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SHAREHOLDER VALUE CREATORS AND
SHAREHOLDER VALUE DESTROYERS IN USA.
YEAR 2002

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SHAREHOLDER VALUE CREATORS AND SHAREHOLDER VALUE DESTROYERS IN USA. YEAR 2002

Abstract

2002 was a bad year: the shareholder value destruction of the companies in the S&P 500 was \$3.3 trillion. In 2002 only 16% of the companies created value (80 companies created value and 420 companies destroyed value). The percentage of value creators was 35%, 54%, 47% and 53% for 2001, 2000, 1999 and 1998, respectively. The market value of the 500 companies was \$8.1 trillion in 2002 and \$10.4 trillion in 2001.

The top shareholder value creators in 2002 were Boston Scientific (\$6.5 billion), Bank of America (\$6.4 billion), Wachovia (\$4.7 billion), and Procter (\$3.3 billion). The top shareholder value destroyers in 2002 were General Electric (-\$185 billion), Intel (-\$125 billion), Microsoft (-\$119 billion) and AOL Time Warner (-\$101 billion). 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 during the five-year period 1998-2002. Wal-Mart Stores was the top shareholder value creator and Coca Cola the top shareholder value destroyer during the five-year period.

We also provide the shareholder return of the 500 companies. Only 148 companies (out of the 500) had positive return in 2002, the highest being Providian Financial (82.8%). Dynegy had the lowest return (-95.3%).

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 AND SHAREHOLDER VALUE DESTROYERS IN USA. YEAR 2002

Introduction

In this paper, we quantify shareholder value creation for the 500 companies included in the S&P 500 in December 2002. We provide the created shareholder value for each and every company for years 1998, 1999, 2000, 2001 and 2002.

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 2002 and in the 5-year period 1998-2002. Section 3 has the ranking of shareholder return for the 500 companies in 2002. Section 4 shows the relation between Shareholder Return and size.

Appendix 1 contains the Shareholder value creation in 1998, 1999, 2000, 2001 and 2002 for the companies in the S&P 500 in December 2002. In Appendix 2 we claim that EVA does not properly measure Shareholder Value Creation.

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, each share's price multiplied by the number of shares. The **increase of equity market value** in one 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:

$$\begin{aligned} \text{Shareholder value added} = & \\ & \text{Increase of equity market value} \\ & + \text{Dividends paid during the year} \\ & - \text{Outlays for capital increases} \\ + \text{Other payments to shareholders (discounts on par value, share buy-backs....)} \\ & - \text{Conversion of convertible debentures} \end{aligned}$$

The **shareholder return** is the shareholder value added in one year, divided by the equity market value at the beginning of the year.

$$\text{Shareholder return} = \text{Shareholder value added} / \text{Equity market value}$$

The **required return to equity** is the sum of the interest rate of long-term Treasury bonds plus a quantity that 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:

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

As we already saw that 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:

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

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 1991-2002.

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

<i>Increase of equity market value</i>	$\text{Equity market value}_t - \text{Equity market value}_{t-1}$
\downarrow	
<i>Shareholder value added</i>	$\text{Increase of equity market value} - \text{payments from shareholders} + \text{dividends} + \text{repurchases} - \text{conversions}$.
\downarrow	
<i>Created shareholder value</i>	$\text{Shareholder value added} - (\text{Equity market value} \times \text{Ke})$

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

	S&P 500		Shareholder return	Shareholder value added	Shareholder value creation
	Index level	Market value			
1991	417.1	2,824	30.5%	669	371
1992	435.7	3,015	7.6%	215	-129
1993	466.5	3,306	10.1%	304	-63
1994	459.3	3,346	1.3%	44	-330
1995	615.9	4,588	37.6%	1,257	811
1996	740.7	5,626	23.0%	1,054	545
1997	970.4	7,555	33.4%	1,877	1,263
1998	1,229.2	9,942	28.6%	2,159	1,416
1999	1,469.3	12,31	21.0%	2,092	1,297
2000	1,320.3	11,735	-9.1%	-1,121	-2,485
2001	1,148.1	10,467	-11.9%	-1,395	-2,428
2002	879.8	8,107	-22.1%	-2,313	-3,259

2. Shareholder value creators

Table 3 shows the top ten value creators and value destroyers in 2002, 2001, 2000 and 1999.

