,456	16%
41	Bellsouth	21,072	11%	119	Computer Assocs.Intl.	5,651	15%	197	Noble	1,432	21%
42	Bank Of New York	19,171	19%	120	Praxair	5,601	16%	198	MBIA	1,405	11%
43	ChevronTexaco	19,047	12%	121	Synovus Finl.	5,592	21%	199	Ball	1,383	15%
44	Coca Cola	17,638	10%	122	Wrigley William Jr.	5,549	14%	200	Plum Creek Timber	1,312	15%
45	General Motors	17,052	10%	123	Occidental Ptl.	5,524	13%	201	Knight-Ridder	1,277	11%
46	Forest Labs.	16,153	26%	124	Becton Dickinson & Co.	5,384	15%	202	Tektronix	1,199	16%
47	Sysco	15,744	19%	125	Safeway	5,309	19%	203	Dominion Res.	1,166	11%
48	Southern	15,643	15%	126	EMC	5,262	30%	204	Nabors Inds.	1,106	18%
49	Home Depot	14,852	11%	127	Frank.Res.	5,145	15%	205	Alberto Culver 'B'	1,098	17%
50	Wyeth	14,715	12%	128	Keycorp	5,065	10%	206	Teradyne	1,077	19%
51	Alcoa	14,559	16%	129	Apache	5,056	17%	207	Peoplesoft	1,056	26%
52	Colgate Palm.	14,420	14%	130	Ecolab	4,862	19%	208	Molex	1,054	14%
53	Aflac	14,377	22%	131	Automatic Data Proc.	4,652	11%	209	Wendy's Intl.	1,011	12%
54	Boston Scientific	13,238	19%	132	BB&T	4,611	17%	210	St. Paul	964	10%
55	Mellon Finl.	12,698	16%	133	Tiffany & Co.	4,590	25%	211	PPG Industries	906	9%
56	Comcast 'A'	12,598	17%	134	Dollar General	4,556	23%	212	Progress En.	888	10%
57	Fifth Third Bancorp	12,451	19%	135	Hershey Foods	4,511	14%	213	Constellation En.	882	10%
58	Progressive Ohio	12,303	22%	136	Dover	4,441	14%	214	Adolph Coors 'B'	870	14%
59	Paychex	12,242	31%	137	Jefferson Pilot	4,385	15%	215	Jones Apparel Group	808	13%
60	Best Buy Co.	12,131	34%	138	First Ten. Nat.	4,352	19%	216	Scientific Atlanta	792	14%
61	ITT Industries	12,110	19%	139	T Rowe Price Gp.	4,316	23%	217	Huntington Bcsh.	788	12%
62	Illinois Tool Wks.	11,815	17%	140	Staples	4,298	20%	218	Crane	734	13%
63	First Data	11,597	16%	141	Intl. Game Tech.	4,224	17%	219	Rohm & Haas	723	11%
64	Gap	11,445	16%	142	Fiserv	4,219	21%	220	Cincinnati Fin.	702	10%
65	Cigna	11,283	13%	143	Ingersoll Rand	4,168	14%	221	Black & Decker	691	11%
66	Stryker	11,253	22%	144	Biomet	4,157	16%	222	Newmont Mining	650	4%
67	Du Pont E I De Nemours	11,141	9%	145	New York Times 'A'	4,012	14%	223	Pub.Ser.Enter.Gp.	572	10%
68	Gen. Dynamics	11,127	20%	146	Coca Cola Ents.	3,963	17%	224	Maytag	570	8%
69	Harley Davidson	10,897	24%	147	Southwest Airlines	3,948	14%	225	Dow Jones & Co	494	8%
70	Golden West Finl.	10,637	20%	148	St. Jude Med.	3,903	15%	226	Air Prds & Chems.	464	10%
71	Analog Devices	10,610	29%	149	Fortune Brands	3,850	14%	227	Pinnacle West Cap.	429	10%
72	Conoco Phillips	10,571	13%	150	Centex	3,842	20%	228	Leggett&Platt	412	11%
73	Omnicon Gp.	10,519	23%	151	Ambac Financial	3,839	16%	229	Millipore	366	11%
74	Bed Bath & Beyond	10,287	31%	152	Comerica	3,759	13%	230	Bard C R	311	11%
75	Avon Products	10,236	18%	153	Parker Hannifin	3,749	17%	231	Applera Appd.Bios.	276	11%
76	U.S. Bancorp	10,229	23%	154	Cintas	3,745	17%	232	Concord Efs	228	25%
77	Gannett	10,227	14%	155	North Fork Bancorp.	3,698	31%	233	Firstenergy	225	10%
78	Kohls	10,198	25%	156	Health Man. As. A	3,677	24%	234	EOG Res.	218	12%

