A DEFINITION OF SHAREHOLDER VALUE CREATION

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Abstract

In this paper, we will define and analyze shareholder value creation. To help us understand this concept better, we will use the example of a listed company, General Electric, between 1991 and 1999.

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.

A company creates value for its shareholders when the shareholder return exceeds 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:

Created shareholder value = Equity market value x (Shareholder return - Ke)

The created shareholder value can also be calculated as follows:

Created shareholder value = Shareholder value added - (Equity market value x Ke)

We also calculate the created shareholder value of 142 American companies during the three-year period 1997-99 and during the eight-year period 1992-99.

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A DEFINITION OF SHAREHOLDER VALUE CREATION

In this paper, we will define and analyze shareholder value creation. To help us understand this concept better, we will use the example of a listed company, General Electric, between 1991 and 1999.

On 31 December 1991, General Electric had 866.59 million shares outstanding and the price of each share on the stock market was 76.5 dollars. On 31 December 1999, General Electric had 3,277.65 million shares outstanding and the price of each share on the stock market was 154.75 dollars. Consequently, General Electric's equity market value[1] increased from 66.29 billion dollars in December 1991 to 507.22 billion dollars in December 1999[2]. The increase of equity market value during this period was 440.92 billion dollars. However, this is not General Electric's created shareholder value during those years.

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. It is important not to confuse the created shareholder value with any of the other concepts we have mentioned. All of these concepts will be explained in this paper.

Figure 1 shows that between December 1991 and December 1999, General Electric's equity market value increased 440.92 billion dollars, the shareholder value added was 478.17 billion dollars, and the created shareholder value was 361.56 billion dollars.

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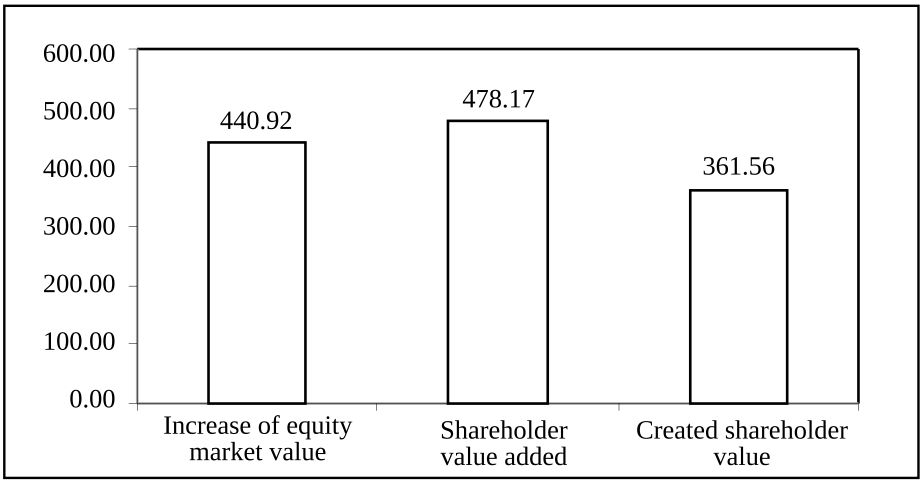
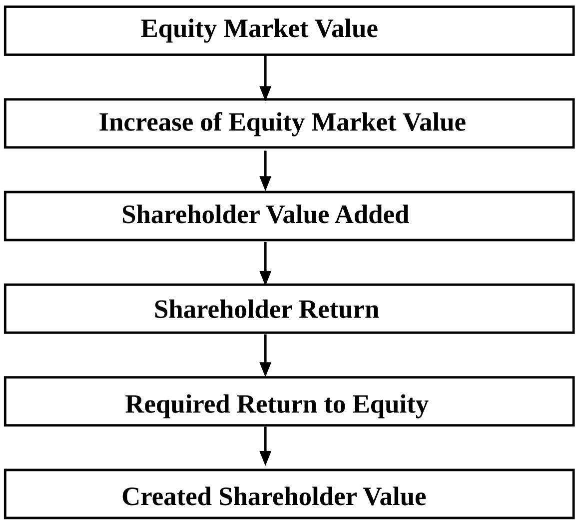
1 The equity market value is the value of all of the company's shares.
2 On 31 December 1999: 3,277.65 million shares x 154.75 dollars/share = 507,22 billion dollars.