Table 3. Top ten value creators and value destroyers in 2002, 2001, 2000, and 1999 (million dollars)

Top shareholder value creators. Shareholder value created in \$ million						
	1999		2000		2001	
1	Microsoft	200,856	Altria Gp.	50,854	Microsoft	95,502
2	Cisco Systems	175,611	Merck	49,504	Intl.Bus.Mach.	50,636
3	General Electric	152,348	Amer.Intl.Gp.	44,642	Bank Of America	26,043
4	Oracle	115,002	Pfizer	39,953	AT & T	20,412
5	Wal Mart Stores	110,182	Wyeth	27,585	Dell Computer	19,294
6	Qualcomm	92,358	Medtronic	24,326	Lowe's Cos.	16,666
7	Sun Microsystems	81,422	Citigroup	23,921	Johnson & Johnson	8,867
8	Citigroup	69,896	Eli Lilly	22,363	Best Buy	8,472
9	Emc Mass.	62,032	Sanmina-Sci	20,876	First Data	8,453
10	Intel	61,007	Wells Fargo & Co	20,095	Ebay	8,070

Top shareholder value destroyers. Shareholder value created in \$ million						
	1999		2000		2001	
1	Altria Gp	-83,556	Microsoft	-459,830	Cisco Systems	-174,423
2	Pfizer	-48,668	Lucent Technolog	-224,781	Emc Mass.	-133,419
3	Coca Cola	-32,036	Cisco Systems	-157,531	General Electric	-113,633
4	Eli Lilly	-31,872	AT & T New	-123,848	Oracle	-106,951
5	Wachovia	-30,795	AOL Time Warner	-121,591	Merck	-96,044
6	Wyeth	-27,728	Yahoo	-118,826	Amer.Intl.Gp.	-63,638
7	Xerox	-27,712	Wal Mart Stores	-109,022	Pfizer	-63,617
8	Merck	-26,666	Dell Computer	-106,091	Sun Microsystems	-62,021
9	Schering-Plough	-26,456	Intel	-103,772	Qwest Comms.Intl.	-52,246
10	Bank One	-25,219	Qualcomm	-90,813	Bristol Myers Squibb	-51,261

The top shareholder value creators in 2002 were Boston Scientific (\$6.5 billion), Bank of America (\$6.4 bn), Wachovia (\$4.7 bn), and Procter (\$3.3 bn). The top shareholder value destroyers in 2002 were General Electric (-\$185 billion), Intel (-\$125 bn), Microsoft (-\$119 bn) and AOL Time Warner (-\$101 bn). In 2001 Microsoft was the top shareholder value creator and Cisco was the top shareholder value destroyer. In 2000 Altria (ex-Phillip Morris) was the top shareholder value creator and Microsoft was the top shareholder value destroyer, but in 1999 the opposite happened.

Appendix 1 has the ranking of created shareholder value in 2002, 2001, 2000, 1999 and 1998. In 2002 only 16% of the companies created value (80 companies created value and 420 companies destroyed value). The percentage of value creators was 35%, 54%, 47% and 53% in 2001, 2000, 1999 and 1998, respectively.

Table 4 shows the created shareholder value of the companies in the S&P 500 during the five-year period 1998-2002 (1). Wall Mart was the top shareholder value creator (\$86.5 billion) and Coca Cola was the top shareholder value destroyer (-\$125.8 billion).

(1) Only 465 companies (out of the 500) traded as of December 21, 1997.

3. Shareholder return

Table 5 shows the shareholder return in 2002 of the 500 companies. It can be seen that Providian was the most profitable company, and that Dynegy (-95.3%) was the least profitable company in 2002. 148 companies had positive return and 352 companies had negative return.