## Appendix 2 (continued)

rank	Company	1993 - 2003	
		CSV	Return
235	Centurytel	213	10%
236	Sherwin - Williams	211	10%
237	Keyspan	146	10%
238	Marathon Oil	138	10%
239	Amer. Power Conv.	137	12%
240	Peoples Energy	-65	9%
241	Thermo Electron	-79	10%
242	Bemis	-135	9%
243	PPL	-145	10%
244	Nicor	-194	8%
245	Nisource	-246	10%
246	National Semicon.	-250	13%
247	Rowan Cos.	-319	10%
248	Andrew	-378	8%
249	Stanley Works	-382	8%
250	Medimmune	-419	19%
251	Snap-On	-426	7%
252	Northrop Grumman	-433	13%
253	Sealed Air	-493	14%
254	Supervalu	-515	9%
255	Sunoco	-560	10%
256	Meadwestvaco	-606	7%
257	Ashland	-652	8%
258	Brunswick	-659	9%
259	Regions Finl.	-688	11%
260	Manor Care	-706	11%
261	Starwood Htls & Resorts Wwd.Paired Certs. 'B'	-720	25%
262	Union Planters	-804	11%
263	KimberlyClark	-866	9%
264	Autodesk	-908	8%
265	Schlumberger	-933	9%
266	Boise Cascade	-969	6%
267	Engelhard	-980	8%
268	Cons. Edison	-1,001	9%
269	Hilton Hotels	-1,013	10%
270	Sempra En.	-1,137	8%
271	McCormick & Co. Nv.	-1,209	9%
272	Citizens Comms.	-1,256	1%
273	Nextel Comms. A	-1,281	11%
274	Federated Dept.Strs.	-1,308	8%
275	Worthington Inds.	-1,321	5%
276	V F	-1,417	7%
277	Navistar Intl.	-1,460	7%
278	Phelps Dodge	-1,469	7%
279	DTE Energy	-1,473	8%
280	Goodrich	-1,473	6%
281	PerkinElmer	-1,480	8%
282	Ryder System	-1,513	6%
283	Computer Scis.	-1,587	12%
284	Tellabs	-1,639	21%
285	Sigma Aldrich	-1,691	7%
286	Genuine Parts	-1,724	7%
287	Whirlpool	-1,771	7%
288	Masco	-1,815	8%
289	Baker Hughes	-1,967	6%
290	Cummins	-1,986	5%
291	Gillette	-2,164	11%
292	Grainger W W	-2,178	6%
293	Pall	-2,178	5%
294	PMC-Sierra	-2,184	25%
295	Hercules	-2,185	-3%
296	Aon	-2,229	7%
297	Burl.Nthn.Santa Fe C	-2,247	9%
298	Sprint	-2,287	9%
299	Amer. Greetings 'A'	-2,334	1%
300	Compuware	-2,414	6%
301	Big Lots	-2,586	2%
302	Safeco	-2,588	6%
303	Weyerhaeuser	-2,593	8%
304	Nordstrom	-2,595	7%
305	Teco Energy	-2,648	2%
306	Thomas & Betts	-2,774	-1%
307	Conagra	-2,824	7%
308	Temple Inland	-2,902	4%
309	Allegheny En.	-2,927	0%
310	Union Pacific	-3,217	7%
311	Campbell Soup	-3,229	5%
312	Anadarko Petroleum	-3,245	13%