Figure 1. General Electric. December 1991-December 1999. Increase of equity market value, shareholder value added, and created shareholder value (billion dollars)





1. Increase of equity market value

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.

Table 1 shows the evolution of General Electric's equity market value and the increase of equity market value during each year.

Table 1. General Electric. Equity market value and increase of equity market value during each year (billion dollars)

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Equity market value	66.29	73.02	89.45	87.91	120.26	162.79	240.14	334.24	507.22
Increase of equity market value	15.95	6.73	16.43	-2.26	33.07	42.53	77.35	94.10	172.98

It is important not to confuse the *increase of equity market value* with the *shareholder value added,* as they are two different concepts, as we shall see in the following section.

2. Shareholder value added

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 *increase of equity market value* is not the *shareholder value added.*

One talks of an increase in the equity market value, but not of a shareholder value added when:

- Shareholders subscribe to new shares of the company paying money, and when
- A conversion of convertible debentures takes place.

One talks of a decrease of the equity market value, but not of a decrease of shareholder value[3] when:

- The company pays money to all of the shareholders: dividends, and when
- The company buys shares on the market (share buy-backs)

The shareholder value added is calculated as follows:

Shareholder value added =

Increase of 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

3 When the company pays dividends to the shareholders, they receive money, but the company's equity market value (and the price per share) also decreases by a similar amount.

Table 2 shows the calculation of the shareholder value added for the period 1991-1999. The shareholder value added has exceeded the increase of equity market value every year. This is because the dividends and other payments to shareholders exceeded the outlays the shareholders had to make.

Table 2. General Electric. Increase of equity market value and shareholder value added each year (billion dollars)

	1992	1993	1994	1995	1996	1997	1998	1999	Total
Increase of equity market value	6.731	6.43	-2.26	33.07	42.53	77.35	94.10	172.98	440.92
+ Dividends	1.93	2.15	2.46	2.77	3.05	3.41	3.91	4.59	24.27
+ Other payments to shareholders	1.21	0.77	1.12	2.52	2.32	2.82	2.82	1.00	14.58
- Outlays by shareholders	0.43	0.41	0.77	0.00	0.00	0.00	0.00	0.00	1.60
- Convertible debentures converted	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
= Shareholder value added	9.43	18.95	0.56	38.36	47.90	83.57	100.83	178.574	78.17

However, the *shareholder value added* is not the *created shareholder value*. For value to be created during a period, the shareholder return must exceed the required return to equity.

3. Shareholder return

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

For example, as Table 3 shows, General Electric's shareholder return in 1998 was 42%: the shareholder value added in 1998 (100.833 billion dollars) divided by the equity market value at the end of 1997 (240.136 billion dollars).

Table 3. Shareholder return of General Electric

	1992	1993	1994	1995	1996	1997	1998	1999	Total
Shareholder return	14%	26%	1%	44%	0%	51%	42%	53%	33%

One way to calculate the shareholder return is: increase in the share's price plus dividends, rights and other payments (discounts on par value, special payments...) divided by the share's price at the start of the year.

4. Required return to equity

The *required return to equity* (also called share cost) is the return that shareholders expect to obtain in order to feel sufficiently remunerated. The required return to equity depends on the interest rates of long-term Treasury bonds and the company's risk. Let us look at an example. On December 1997, the return provided by 10-year Treasury bonds was 5.74%. A shareholder would therefore demand a return on his investment that was higher than the 5.74% he could get risk-free. How much higher? That depends on the company's risk. Obviously, he would require a higher return on an investment in shares of a high-risk company than on an investment in shares of a lower-risk company.

The required return 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.

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

Ke is the term used for the required return to equity (return on the investment required by the shareholder), also known as the equity cost.

If the one-year, risk-free interest rate is 12%, this means that one million dollars to be paid in one year's time with the guarantee of the State (this is what we mean by the expression "risk-free") today has a value of 1,000,000/1.12 = 892,857 dollars. The value today of obtaining a million dollars in one year's time, as a result of an investment in a company's shares, will be less because that million has more risk (we have less certainty of obtaining it). For the value today of our investment in the company to be less than 892,857 dollars, we must divide the million we expect to obtain by a quantity greater than 1.12. If we give our investment in the company a value of 833,333 dollars (1,000,000 /1.20 = 833,333), this means that we are restating at 20% less the million we expect to obtain in one year's time.