Table 5. Shareholder return in 2003 of the 500 companies in the S&P 500

rank	Company	2002 Return	rank	Company	2002 Return	rank	Company	2002 Return
1	Providian Finl.	82.8%	61	Allstate Corp.	12.3%	121	Sara Lee Corp.	4.2%
2	Boston Scientific	76.3%	62	Gap	12.1%	122	Moodys	4.0%
3	Newmont Mining	52.6%	63	Cons.Edison	11.8%	123	Ppl	3.9%
4	Halliburton	47.2%	64	Mattel	11.6%	124	Ryder System	3.6%
5	Apollo Gp.'A'	46.6%	65	Worthington Inds.	11.6%	125	Southtrust	3.4%
6	Ball	46.0%	66	Procter & Gamble	11.5%	126	Noble Corp.	3.3%
7	Zimmer Hdg.	36.0%	67	Intl.Game Tech.	11.2%	127	Du Pont E I De Ncr	3.0%
8	Countrywide Finl.	27.3%	68	Fpl Group	11.0%	128	Bemis	3.0%
9	Big Lots	27.2%	69	Occidental Ptl.	11.0%	129	Nabors Inds.	2.7%
10	Anthem	27.1%	70	Reebok Intl.	10.9%	130	Lexmark Intl.Gp.A	2.5%
11	Principal Finl.Gp.	26.6%	71	Norfolk Sthn.	10.4%	131	Eog Res.	2.5%
12	Eastman Kodak	25.5%	72	Avery Dennison C	10.4%	132	Bear Stearns	2.3%
13	Freeport-Mcmoran	25.3%	73	Wells Fargo & Co	10.3%	133	St.Jude Med.	2.3%
14	Aetna New	24.8%	74	Intuit	9.7%	134	Parker-Hannifin	2.1%
15	Slm	24.7%	75	Pepsi Bottling Gp.	9.5%	135	1st.Ten.Nat.	2.0%
16	Lockheed Martin C	24.6%	76	Conagra	9.3%	136	Autonation	1.9%
17	Ecolab	24.5%	77	Danaher	9.1%	137	Bed Bath & Beyond	1.9%
18	Sigma Aldrich	24.5%	78	Paccar	9.0%	138	Hershey Foods	1.4%
19	Simon Pr.Gp.	24.0%	79	Grainger W W	8.9%	139	Ebay	1.4%
20	Aflac	23.6%	80	Washington Mutua	8.7%	140	Progress En.	1.1%
21	Pactiv	23.2%	81	Winn-Dixie Strs.	8.7%	141	Gen.Dynamics	1.0%
22	Tribune	22.7%	82	Anheuser-Busch	8.6%	142	Ust Inc.	1.0%
23	Golden West Finl.	22.6%	83	Wrigley William	8.5%	143	Johnson Controls	0.9%
24	Wellpoint Hlth.Ne	21.8%	84	Constellation En.	8.4%	144	Mcgraw-Hill Co.	0.7%
25	Itt Industries	21.3%	85	Cooper Inds.	8.4%	145	Cincinnati Fin.	0.6%
26	Rockwell Collins	21.1%	86	North Fork Bancor	8.3%	146	Sempra En.	0.6%
27	Intl.Flav.& Frag.	20.3%	87	Gannett	8.1%	147	Amer.Express	0.2%
28	Entergy	20.2%	88	Keycorp	8.1%	148	Ppg Industries	0.2%
29	Liz Claiborne	20.1%	89	Hca	7.9%	149	Progressive Corp.	-0.1%
30	Rockwell Automot	19.9%	90	Peoples Energy	7.7%	150	Dillards 'A'	-0.1%
31	Fortune Brands	19.9%	91	Kb Home	7.6%	151	Gt.Lakes Chm.	-0.3%
32	Forest Labs.	19.9%	92	Pulte Homes	7.5%	152	Leggett&Platt	-0.4%
33	Wachovia	19.5%	93	Eaton	7.5%	153	Bj Svs.	-0.4%
34	Devon En.New	19.3%	94	Keypsan	7.1%	154	Knight-Ridder	-0.9%
35	Rowan Cos.	18.3%	95	Deere & Co.	7.1%	155	Ctzn.Comms.	-1.0%
36	Unitedhealth Gp.	18.0%	96	Harrahs Entm.	7.0%	156	Merck	-1.3%
37	Avon Products	17.7%	97	Starbucks	7.0%	157	Firstenergy	-1.5%
38	Southern	17.6%	98	Ny.Times 'A'	6.9%	158	Tjx Cos.New	-1.5%
39	Kellogg	17.2%	99	Jones Apparel Gro	6.8%	159	Yum! Brands	-1.5%
40	United Parcel Ser.	17.2%	100	Textron	6.8%	160	Autozone	-1.6%
41	Hilton Hotels	17.1%	101	Brown-Forman 'B'	6.5%	161	Dell Computer	-1.6%
42	Meredith	16.3%	102	Clorox	6.5%	162	Cooper Tire Rub.	-1.7%
43	Adolph Coors 'B'	16.2%	103	Cinergy Corp.	6.5%	163	Eastman Chemical	-1.8%
44	Dte Energy	16.0%	104	Union Pacific	6.5%	164	Staples	-2.1%
45	Coca Cola Ents.	15.6%	105	3m Co.	6.4%	165	Ambac Financial	-2.2%
46	Sysco	15.5%	106	Praxair	6.0%	166	Union Planters	-2.3%
47	Burlington Res.	15.3%	107	Amsouth Banc.	6.0%	167	Phelps Dodge	-2.3%
48	Regions Finl.	15.2%	108	Bb & T	5.7%	168	Northrop Grumman	-2.4%
49	Stryker	15.2%	109	Nextel Comms.A	5.4%	169	Frank.Res.	-2.6%
50	Apache	15.1%	110	Pharmacia	5.4%	170	Health Man.As.A	-2.6%
51	Black & Decker	14.9%	111	Us Bancorp Del.Ne	5.2%	171	Nat.City	-2.6%
52	Travelers Pr.Cty.	14.8%	112	Family \$.Strs.	5.0%	172	Bausch & Lomb	-2.7%
53	Amer.Greeting 'A'	14.7%	113	Sherwin-Williams	4.9%	173	United Technolog	-2.7%
54	Bank Of America	14.5%	114	Fedex	4.8%	174	Illinois Tool Wks.	-2.9%
55	Charter One Finl.	14.2%	115	Amer.Power Conv	4.8%	175	Raytheon New	-3.0%
56	Exelon	14.1%	116	Ingersoll-Rand	4.6%	176	Fifth Third Bancor	-3.0%
57	Safeco	14.0%	117	Deluxe	4.6%	177	Prudential Finl.	-3.1%
58	Alberto Culver 'B'	13.5%	118	Bmc Software	4.5%	178	Limited Brands	-3.7%
59	Newell Rubbermaid	12.9%	119	Ameren	4.4%	179	Equifax	-3.9%
60	Hntgtn.Bcsh.	12.5%	120	Amer.Standard Co.	4.3%	180	Rohm & Haas	-4.1%