rank	Company	1993-2003	
		CSV	Return
313	Torchmark	-3,280	6%
314	LSI Logic	-3,342	11%
315	Hasbro	-3,343	5%
316	U.S. Steel	-3,434	3%
317	Kerr-McGehee	-3,442	4%
318	Allied Waste Inds.	-3,510	10%
319	Mieron Tech.	-3,513	20%
320	CMS Energy	-3,613	-3%
321	May Dept.Stores	-3,749	6%
322	Deluxe	-3,770	6%
323	McDonalds	-3,804	8%
324	Mattel	-3,852	5%
325	Unocal	-3,865	6%
326	Liz Claiborne	-3,932	6%
327	Nucor	-3,940	4%
328	Georgia Pacific	-4,106	5%
329	Reebok Intl.	-4,212	2%
330	Wachovia	-4,239	11%
331	Intl. Flav. & Frag.	-4,285	3%
332	Alltel	-4,360	9%
333	UST	-4,407	7%
334	Chubb	-4,518	6%
335	Adv. Micro Devc.	-4,802	5%
336	Comverse Tech.	-4,816	11%
337	Bausch & Lomb	-4,880	2%
338	Qualcomm	-4,960	39%
339	Amerada Hess	-5,026	3%
340	Newell Rubbermaid	-5,134	3%
341	Amer. Elec. Pwr.	-5,181	6%
342	Gen. Mills	-5,185	8%
343	Cooper Inds.	-5,218	5%
344	Heinz HJ	-5,245	7%
345	Halliburton	-5,287	8%
346	Xcel Energy	-5,288	4%
347	Circuit City Stores	-5,429	2%
348	Loews	-5,467	6%
349	Parametric Tech.	-5,577	-5%
350	Sun Microsystems	-5,584	14%
351	Cooper Tire Rub.	-5,597	-2%
352	Williams Cos.	-5,839	7%
353	BMC Software	-5,857	7%
354	Dana	-5,921	1%
355	Burlington Res.	-5,925	4%
356	Tenet Hlthcr.	-5,927	7%
357	Donnelley R R	-6,005	2%
358	Allegheny Techs.	-6,043	-5%
359	Raytheon 'B'	-6,243	4%
360	Interpublic Gp.	-6,364	4%
361	Eastman Kodak	-6,531	1%
362	Centerpoint En.	-6,583	0%
363	Delta Air Lines	-6,669	-6%
364	Lna. Pacific	-6,684	-3%
365	Office Depot	-6,835	5%
366	Clear Chl. Comms.	-6,842	36%
367	Ade Telecom.	-6,939	7%
368	Norfolk Southern	-7,213	4%
369	Sara Lee	-7,624	6%
370	Edison Intl.	-7,857	4%
371	Boeing	-7,925	9%
372	CVS	-8,057	6%
373	HCA	-8,438	11%
374	CSX	-8,512	3%
375	Archer-Danls-Midl.	-8,545	4%
376	Unisys	-8,665	4%
377	Duke Energy	-9,073	6%
378	Gt. Lakes Chm.	-9,098	-6%
379	Aes	-9,354	7%
380	Honeywell Intl.	-9,405	9%
381	Dynegy 'A'	-9,492	-6%
382	UnumProvident	-9,501	-3%
383	Limited Brands	-10,562	5%
384	Albertsons	-11,250	1%
385	Xerox	-11,350	2%
386	TXU	-11,416	1%
387	Goodyear Tire	-11,518	-10%
388	Autonation	-11,587	20%
389	Intl. Paper	-11,890	5%
390	Winn-Dixie Strs.	-12,221	-9%

rank	Company	1993-2003	
		CSV	Return
391	Dillards 'A'	-12,698	-9%
392	Solectron	-12,888	9%
393	Penney JC	-13,796	0%
394	Kellogg	-15,192	4%
395	PG&E	-15,441	2%
396	Viacom 'B'	-16,195	7%
397	Cendant	-18,667	9%
398	El Paso	-20,495	-3%
399	Waste Man.	-20,706	7%
400	Apple Computers	-20,963	-3%
401	Coming	-22,387	1%
402	Motorola	-23,056	5%
403	Bank One	-25,000	7%
404	Walt Disney	-26,928	5%
405	Novell	-28,274	-9%
406	Toys R Us Holdings Co.	-28,386	-10%
407	Electronic Data Systems	-28,423	-1%
408	Tyco Intl.	-35,216	19%
409	Verizon Comms.	-50,087	7%
410	Time Warner	-66,238	49%
411	SBC Communications	-79,534	7%
412	AT&T	-113,698	-2%