Another way of saying this is that the return we require on an investment guaranteed by the State is 12% (the risk-free interest rate) and the required return on an investment in the company is 20%. The difference between 20% and 12% is due to the risk perceived in a company and is usually called the company's risk premium.

Stating this idea as an equation, we could say that the required return on the investment in the company's shares (Ke) is equal to the risk-free rate plus the company's risk premium. The company's risk premium is a function of the company's perceived risk[4]:

Ke = return of Treasury bonds + company's risk premium

Table 4 shows the evolution of 10-year Treasury bonds and the required return to equity of General Electric.

[4] If, instead of investing in a single company's shares, we were to invest in all companies' shares (in a diversified portfolio), we would then require a return which is the following: Ke = return of Treasury bonds + market risk premium By way of reference, in 1999 and 2000, most market analysts used a market risk premium around 4%.

Table 4. Yield of 10-year Treasury bonds and required return to equity of General Electric (data corresponding to December)

	1991	1992	1993	1994	1995	1996	1997	1998	1999
10-year Treasury bonds	6.70%	6.69%	5.79%	7.82%	5.57%	6.42%	5.74%	4.65%	6.44%
Required return to equity (Ke)	11.5%	11.5%	10.0%	13.5%	9.6%	11.0%	9.9%	8.0%	11.1%

5. Created shareholder value

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:

Created shareholder value = Equity market value x (Shareholder return - 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:

Created shareholder value = Shareholder value added - (Equity market value x Ke)

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

Table 5 shows the created shareholder value of General Electric. General Electric has created value for its shareholders every year except 1994.

Table 5. General Electric. Evolution of the increase of equity market value, shareholder value added, and created shareholder value (billion dollars)

	1992	1993	1994	1995	1996	1997	1998	1999	Total
Increase of equity market value	6.73	16.43	-2.26	33.07	42.53	77.359	4.10	172.98	440.92
Shareholder value added	9.43	18.95	0.56	38.36	47.90	83.57	100.83	178.57	478.17
Created shareholder value	1.79	10.55	-8.36	26.63	36.38	65.60	77.12	151.85	361.56

Table 6 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 6 Increase of equity market value, shareholder value added, and created shareholder value

Increase of equity market value	Equity market value$_t$ - Equity market value $_{t-1}$ ↓
Shareholder value added	*Increase of equity market value* - payments from shareholders + dividends + repurchases - conversions. ↓
Created shareholder value	*Shareholder value added* - (Equity market value x Ke)

6. The ROE is not the shareholder return

ROE means Return on Equity. However, it is not true that the ROE, which is calculated by dividing the net income by the shares' book value, is the shareholder return. In section 3, we already defined the shareholder return as the shareholder value added divided by the equity market value and this is not the ROE.

Table 7, which shows General Electric's ROE and shareholder return prove this for each year. We can see that the ROE follows a different course from the shareholder return.

Table 7. General Electric's ROE and shareholder return

	1992	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**Average**
Shareholder return	14%	26%	1%	44%	40%	51%	42%	53%	33%
ROE	21%	18%	18%	23%	24%	25%	25%	26%	23%

7. Comparison of General Electric with other companies

Table 8 shows the created shareholder value of selected American companies during the three-year period 1997-99 and during the eight-year period 1992-99. General Electric was the second top company in both created shareholder value and equity market value.

Table 8. Created shareholder value and market capitalization of selected American companies (million dollars)