Table 5. (cont.). Shareholder return of selected companies (average annual return)

rank	Company	2002 Return	rank	Company	2002 Return	rank	Company	2002 Return
181	Cintas	-4.2%	241	Genuine Parts	-13.1%	301	Nucor	-20.8%
182	Bank One	-4.4%	242	Unocal	-13.2%	302	General Motors	-20.8%
183	Lna.Pacific	-4.5%	243	Boeing	-13.4%	303	Crane	-20.9%
184	Nordstrom	-4.6%	244	Xl Cap.'A'	-13.5%	304	Synovus Finl.	-21.0%
185	Dominion Res.	-4.6%	245	Snap-On	-13.7%	305	Unisys	-21.1%
186	VF	-5.4%	246	Hewlett-Packard	-13.9%	306	Jabil Circuit	-21.1%
187	Coca Cola	-5.5%	247	Metlife	-14.0%	307	At & T New	-21.3%
188	Heinz Hj	-5.8%	248	Nicor	-14.2%	308	Manor Care	-21.5%
189	Torchmark Corp.	-6.2%	249	Chiron Corp	-14.2%	309	Edison Intl.	-21.5%
190	Maytag	-6.3%	250	Amgen	-14.4%	310	Oracle	-21.8%
191	Weyerhaeuser	-6.3%	251	Amerisourceberger	-14.4%	311	Comerica	-21.9%
192	Becton Dickinson	-6.3%	252	Harley-Davidson	-14.7%	312	Microsoft	-22.0%
193	Wendy's Intl.	-6.5%	253	Pinnacle West Cap	-14.7%	313	Pfizer	-22.2%
194	Brunswick	-6.5%	254	Cvs	-15.0%	314	Schlumberger (Nys	-22.2%
195	Suntrust Banks	-6.7%	255	Alltel	-15.0%	315	Pnc Finl.Svs.	-22.4%
196	Altria Gp.	-6.8%	256	Dana Corp.	-15.1%	316	Qlogic	-22.5%
197	Biomet	-6.9%	257	Verizon Comms.	-15.2%	317	Autodesk	-22.5%
198	Air Prds.& Chems	-7.2%	258	Anadarko Ptl.	-15.2%	318	Chubb	-22.7%
199	Gillette	-7.3%	259	Humana	-15.2%	319	Xerox	-22.8%
200	Burlington Nthn.S	-7.3%	260	Jefferson Pilot	-15.4%	320	ChevronTexaco	-23.1%
201	Gen.Mills	-7.6%	261	Thermo Electron	-15.7%	321	Supervalu	-23.5%
202	Viacom 'B'	-7.7%	262	Kerr-Mcgee	-16.2%	322	Kinder Morgan Ka	-23.5%
203	Yahoo	-7.8%	263	Electronic Arts	-17.0%	323	Tiffany & Co	-23.6%
204	Johnson & Johns	-7.9%	264	Mbia	-17.0%	324	Fluor New	-23.7%
205	Nisource	-7.9%	265	Meadwestvaco	-17.2%	325	Stanley Works	-23.8%
206	Colgate-Palm.	-8.0%	266	Conocophillips	-17.4%	326	Donnelley R R	-23.8%
207	Dow Chemicals	-8.2%	267	Lilly Eli	-17.6%	327	Zions Bancorp.	-23.9%
208	Cardinal Health	-8.3%	268	Ims Health	-17.6%	328	Citigroup	-23.9%
209	Emerson Electric	-8.3%	269	Fannie Mae	-17.6%	329	Boise Cascade	-24.3%
210	Freddie Mac	-8.4%	270	Starwood Htls.& R	-17.6%	330	Cummins	-24.4%