## Appendix 3

## SHAREHOLDER VALUE CREATORS IN THE S&amp;P 500: YEAR 2003

## Shareholder return in 2003 of the 500 companies in the S&amp;P 500

rank	Company	Return 2003	rank	Company	Return 2003	rank	Company	Return 2003
1	Avaya	425.83%	61	Cummins	80.21%	121	Tyco Intl.	55.58%
2	Williams Cos.	265.99%	62	Provident Finl.	79.36%	122	United Technologies	55.40%
3	Dynegy 'A'	262.76%	63	Ford Motor	78.64%	123	Starwood Htls. & Resorts Wwd.Paired Certs.'B'	55.05%
4	PMC-Sierra	261.53%	64	Supervalu	78.32%	124	Visteon	55.01%
5	Novell	215.25%	65	Dollar General	77.10%	125	St. Jude Med.	54.46%
6	Corning	215.07%	66	T Rowe Price Gp.	77.05%	126	Apollo Gp. 'A'	54.11%
7	AES	212.60%	67	Rockwell Automation	76.57%	127	Frank. Res.	53.89%
8	Sanmina-Sci	180.61%	68	Comverse Tech.	75.55%	128	LSI Logic	53.71%
9	Yahoo	175.42%	69	Tektronix	74.00%	129	Synovus Finl.	53.31%
10	U.S. Steel	170.48%	70	Autodesk	73.03%	130	Monsanto	53.13%
11	National Semicon.	162.56%	71	Boston Scientific	72.93%	131	Occidental Ptl.	53.05%
12	Freepor-Mcmor.Cpr.&.Gd. 'B'	154.03%	72	Applied Mats.	72.22%	132	General Motors	52.85%
13	Nextel Comms.A	142.98%	73	Citrix Sys.	71.75%	133	Waters	52.26%
14	Phelps Dodge	140.39%	74	Xerox	71.50%	134	Molex	51.99%
15	Veritas Software	137.00%	75	Alcoa	70.93%	135	Reynolds R J Tob.	51.73%
16	Advd. Micro Devc.	130.65%	76	Symantec	70.33%	136	Chiron Corp	51.54%
17	Scientific Atlanta	130.64%	77	KB Home	70.16%	137	Maxim Integrated Prds.	50.84%
18	Humana	128.50%	78	Zimmer Hdg.	69.49%	138	Apache	50.40%
19	Broadcom 'A'	126.00%	79	Allegheny En.	68.78%	139	Gap	50.31%
20	Lucent Technologies	125.11%	80	Progressive Ohio	68.68%	140	Unisys	50.00%
21	Allegheny Techs.	122.61%	81	Goodrich	68.53%	141	Novellus Systems	49.75%
22	Lna. Pacific	121.83%	82	Newmont Mining	68.26%	142	Qlogic	49.43%
23	Centex	117.49%	83	Genzyme	66.70%	143	Staples	49.18%
24	Best Buy Co.	117.45%	84	Solectron	66.48%	144	Apple Computers	49.18%
25	Cendant	112.50%	85	KLA Tencor	65.51%	145	Qualcomm	49.13%
26	Perkinelmer	112.10%	86	Federated Dept.Strs.	65.39%	146	Home Depot	49.04%
27	EMC	110.43%	87	Radioshack	65.13%	147	Lowe's Companies	48.04%
28	Monster Worldwide	107.18%	88	Linear Tech.	64.66%	148	Morgan Stanley	47.9%
29	Capital One Finl.	106.74%	89	Motorola	64.48%	149	Calpine	47.56%