	(million dollars) Company Name	Created shareholder value 1997-99	Created shareholder value 1992-99	Capitalization (year end) 1991	Capitalization (year end) 1999
1	Microsoft	411,92	1468,206	19,602	602,432
2	General Electric	294,570	361,56	366,294	507,216
3	Cisco Systems	264,5182	90,119	1,927	366,498
4	Wal-Mart Stores	231,812	183,157	67,614	307,865
5	Lucent Technologies	141,452			235,118
6	Oracle	125,205	144,273	1,985	159,540
7	America Online	120,608			169,617
8	Intel	119,975	202,524	9,982	275,006
9	Home Depot	115,873	111,816	14,143	158,287
10	Dell Computer	113,763	121,475	605	130,823
11	IBM	105,724	121,878	50,873	194,456
12	Sun Microsystems	101,574	105,924	2,770	121,843
13	EMC	93,957	98,293	314	112,443
14	Yahoo!	78,929			113,901
15	Citicorp	78,903	95,598	4,260	187,759
16	American Int. Group	70,124	84,409	20,889	167,404
17	Texas Instruments	57,273	63,061	2,520	75,915
18	Bristol-Myers Squibb	51,575	48,651	46,006	127,328
19	Procter & Gamble	50,490	73,432	31,764	143,984
20	Ford Motor	50,336	59,9791	3,523	60,618
21	Morgan Stanley, DW	50,126			79,506
22	Hewlett-Packard	49,256	73,755	14,336	115,911
23	Time Warner	46,915	45,935	8,090	85,280
24	Exxon	46,191	65,114	75,6532	78,873
25	Pfizer	45,704	59,059	27,713	1125,574
26	Amgen	42,385	41,027	9,884	61,355
27	Motorola	41,940	53,775	8,621	89,689
28	American Express	40,652	54,585	9,644	74,426
29	BellSouth	39,831	44,804	25,183	88,116
30	Warner-Lambert	37,234	42,753	10,442	70,357
31	AT&T	37,066	32,806	51,105	162,363
32	WorldCom	36,666			150,609
33	Applied Materials	36,632	39,838	595	47,940
34	Johnson & Johnson	36,211	45,355	38,1191	29,669
35	Merck	34,605	41,853	64,353	157,046
36	Amazon	34,546			36,358
37	Sprint	31,566	36,944	5,163	52,854
38	Media One Group	31,252			47,008
39	The Gap	28,283	26,305	7,613	39,141
40	Schering-Plough	26,369	32,041	13,931	62,252
41	Bell Atlantic	25,800	25,620	19,044	95,593
42	CBS	22,986	21,40	46,128	48,746
43	Mobil	22,611	33,108	27,034	81,110
44	Tele-Communications	22,292	17,418	5,201	31,459
45	Nextel Communications	22,037			35,585
46	Comcast	22,003	21,464	1,349	36,155
47	Charles Schwab Corp.	21,310	24,696	1,166	31,364
48	SBC Communications	20,560	23,013	19,377	166,305
49	Viacom	20,038	14,874	2,282	33,251
50	Colgate-Palmolive	19,768	22,223	7,108	37,868
51	Cox Communications	18,540			29,406
52	Corning	18,460	17,276	7,367	31,562
53	Chase Manhattan Corp.	17,823	28,811	1,928	64,075
54	US West	16,635	20,612	15,474	36,382
72	Apple Computer	10,015	2,889	6,650	16,540
73	Anheuser-Busch	9,730	7,795	17,505	32,977
74	Merrill Lynch & Co., Inc.	9,391	15,591	6,070	30,547
75	Dow Chemical	9,041	9,715	14,547	29,304
76	Gannett Co	8,655	9,371	6,538	22,737
77	Honeywell	8,1331	6,241	6,030	45,529
78	MBNA Corporation	7,780	14,045	1,7642	1,849
79	Fifth Third Bancorp	7,745	9,380	2,687	22,651
80	E.I. Du Pont De Nemours	7,348	22,855	31,292	68,716
81	Tandy	6,954	6,654	2,264	9,509
82	Wells Fargo & Company	6,521	11,657	4,738	66,410
83	McGraw-Hill Companies	6,082	6,480	2,814	12,085
84	Electronic Data Systems	5,980	2,074	6,110	31,513
85	CoreStates Financial Corp	5,908	8,576	2,6171	9,806
86	Mellon Bank Corporation	5,503	10,509	1,769	17,515
87	American General Corp.	5,223	6,983	4,8431	8,750
88	CIGNA Corporation	4,707	8,574	4,374	14,981
89	Chevron	4,288	14,804	24,140	56,849
90	Abbott Laboratories	3,96	14,134	29,291	55,824
91	Georgia-Pacific	3,466	2,459	4,686	8,678
92	HBO & Company	3,458	6,741	161	14,304
93	Kimberly-Clark	3,170	7,577	8,112	35,621
94	Safeway	2,517	7,992	1,731	18,190
95	Atlantic Richfield	2,507	1,112	16,822	27,916
96	International Paper	1,883	-772	7,858	23,370
97	J.P. Morgan & Company	1,572	2,303	12,962	21,924
98	CVS Corp	1,218	-221	4,636	15,626
99	AMR Corporation	1,132	-360	4,817	9,922
100	Compaq Computer	1,117	13,786	2,245	45,817
101	SunTrust Banks, Inc.	1,027	5,328	5,116	22,018
102	BankBoston Corporation	960	5,330	865	12,894
103	PepsiCo	897	4,242	26,708	51,313
104	American Home Products	120	1,343	26,732	51,286
105	Delta Air Lines	71	-1,302	3,267	6,618
106	Caterpillar	-178	6,489	4,427	16,687
107	UAL Corp	-471			4,151
108	General Mills	-1,013	-5,066	12,191	10,862
109	USAir	-1,334	-970	560	2,291
110	USX - Marathon Group	-1,741	-3,691	6,267	7,620
111	Wachovia Corporation	-1,766	648	4,939	13,752
112	Phillips Petroleum	-1,803	652	6,236	11,904
113	Coca-Cola Enterprises	-1,901	1,107	1,975	8,563
114	Kmart	-1,980	-10,850	9,607	4,968
115	Sara Lee	-1,985	-4,169	13,691	19,711
116	H.J. Heinz	-2,114	-2,584	10,06	214,120
117	May Department Stores	-2,301	184	6,482	10,670
118	Air Products and Chemicals	-2,470	-1,244	4,152	7,696
119	Texaco	-2,924	1,439	15,831	30,038
120	Schlumberger	-3,365	-1,023	14,960	30,860
121	Walt Disney	-4,006	4,976	14,895	60,323
122	Nike	-4,375	1,375	3,464	8,890
123	Hilton Hotels	-4,447	-2,588	1,925	3,527
124	ConAgra	-4,452	-4,593	7,998	11,887
125	Campbell Soup	-4,905	-591	10,668	16,497