211	Sunoco	-8.5%	271	Mbna Corp.	-17.9%	331	State Street	-24.5%
212	Bard CR	-8.6%	272	Tupperware	-18.0%	332	Quintiles Transnat	-24.6%
213	Sealed Air	-8.6%	273	Engelhard	-18.0%	333	Sw.Airlines	-24.7%
214	Equity Resd.Tst. I	-8.6%	274	Csx	-18.2%	334	Sprint	-25.2%
215	Block H R	-8.7%	275	Marriott Intl.New '	-18.6%	335	Molex	-25.3%
216	Exxon Mobil	-8.9%	276	Sungard Data Syste	-18.6%	336	Ace	-25.4%
217	First Data	-9.5%	277	Loews	-18.8%	337	Goodrich Bf	-25.8%
218	Carnival	-9.8%	278	Paychex	-18.8%	338	Kroger	-26.0%
219	Centurytel	-9.8%	279	Campbell Soup	-19.0%	339	Merrill Lynch	-26.0%
220	Caterpillar	-9.8%	280	Kimberly-Clark	-19.0%	340	Goldman Sachs Gr	-26.1%
221	Watson Pharm.	-9.9%	281	Lowe's Cos.	-19.0%	341	Marathon Oil	-26.3%
222	Medtronic	-10.3%	282	Temple Inland	-19.1%	342	Hartford Finl.Svs.	-26.4%
223	Amerada Hess	-10.4%	283	Dollar Gen.	-19.1%	343	Target	-26.5%
224	Baker Hughes	-10.4%	284	Dow Jones	-19.2%	344	Abbott Labs.	-26.7%
225	Pitney-Bowes	-10.4%	285	Pub.Ser.Enter.Gp.	-19.3%	345	Us.Steel	-26.7%
226	Equity Offe.Props	-10.8%	286	Lehman Brothers H	-19.7%	346	Clear Chl.Comms.	-26.8%
227	Intl.Paper	-11.1%	287	Fiserv	-19.8%	347	Omnicom	-26.9%
228	Wal Mart Stores	-11.8%	288	T Rowe Price Gp.	-19.8%	348	Amer.Intl.Gp.	-26.9%
229	Centex	-11.8%	289	Allergan	-19.9%	349	Morgan Stanley	-27.2%
230	Marshall & Ilsley	-11.9%	290	Reynolds R J Tob.	-20.0%	350	Mckesson	-27.2%
231	Plum Creek Timbe	-12.0%	291	Vulcan Materials	-20.0%	351	Novell	-27.2%
232	Hercules	-12.0%	292	Adobe Sys.	-20.0%	352	Whirlpool	-27.2%
233	Marsh & McLenna	-12.0%	293	St.Paul	-20.0%	353	Honeywell Intl.	-27.3%
234	Masco	-12.1%	294	Dover	-20.0%	354	Albertsons	-27.4%
235	Archer-Danls.-Mic	-12.1%	295	Thomas & Betts	-20.1%	355	Cisco Systems	-27.7%
236	Pepsico	-12.1%	296	Nike 'B'	-20.1%	356	PG & E	-27.8%
237	Penney Jc	-12.3%	297	Walt Disney	-20.3%	357	Qualcomm	-27.9%
238	Mercury Interactiv	-12.7%	298	Office Depot	-20.4%	358	Waste Man.	-28.1%
239	Walgreen	-12.9%	299	Kohls	-20.6%	359	Hasbro	-28.2%
240	Darden Restaurant	-13.1%	300	Quest Diagnostics	-20.6%	360	Sbc Communicatio	-28.3%

Table 5. (cont.). Shareholder return of selected companies (average annual return)