30	Intel	106.62%	90	Aetna	64.40%	150	JDS Uniphase	47.36%
31	Symbol Techs.	105.84%	91	Mercury Interactive	64.04%	151	Johnson Controls	47.30%
32	Network Appliance	104.39%	92	Cooper Inds.	63.99%	152	Moody's	47.14%
33	Computer Assocs.Intl.	103.19%	93	Pall	63.75%	153	Gateway	46.63%
34	Nvidia	101.54%	94	NCR	63.47%	154	Goldman Sachs Gp.	46.26%
35	PG&E	99.78%	95	Amer. Power Conv.	63.03%	155	Autonation	46.23%
36	Countrywide Finl.	97.41%	96	Brunswick	62.98%	156	Wendy's Intl.	46.14%
37	Navistar Intl.	97.12%	97	Agilent Techs.	62.86%	157	Bausch & Lomb	46.11%
38	Texas Insts.	96.58%	98	Starbucks	62.70%	158	Lehman Bros. Hdg.	46.02%
39	Guidant	96.11%	99	Watson Pharms.	62.70%	159	CVS	45.90%
40	Pulte Homes	96.07%	100	Univision Comms. 'A'	62.01%	160	Brown-Forman 'B'	45.78%
41	Teradyne	95.61%	101	Applied Micro Circuits	61.82%	161	Dow Chemicals	45.72%
42	Sears Roebuck & Co.	95.28%	102	Xcel Energy	61.69%	162	U.S. Bancorp	45.35%
43	Georgia Pacific	94.75%	103	Carnival	61.64%	163	Constellation En.	45.21%
44	Electronic Arts	91.60%	104	Marathon Oil	61.43%	164	Sealed Air	45.15%
45	Analog Devices	91.40%	105	JP Morgan Chase & Co.	60.29%	165	Ace	44.93%
46	Power-One	91.02%	106	Ingersoll-Rand	60.03%	166	Robert Half Intl.	44.88%
47	E-Bay	90.53%	107	Ashland	59.78%	167	Donnelley R R	44.59%
48	Tiffany & Co.	90.08%	108	Zions Bancorp.	58.95%	168	Simon Pr. Gp.	44.49%
49	Intl.Game Tech.	89.83%	109	Sunoco	58.40%	169	Deere & Co.	44.43%
50	Paccar	89.75%	110	Jabil Circuit	57.92%	170	Walt Disney	44.38%
51	FleetBoston Finl.	88.13%	111	Adobe Sys.	57.81%	171	Golden West Finl.	44.31%
52	Siebel Sys.	88.13%	112	Dana	57.08%	172	Fluor	44.26%
53	Xilinx	87.52%	113	Fortune Brands	57.04%	173	Pub. Ser. Enter. Gp.	43.99%
54	Manor Care	87.31%	114	Crane	57.01%	174	Temple Inland	43.86%
55	Caterpillar	86.11%	115	McDonalds	56.76%	175	Sun Microsystems	43.74%
56	Hasbro	85.60%	116	Merrill Lynch & Co.	56.76%	176	Cigna	43.65%
57	Edison Intl.	85.06%	117	Parametric Tech.	56.34%	177	Honeywell Intl.	43.28%
58	Cisco Systems	84.96%	118	IMS Health	56.18%	178	Cooper Tire Rub.	42.93%
59	Nordstrom	84.21%	119	Nike 'B'	55.65%	179	Marshall & Ilsley	42.92%
60	Altera	83.70%	120	Ryder System	55.62%	180	Kinder Morgan Kans	42.85%