Table 8 (continued)

55	General Motors	16,399	22,496	17,781	46,535	126	Crown Cork & Seal	-5,525	-5,109	2,605	2,727
56	Alcoa	15,849	18,245	5,477	30,412	127	Goodyear Tire & Rubber	-5,795	-4,816	3,777	4,387
57	Eli Lilly	15,631	24,963	24,410	72,520	128	3Com	-6,364	1,840	305	16,216
58	GTE	14,768	15,130	30,768	68,572	129	Toys "R" Us	-6,574	-13,040	9,457	3,503
59	Automatic Data Process	14,458	15,904	6,285	33,678	130	Mattel	-6,745	-4,501	2,117	5,523
60	Tellabs	14,317	19,725	289	25,821	131	Union Pacific	-7,517	-4,967	10,481	10,859
61	Walgreen	14,237	16,739	4,677	29,400	132	U.S. Bancorp	-8,768	-4,998	1,881	17,979
62	Qwest Communications	14,230			32,164	133	Xerox	-8,959	-3,631	6,339	15,070
63	Tyco International	13,927	15,278	733	66,300	134	J.C. Penney	-10,111	-8,836	6,415	5,193
64	McDonald's	13,623	21,265	13,572	54,584	135	Eastman Kodak	-10,154	-2,620	15,659	20,909
65	Bank of New York	13,016	20,637	2,169	29,456	136	Sears Roebuck	-10,412	6,460	13,032	11,480
66	Computer Associates	13,008	25,850	2,015	37,698	137	Gillette	-12,667	1,639	12,292	44,180
67	Enron	11,578	14,721	3,5353	1,755	138	Boeing	-21,241	-9,2501	6,3863	8,725
68	Medtronic	11,348	17,810	5,600	43,520	139	BankAmerica Corp.	-22,588	-13,175	4,7068	5,679
69	Omnicom	11,145	12,486	895	17,745	140	Banc One Corporation	-23,614	-23,250	8,770	36,700
70	Kellogg	10,745	3,759	15,782	12,492	141	Coca-Cola	-27,410	23,469	53,363	143,876
71	United Technologies	10,116	16,547	6,599	31,118	142	Philip Morris	-56,297	-50,928	74,016	54,421

Table 9 shows the return of listed American companies in the three-year period 1997-99 and in the eight-year period 1992-99. It can be seen that General Electric was the thirty-third most profitable company during the period 1997-99. Yahoo! and Amazon were the most profitable. However, in 2000 the return for both Yahoo! and Amazon shareholders was –85%.