rank	Company	2002 Return	rank	Company	2002 Return	rank	Company	2002 Return
361	Kla Tencor	-28.6%	421	Cendant	-46.6%	481	Jds Uniphase	-71.5%
362	Novellus Systems	-28.8%	422	Baxter Intl.	-46.7%	482	Healthsouth	-71.7%
363	Allied Waste Inds.	-28.9%	423	Xilinx	-47.2%	483	Electronic Data Sy	-72.6%
364	Pall	-29.1%	424	Symbol Techs.	-48.1%	484	Siebel Sys.	-73.6%
365	Tektronix	-29.4%	425	Duke Energy	-48.2%	485	Tmp Worldwide	-73.6%
366	Mellon Finl.	-29.5%	426	Sears Roebuck	-48.6%	486	Pmc-Sierra	-73.8%
367	Charles Schwab	-29.6%	427	Intel	-50.3%	487	Sun Microsystems	-74.7%
368	Cmp.Sciences	-29.7%	428	Scientific-Atl.	-50.3%	488	Lucent Technologi	-75.5%
369	Federated Dept.Str	-29.7%	429	Genzyme	-50.6%	489	Perkinelmer	-75.7%
370	Biogen Nv.	-30.2%	430	Household Intl.	-50.7%	490	Sanmina-Sci	-77.4%
371	FleetBoston Finl.	-30.2%	431	Nat.Semiconductor	-51.3%	491	Allegheny En.	-78.0%
372	Bellsouth	-30.4%	432	Best Buy	-51.4%	492	Avaya	-79.8%
373	Jp Morgan Chase	-30.7%	433	Tellabs	-51.4%	493	Calpine	-80.6%
374	Transocean	-31.3%	434	Interpublic Gp.	-51.5%	494	Aes	-81.5%
375	John Hancock Fin	-31.7%	435	Toys R Us Holding	-51.8%	495	Sprint Pcs	-82.1%
376	UnumProvident	-32.1%	436	Janus Capital Gp.	-51.8%	496	Nvidia	-82.8%
377	Automatic Data Pr	-32.7%	437	Concord Efs	-52.0%	497	El Paso	-83.5%
378	Lincoln Nat.	-32.8%	438	Bristol Myers Squib	-52.4%	498	Mirant	-88.3%
379	Amer.Elec.Pwr.	-32.8%	439	Visteon	-52.6%	499	Williams Cos.	-89.0%
380	Magic Invst	-33.0%	440	Home Depot	-52.6%	500	Dynegy 'A'	-95.3%
381	Linear Tech.	-33.7%	441	Andrew	-53.0%			
382	Comcast 'A' New	-34.5%	442	Network Appliance	-54.3%			
383	Apple Computers	-34.6%	443	Emc Mass.	-54.3%			
384	Alcoa	-34.6%	444	PeopleSoft	-54.5%			
385	Applied Mats.	-35.0%	445	Adc Telecom.	-54.6%			
386	Intl.Bus.Mach.	-35.5%	446	Cigna	-54.8%			
387	Ncr	-35.6%	447	Applera Appd.Bio	-55.0%			
388	May Dept.Stores	-35.9%	448	Comverse Tech.	-55.2%			
389	Millipore	-36.0%	449	Teradyne	-56.8%			
390	Ashland	-36.0%	450	Xcel Energy	-57.2%			
391	Schering-Plough	-36.4%	451	Sabre Hdg.	-57.3%			
392	Costco Whsl.	-36.8%	452	Cms Energy	-57.7%			
393	Teco Energy	-37.0%	453	Circuit City Stores	-57.9%			
394	Agilent Techs.	-37.0%	454	Tenet Hlthcr.	-58.1%			
395	Maxim Integ.Produ	-37.0%	455	Delta Air Lines	-58.4%			
396	Radioshack	-37.1%	456	Txu	-58.6%			
397	General Electric	-37.7%	457	Aol Time Warner	-59.2%			
398	Wyeth	-37.8%	458	King Pharmas.	-59.2%			
399	Guidant Corp.	-38.1%	459	Adv.Micro Devc.	-59.3%			
400	Mcdonalds	-38.4%	460	Compuware	-59.3%			
401	Navistar Intl.	-38.5%	461	Convergys	-59.6%			
402	Ford Motor	-38.9%	462	Centerpoint En.	-60.5%			
403	Univision Comms	-39.5%	463	Computer Assoc.	-60.6%			
404	Delphi Autv.Sys.	-39.6%	464	At&T Wireless Svs	-60.8%			
405	Robert Half Intl.	-39.7%	465	Allegheny Techs.	-60.8%			
406	Bank Of New York	-39.9%	466	Gateway	-61.0%			
407	Georgia Pacific	-40.0%	467	Corning	-62.9%			
408	Ntnh.Trust	-40.9%	468	Broadcom 'A'	-63.2%			
409	Medimmune	-41.4%	469	Lsi Logic	-63.4%			
410	Motorola	-41.7%	470	Ciena	-64.1%			
411	Monsanto New	-41.7%	471	Mcdermott Intl.	-64.3%			
412	Altera	-41.9%	472	Qwest Comms.Intl	-64.6%			
413	Waters	-43.8%	473	Veritas Software	-65.2%			
414	Safeway	-44.0%	474	Applied Micro Cir	-67.4%			
415	Capital One Finl.	-44.8%	475	Parametric Tech.	-67.7%			
416	Aon Corp.	-45.1%	476	Solectron	-68.5%			
417	Power-One	-45.5%	477	Micron Tech.	-68.6%			
418	Citrix Sys.	-45.6%	478	Goodyear Tire	-70.4%			
419	Texas Insts.	-46.2%	479	Amr (American Ai	-70.4%			
420	Analog Devices	-46.2%	480	Tyco Intl.	-70.9%			

4. Shareholder Return and size

Figure 1 relates shareholder return to size (measured as the log of the market capitalization) in 2002. There is not a close relationship. The slope of the regression is zero and the R-squared is 0.1% (that is, the difference in size explained only 0.4% of the return). Figure 2 plots the relation between the ranking of shareholder return and the ranking of size. Again, no relation is found.