## Appendix 3 (continued)

rank	Company	Return 2003
181	Altria Gp.	42.74%
182	Whirlpool	42.37%
183	ADC Telecom.	42.11%
184	Bank Of New York	42.09%
185	Halliburton	42.07%
186	Bard C R	42.01%
187	Yum! Brands	41.97%
188	AT&T Wireless Svs.	41.81%
189	Marriott Intl. 'A'	41.63%
190	Citigroup	41.58%
191	Amer. Standard Co.	41.58%
192	Eaton	41.34%
193	3M	40.63%
194	H & R Block	40.13%
195	Danaher	39.84%
196	Conoco Phillips	39.79%
197	Unitedhealth Gp.	39.40%
198	Comcast 'A'	39.12%
199	Allied Waste Inds.	38.78%
200	Dover	38.75%
201	Hercules	38.61%
202	Amer. Greetings 'A'	38.43%
203	Micron Tech.	38.30%
204	Express Scripts 'A'	38.28%
205	MGIC Invt	38.20%
206	Nucor	37.93%
207	Circuit City Stores	37.71%
208	American Express	37.66%
209	Electronic Data Systems	37.39%
210	Time Warner	37.33%
211	MBIA	37.23%
212	Textron	37.19%
213	Jefferson Pilot	37.02%
214	Omnicom Gp.	36.77%
215	Plum Creek Timber	36.63%
216	Wellpoint Hlth. Net.	36.30%
217	Pnc Finl.Svs.Gp.	36.20%
218	Engelhard	36.16%
219	Bear Stearns	36.00%
220	John Hancock Finl.Svs.	35.74%
221	Becton Dickinson & Co.	35.66%
222	Southtrust	35.65%
223	Hilton Hotels	35.56%
224	Thomas & Betts	35.50%
225	Chevrontexaco	35.41%
226	State Street	35.36%
227	Comerica	35.35%
228	Paychex	35.30%
229	Rohm & Haas	34.89%
230	Health Man.As.A	34.63%
231	Prologis Tst.Shbi	34.55%
232	Hewlett-Packard	34.48%
233	Nthn.Trust	34.45%
234	Reebok Intl.	34.35%
235	Praxair	34.18%
236	Weyerhaeuser	34.01%
237	Allergan	33.99%
238	Chubb	33.77%
239	Masco	33.69%
240	Prudential Finl.	33.33%

rank	Company	Return 2003
241	Boise Cascade	33.30%
242	Amsouth Banc.	33.11%
243	MBNA	33.07%
244	Hartford Finl.Svs.Gp.	33.01%
245	Limited Brands	32.90%
246	Lincoln Nat.	32.87%
247	Costco Wholesale	32.50%
248	Schlumberger	32.12%
249	McCormick & Co. Nv.	32.11%
250	Ppg Industries	32.06%
251	Wachovia	31.83%
252	Sempra En.	31.77%
253	May Dept. Stores	31.74%
254	Emerson Electric	31.31%
255	Burlington Res.	31.29%
256	Rockwell Collins	31.19%
257	Parker-Hannifin	31.18%
258	PPL	31.17%
259	Illinois Tool Wks.	31.15%
260	Delphi Autv. Sys.	31.05%
261	General Electric	30.75%
262	Boeing	30.43%
263	Aon	30.33%
264	Vulcan Materials	30.20%
265	Exelon	30.17%
266	TXU	30.16%
267	Lexmark Intl.Gp.A	29.99%
268	Wells Fargo & Co.	29.46%
269	Nat. City	29.42%
270	Entergy	29.39%
271	Suntrust Banks	29.35%
272	Waste Man.	29.18%
273	Bristol Myers Squibb	29.02%
274	Target	28.97%
275	Quest Diagnostics	28.70%
276	CSX	28.61%
277	Pitney-Bowes	28.55%
278	Computer Scis.	28.39%
279	Sprint PCS	28.36%
280	Equity Resd.Tst.Props. Shbi	27.93%
281	Kimberly-Clark	27.84%
282	Amgen	27.82%
283	Bank One	27.71%
284	Ciena	27.70%
285	Harras Entm.	27.41%
286	Centerpoint En.	27.15%
287	Dell	27.08%
288	Avon Products	27.07%
289	Biomet	27.03%
290	Stryker	26.86%
291	Sysco	26.81%
292	Burl.Nthn.Santa Fe C	26.75%
293	First Ten.Nat.	26.65%
294	Millipore	26.61%
295	Intl. Paper	26.61%
296	Toys R Us Holdings Co.	26.40%
297	Clear Chl. Comms.	26.19%
298	Alberto Culver 'B'	26.14%
299	Air Prds. & Chems.	26.07%
300	Torchmark	25.90%