Table 9. Shareholder return of selected companies (average annual return)

		Shareholder return				Shareholder return				Shareholder return	
	Company Name	**1997-99**	**1992-99**		**Company Name**	**1997-99**	**1992-99**		**Company Name**	**1997-99**	**1992-99**
1	Yahoo!	434.60%		48	Schering-Plough	39.50%	25.30%	95	International Paper	14.00%	8.50%
2	Amazon	412.00%		49	Automatic Data Proc.	37.10%	22.60%	96	SunTrust Banks, Inc.	13.70%	19.30%
3	America Online	231.70%	106.60%	50	US Wst	37.00%	22.00%	97	Atlantic Richfield	13.50%	11.10%
4	Dell Computer	148.60%	92.80%	51	Intel	36.20%	51.20%	98	Chevron	13.30%	16.40%
5	EMC	136.30%	95.10%	52	Bank of New York	35.90%	37.90%	99	Kimberly-Clark	13.30%	5.90%
6	Sun Microsystems	129.30%	60.30%	53	BellSouth	35.40%	22.00%	100	BankBoston Corporation	13.30%	31.90%
7	Nextel Communications	99.10%		54	Bristol-Myers Squibb	35.00%	18.10%	101	J.P. Morgan & Company	12.70%	12.00%
8	Cisco Systems	96.40%	81.20%	55	Motorola	35.00%	32.60%	102	American Home Products	12.40%	11.50%
9	Applied Materials	91.80%	65.90%	56	Pfizer	34.10%	23.30%	103	Delta Air Lines1	2.20%	5.80%
10	Lucent Technologies	87.00%	26.50%	57	Hewlett-Packard	32.50%	31.00%	104	USAir	11.10%	12.90%
11	Home Depot	84.00%	32.40%	58	MBNA Corporation	31.80%	39.10%	105	PepsiCo	10.90%	12.40%
12	Wal-Mart Stores	83.50%	22.10%	59	Gannett Co	31.30%	19.70%	106	Caterpillar	10.00%	22.00%
13	Texas Instruments	83.20%	51.10%	60	Enron	29.60%	25.30%	107	Wachovia Corporation	9.00%	14.60%
14	Oracle	82.10%	72.50%	61	Medtronic	29.50%	26.40%	108	Walt Disney	8.70%	15.80%
15	Comcas	78.80%	32.20%	62	Merrill Lynch	28.60%	26.30%	109	Coca-Cola Enterprises	8.10%	19.10%
16	Microsoft	78.10%	49.70%	63	Procter & Gamble	28.50%	23.50%	110	Sara Lee	7.80%	7.70%
17	Charles Schwab	75.80%	50.90%	64	Computer Associates	28.40%	46.50%	111	UAL Corp	7.50%	
18	The Gap	73.50%	25.70%	65	Bell Atlantic	28.10%	17.50%	112	General Mills	7.10%	5.30%
19	Tele-Communications	72.00%	24.20%	66	Georgia-Pacific	28.10%	15.70%	113	Texaco	6.70%	12.00%
20	Apple Computer	70.10%	8.40%	67	HBO & Company	27.60%	60.40%	114	Schlumberger	6.60%	10.00%
21	Tandy	66.20%	28.90%	68	Mellon Bank Corporation	27.30%	29.00%	115	H.J. Heinz	6.50%	8.90%
22	Omnicom	65.30%	39.90%	69	United Technologies	27.00%	24.60%	116	Phillips Petroleum	5.10%	12.60%
23	Morgan Stanley, DW6	4.60%		70	SBC Communications	26.40%	18.60%	117	Coca-Cola	4.40%	15.70%
24	Cox Communications	64.60%		71	American General Corp.	26.00%	20.60%	118	USX - Marathon Group	3.90%	3.70%

Table 9 (continued)