Figure 3 shows the relation of shareholder return in the five-year period 2002 to size (measured as the log of the market capitalization at the beginning of the period, in 1997). Again, no significant relation is found. Difference in size explained only 0.4% of the return.

Figure 1. Relation of shareholder return and size of the companies in the S&P 500 in 2002

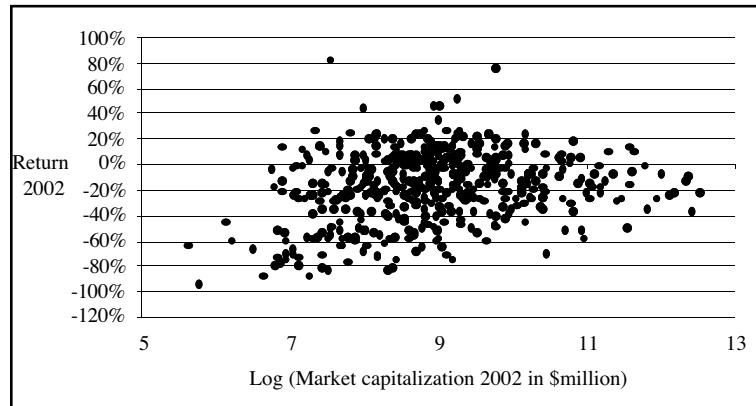


Figure 2. Relation of the rankings of shareholder return and size of the companies in the S&P 500 in 2002

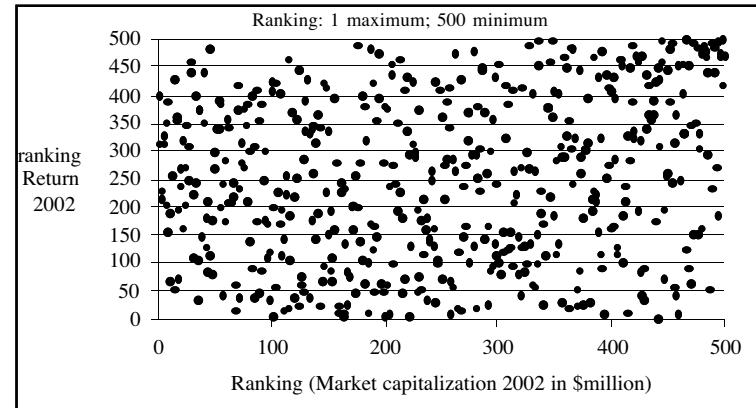
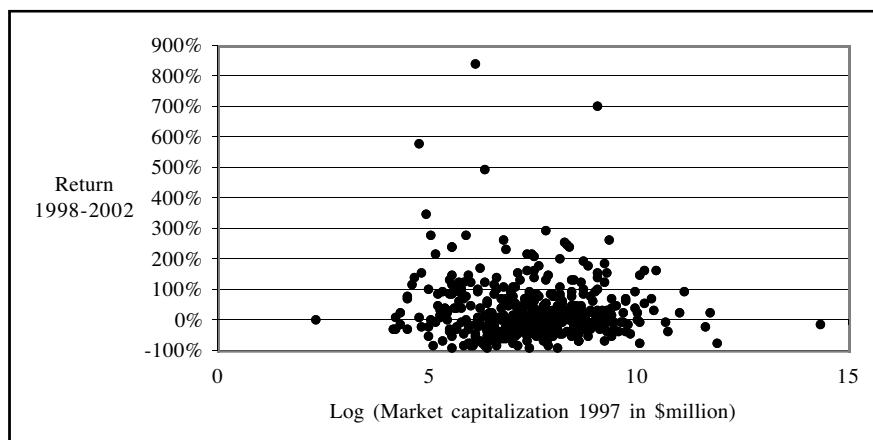


Figure 3. Relation of shareholder return and size of the companies in the S&P 500 in the period 1998-2002