rank	Company	Return 2003
301	Forest Labs.	25.84%
302	Compuware	25.77%
303	Gannett	25.75%
304	Janus Capital Gp.	25.73%
305	Sherwin-Williams	25.63%
306	Mellon Finl.	25.59%
307	Bed Bath & Beyond	25.54%
308	Metlife	25.49%
309	Walgreen	25.28%
310	Thermo Electron	25.25%
311	Devon Energy	25.22%
312	Archer-Danls.-Midl.	25.11%
313	Meadwestvaco	25.01%
314	Fedex	24.91%
315	Peoplesoft	24.54%
316	Knight-Ridder	24.48%
317	Huntington Bcsh.	24.26%
318	Ambac Financial	24.23%
319	Charter One Finl.	24.17%
320	Unocal	23.80%
321	North Fork Bancorp.	23.74%
322	ITT Industries	23.59%
323	Worthington Inds.	23.56%
324	Gillette	23.55%
325	Pinnacle West Cap.	23.52%
326	Equity Offe.Props.Tst.	23.43%
327	V F	23.18%
328	Oracle	22.50%
329	Tupperware	22.20%
330	Keycorp	22.15%
331	Cinergy	21.46%
332	Dominion Res.	21.39%
333	Aflac	21.22%
334	Exxon Mobil	20.64%
335	Autozone	20.61%
336	Intl. Bus. Mach.	20.50%
337	El Paso	20.49%
338	Liz Claiborne	20.44%
339	Sabre Hdg.	20.43%
340	Clorox	20.41%
341	Washington Mutual	20.34%
342	St. Paul	20.21%
343	Bank Of America	20.14%
344	Norfolk Southern	20.10%
345	McKesson	19.93%
346	United Parcel Ser. 'B'	19.88%
347	Kroger	19.81%
348	Meredith	19.76%
349	Fannie Mae	19.58%
350	Allstate	19.39%
351	Abbott Labs.	19.28%
352	Anthem	19.25%
353	Amer. Elec. Pwr.	19.23%
354	Appera Appd. Bios.	19.08%
355	Snap-On	18.79%
356	Sigma Aldrich	18.55%
357	Procter & Gamble	18.48%
358	Coca Cola	18.11%
359	Dow Jones & Co	17.99%
360	Union Pacific	17.98%

## Appendix 3 (continued)

rank	Company	Return 2003
361	Travelers Pr.Clty. 'B'	17.85%
362	McGraw-Hill Co.	17.79%
363	Pfizer	17.76%
364	Citizens Comms.	17.72%
365	Nabors Inds.	17.66%
366	Sungard Data Systems	17.61%
367	Sprint	17.52%
368	Ball	17.45%
369	Ameren	17.41%
370	Campbell Soup	17.13%
371	Penney JC	17.03%
372	Federated Invs. 'B'	16.97%
373	Union Planters	16.93%
374	Black & Decker	16.56%
375	Hershey Foods	16.53%
376	Fiserv	16.46%
377	First Data	16.27%
378	Southwest Airlines	16.25%
379	EOG Res.	16.18%
380	Nisource	16.14%
381	Wyeth	16.09%
382	Family \$ Strs.	15.98%
383	Gen. Dynamics	15.97%
384	Gt. Lakes Chm.	15.72%
385	Tellabs	15.68%
386	Regions Finl.	15.62%
387	Goodyear Tire	15.42%
388	Convergys	15.26%
389	American Intl. Gp.	15.03%
390	Safeco	14.63%
391	Tribune	14.57%
392	Kellogg	14.55%
393	Peoples Energy	14.54%
394	Heinz HJ	14.47%
395	Cincinnati Fin.	14.10%
396	TJX Cos.	13.76%
397	Stanley Works	13.55%
398	UST	13.31%
399	Eastman Chemicals	13.27%
400	Office Depot	13.22%
401	Bellsouth	13.16%
402	Lilly Eli	13.14%
403	FPL Group	13.06%
404	Loews	12.77%
405	Andrew	12.74%
406	Intuit	12.65%
407	Pepsico	12.04%
408	Du Pont E I De Nemours	12.01%
409	Duke Energy	11.93%
410	Genuine Parts	11.89%
411	Ecolab	11.86%
412	FirstEnergy	11.81%
413	Centurytel	11.80%
414	Southern	11.78%
415	Principal Finl. Gp.	11.40%
416	Baxter Intl.	11.15%
417	BJ Svs.	11.11%
418	Interpublic Gp.	10.80%
419	Anheuser-Busch Cos.	10.67%
420	Biogen Idec	10.64%