25	Amgen	64.10%	26.00%	72	AT&T	25.50%	16.60%	119	BankAmerica Corp.	3.70%	15.50%
26	Media One Group	63.20%		73	Wells Fargo & Company	25.50%	23.60%	120	U.S. Bancorp	3.70%	17.80%
27	Sprint	58.50%	34.00%	74	CVS Corp	25.30%	12.10%	121	May Department Stores	3.40%	12.00%
28	Time Warner	57.60%	27.60%	75	CoreStates Financia	l25.20%	23.00%	122	Gillette	3.00%	15.80%
29	Corning	51.40%	21.10%	76	Johnson & Johnson	24.90%	17.90%	123	Campbell Soup	2.00%	10.70%
30	Viacom	51.30%	17.10%	77	Eli Lilly	23.70%	18.80%	124	Air Products	0.80%	9.80%
31	Tellabs	50.50%	71.00%	78	Dow Chemica	l23.70%	16.50%	125	Kellogg	0.40%	1.60%
32	Warner-Lambert	50.20%	28.90%	79	Anheuser-Busch Comp.	23.50%	14.00%	126	ConAgra	-0.80%	5.50%
33	General Electric	48.80%	32.70%	80	Chase Manhattan Corp. (The)	23.00%	32.20%	127	Kmart	-1.00%	-8.20%
34	Tyco International	48.80%	35.00%	81	CIGNA Corporation	23.00%	22.70%	128	Xerox	-3.20%	11.80%
35	CBS	47.60%	18.80%	82	Mobil	22.90%	19.40%	129	Banc One Corporation	-3.30%	4.80%
36	WorldCom	45.70%		83	General Motors	22.30%	9.00%	130	Eastman Kodak	-3.80%	9.90%
37	American Express	44.60%	35.00%	84	Compaq Computer	22.30%	40.80%	131	Nike	-5.30%	14.60%
38	Walgreen	43.70%	27.00%	85	McDonald's	21.80%	20.60%	132	Boeing	-6.90%	9.00%
39	Colgate-Palmolive	43.30%	25.80%	86	Honeywell	21.50%	25.00%	133	Union Pacific	-8.30%	5.30%
40	IBM	42.70%	24.10%	87	Merck	21.00%	14.20%	134	Sears Roebuck	-11.20%	13.00%
41	Qwest Communications	42.50%		88	Exxon	20.90%	17.10%	135	Philip Morris	-11.40%	2.60%
42	Citicorp	41.70%	39.30%	89	GTE	19.80%	14.30%	1363	Com	-13.80%	42.20%
43	McGraw-Hill Companies	41.60%	23.40%	90	Safeway	18.70%	29.80%	137	Hilton Hotels	-14.80%	7.40%
44	American Int. Group	41.50%	27.90%	91	Electronic Data Systems	17.30%	11.30%	138	Goodyear	-16.50%	2.50%
45	Ford Motor	40.50%	29.10%	92	AMR Corporation	15.00%	8.40%	139	Mattel	-21.20%	2.90%
46	Alcoa	39.80%	25.20%	93	Abbott Laboratories	14.50%	12.00%	140	Toys "R" Us	-21.80%	-9.80%
47	Fifth Third Bancorp	39.80%	25.80%	94	E.I. Du Pont De Nemours	14.30%	17.10%	141	J.C. Penney	-22.50%	-0.10%
								142	Crown Cork & Seal	-23.70%	-2.00%

8. What should the shareholder return be compared with?

In section 5, we saw that a company creates value if the shareholder return exceeds the required return (and it destroys value in the opposite case).

However, the shareholder return is often compared with other benchmarks[5]. The most common benchmarks are:

a) Zero. If the shareholder return is positive (above zero), the shareholders have more money in nominal terms than at the beginning of the year.

b) The return of Treasury bonds. If the shareholder return exceeds that of investing in Treasury bonds, the shareholders have obtained an additional return for bearing more risk (the additional risk of investing in the company instead of investing in Treasury bonds).

c) Required return to equity. If the shareholder return exceeds the expected return, the company has created value: the shareholders have obtained a return that is greater than that required to compensate the additional risk of investing in the company instead of investing in Treasury bonds.

[5] Comparing different benchmarks enables different questions to be answered.

d) Shareholder return of companies in the same industry. If the shareholder return exceeds the shareholder return of companies in the same industry, the company has created more value than the other companies in its industry (for an equal investment and risk).

e) Return of the stock market index. If the shareholder return exceeds the return of the stock market index, the company has outperformed the market as a whole. □