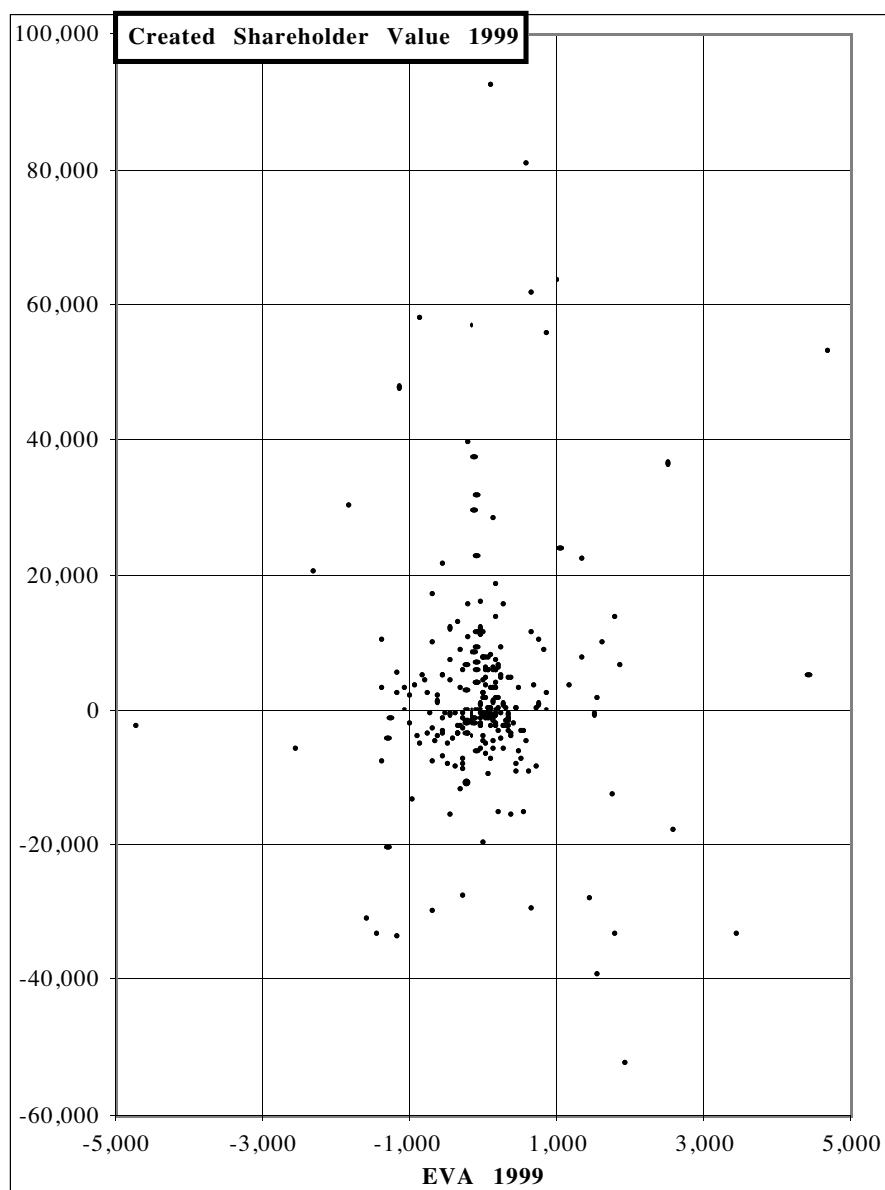
Appendix 2

SHAREHOLDER VALUE CREATORS AND SHAREHOLDER VALUE DESTROYERS IN USA. YEAR 2002

EVA does not properly measure Wealth Creation

We have compared EVA calculated by Stern Stewart and Co. (1) with created shareholder value. Figure 4 shows EVA and created shareholder value for 269 companies in 1999. We only use data for 1999 because the mentioned *Fortune* article only provides 1999 data. For a comparison of several years see Fernández (2002), chapter 14.

Figure 4. EVA (according to Stern Stewart and Co.) and created shareholder value for 269 companies in 1999 (million dollars)



(1) See *Fortune* (December 18, 2000), “America’s Best and Worst Wealth Creators”, pp. 207-216. The article contains EVA (Economic Value Added), calculated by Stern Stewart and Co, of several American companies for 1999.

Appendix 2 (continued)

The correlation of EVA with created shareholder value was only 17.66%. 60 companies had negative EVA and positive created shareholder value. 64 companies had positive EVA and negative created shareholder value.

On average, the difference of shareholder value creation minus EVA was -434% of EVA. On average, the absolute value of the difference of shareholder value creation minus EVA was 8972% of EVA.

With this evidence, we conclude that EVA does not properly measure shareholder value creation.

References

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

Fortune (December 18, 2000), “America’s Best and Worst Wealth Creators”, pp. 207-216. □