rank	Company	Return 2003
421	SLM	10.51%
422	Cintas	10.23%
423	Conagra	10.21%
424	Progress En.	9.95%
425	Keyspan	9.92%
426	Charles Schwab	9.66%
427	Pactiv	9.31%
428	Kerr -McGee	9.31%
429	Viacom 'B'	9.19%
430	BMC Software	9.00%
431	BB&T	8.14%
432	Anadarko Petroleum	7.54%
433	Big Lots	7.39%
434	Medtronic	7.23%
435	Marsh & McLennan	6.86%
436	Microsoft	6.81%
437	Cons. Edison	6.27%
438	Equifax	6.26%
439	New York Times 'A'	5.82%
440	Nicor	5.77%
441	Wal-Mart Stores	5.73%
442	Albertsons	5.59%
443	Dillards 'A'	4.97%
444	Wrigley William Jr.	4.01%
445	HCA	3.75%
446	AmerisourceBergen	3.54%
447	Cardinal Health	3.52%
448	Transocean	3.50%
449	Harley-Davidson	3.33%
450	Darden Restaurants	3.30%
451	Bemis	3.29%
452	Fifth Third Bancorp	2.97%
453	XI Cap. 'A'	2.84%
454	Mattel	2.67%
455	Automatic Data Proc.	2.36%
456	Rowan Cos.	2.07%
457	Noble	1.79%
458	SBC Communications	1.74%
459	Deluxe	1.70%
460	Coca Cola Ents.	1.51%
461	Baker Hughes	1.50%
462	Intl. Flav. & Frag.	1.43%
463	Freddie Mac	0.74%
464	Medco Health Sltn.	0.66%
465	Maytag	0.61%
466	Teco Energy	0.46%
467	Raytheon 'B'	0.33%
468	Northrop Grumman	0.31%
469	Apartment Inv.Man. 'A'	0.19%
470	Sara Lee	-0.07%
471	Jones Apparel Group	-0.10%
472	Amerada Hess	-0.95%
473	Leggett&Platt	-1.07%
474	Gen. Mills	-1.20%
475	Delta Air Lines	-1.91%
476	Johnson & Johnson	-2.12%
477	Tenet Hlthcr.	-2.13%
478	Colgate-Palm.	-2.98%
479	Verizon Comms.	-5.59%
480	Concord EFS	-5.72%

rank	Company	Return 2003
481	Pepsi Bottling Gp.	-5.73%
482	Alltel	-5.78%
483	Avery Dennison	-5.86%
484	Safeway	-6.21%
485	Medimmune	-6.59%
486	Grainger W W	-6.60%
487	Adolph Coors 'B'	-6.98%
488	UnumProvident	-7.79%
489	CMS Energy	-9.75%
490	Lockheed Martin	-9.91%
491	DTE Energy	-10.42%
492	King Pharms.	-11.24%
493	Merck & Co.	-11.24%
494	Qwest Comms. Intl.	-13.57%
495	AT&T	-18.84%
496	Schering-Plough	-19.10%
497	Kohls	-19.68%
498	Newell Rubbermaid	-22.39%
499	Eastman Kodak	-23.78%
500	Winn-Dixie Strs.	-33.69%

**References**

Fernández, Pablo (2002), *Valuation and Shareholder Value Creation*, Academic Press, San Diego, CA.