



EUROPEAN  
COMMISSION

Monitoring industrial  
research:

volume II: COMPANY DATA

**the 2005 EU industrial  
R&D investment  
SCOREBOARD**

Directorate General Joint Research Centre  
Directorate General Research

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### **Web page**

The *Scoreboard* webpage is: <http://eu-iriscoreboard.jrc.es/index.htm> where the electronic version of the *2005 EU Industrial R&D Investment Scoreboard* (both Analysis – Volume I - and Company Data – Volume II) is available and can be downloaded.

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## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Explanations of the terms in the header are to be found in Volume II, page nr. 195, Glossary of Definitions

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				units	€m	%	%	%	€m
<b>Top 700 Companies</b>				<b>102 238</b>	<b>0.7</b>	<b>1.1</b>	<b>-1.4</b>	<b>3 579 466</b>	<b>7.2</b>
<i>number of companies for calculation</i>				<i>700</i>	<i>686</i>	<i>653</i>	<i>621</i>	<i>700</i>	<i>686</i>
1	DaimlerChrysler	Automobiles & parts (31)	Germany	5 658	1.6	-8.2	2.3	142 059	4.1
2	Siemens	Electronic & Electrical (25)	Germany	5 063	-8.1	-5.3	-14.2	75 167	1.3
3	Volkswagen	Automobiles & parts (31)	Germany	4 164	0.6	-5.3	21.9	88 963	0.6
4	GlaxoSmithKline	Pharma & biotech (48)	UK	4 010	1.7	-4.9	10.8	28 757	-5.1
5	Sanofi-Aventis	Pharma & biotech (48)	France	3 961	-2.6	234.0	18.1	25 418	4.6
6	Nokia	IT hardware (93)	Finland	3 834	-3.6	14.6	1.6	29 267	-0.6
7	Robert Bosch	Automobiles & parts (31)	Germany	2 898	9.4	6.6	9.4	40 007	10.0
8	BMW	Automobiles & parts (31)	Germany	2 818	10.1	9.7	23.8	44 335	6.8
9	AstraZeneca	Pharma & biotech (48)	UK	2 798	10.2	12.4	10.7	15 763	13.7
10	Philips Electronics	Electronic & Electrical (25)	The Netherlands	2 534	-3.2	-14.0	-8.1	30 319	4.4
11	Ericsson	IT hardware (93)	Sweden	2 436	-24.9	-0.1	-37.1	14 611	12.1
12	Bayer	Chemicals (11)	Germany	2 404	-0.4	-4.7	1.8	29 758	4.2
13	EADS	Aerospace & defence (21)	The Netherlands	2 295	4.7	4.6	2.4	31 761	5.4
14	Peugeot (PSA)	Automobiles & parts (31)	France	2 118	1.0	12.5	7.6	56 797	4.7
15	Renault	Automobiles & parts (31)	France	1 961	12.9	-2.4	-8.0	40 715	8.5
16	Istituto Finanziario Industriale	Automobiles & parts (31)	Italy	1 827	3.6	0.1	-4.7	51 878	-3.1
17	BAE Systems	Aerospace & defence (21)	UK	1 568	1.0	22.2	-9.6	12 847	8.4
18	Alcatel	IT hardware (93)	France	1 557	-2.3	-32.8	-23.5	12 265	-2.0
19	Finmeccanica	Aerospace & defence (21)	Italy	1 454	18.5	24.1	14.4	7 529	0.4
20	Boehringer Ingelheim	Pharma & biotech (48)	Germany	1 232	4.8	-9.8	28.0	8 157	10.5
21	Infineon Technologies	IT hardware (93)	Germany	1 219	12.6	12.3	..	7 195	17.0
22	BASF	Chemicals (11)	Germany	1 173	6.2	-2.7	-9.0	37 537	12.5
23	Unilever	Food producers (43)	UK	1 040	-2.3	-8.7	-1.0	40 169	-5.9
24	SAP	Software & computer services (97)	Germany	1 020	2.4	9.5	1.2	7 514	7.0
25	Volvo	Engineering & machinery (26)	Sweden	991	14.0	4.2	1.4	23 294	14.8
26	Schering	Pharma & biotech (48)	Germany	933	-1.5	-2.4	12.3	4 907	1.6
27	Deutsche Telekom	Telecommunication services (67)	Germany	900	0.0	0.0	0.0	57 880	3.7
28	AKZO Nobel	Chemicals (11)	The Netherlands	826	-7.4	-2.2	7.7	12 688	-2.8
29	Snecma	Aerospace & defence (21)	France	754	20.8	0.3	28.5	6 812	5.9
30	Michelin	Automobiles & parts (31)	France	674	-5.2	0.9	0.3	15 689	2.1
31	Total	Oil & gas (7)	France	635	-4.8	0.8	-4.7	122 700	17.2
32	Merck	Pharma & biotech (48)	Germany	599	-0.9	1.6	4.9	5 859	-18.6
33	Novo Nordisk	Pharma & biotech (48)	Denmark	585	3.8	1.3	4.3	3 903	9.4
34	Valeo	Automobiles & parts (31)	France	584	3.5	-2.3	-6.8	9 439	2.2
35	France Telecom	Telecommunication services (67)	France	564	18.0	-17.0	1.6	47 157	2.2
36	Schneider	Electronic & Electrical (25)	France	535	8.3	4.5	-7.8	10 365	18.1
37	Continental	Automobiles & parts (31)	Germany	530	6.4	1.4	6.9	12 597	9.2
38	ZF	Automobiles & parts (31)	Germany	521	-0.7	-3.3	59.9	9 899	10.9
39	L'Oreal	Personal care & household (47)	France	507	5.6	2.6	8.3	14 534	3.6
40	Telefonica	Telecommunication services (67)	Spain	461	4.8	-14.2	4.5	30 322	6.8
41	ALTANA	Pharma & biotech (48)	Germany	445	8.1	11.6	29.7	2 963	8.3
42	Thales	Aerospace & defence (21)	France	436	14.5	-11.5	-0.5	10 288	-2.7
43	Solvay	Chemicals (11)	Belgium	427	1.7	2.4	14.5	7 877	4.2
44	Electricite de France	Electricity (72)	France	425	11.5	-11.8	3.4	46 928	4.5
45	Shell (now Royal Dutch Shell)	Oil & gas (7)	UK	407	-5.3	23.7	22.0	195 104	31.5
46	AREVA	Electricity (72)	France	402	41.1	-14.2	-11.9	11 109	34.6
47	MAN	Engineering & machinery (26)	Germany	400	-1.7	-3.8	0.5	14 947	-0.5
48	Rolls-Royce	Aerospace & defence (21)	UK	398	0.4	-5.4	-17.0	8 389	5.2
49	UCB	Pharma & biotech (48)	Belgium	376	39.3	25.8	19.0	3 068	3.4
50	BT	Telecommunication services (67)	UK	363	-23.1	-12.1	5.0	26 305	0.6

Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
0.2	-0.9	13 608 537	-0.3	2.9	3.1	8.6	7.5	7.2	3 462 021	45.5	5.9	6.5
676	664	688	681	689	677	696	688	681	587	441	631	617
-8.8	-2.2	379 019	2.2	4.0	4.1	2.4	14.9	15.0	46 204	38.0	4.5	4.9
-11.6	-3.4	419 200	-0.0	6.7	7.4	4.0	12.1	13.1	59 127	27.0	4.0	4.6
-1.8	1.7	321 090	2.0	4.7	4.7	2.0	13.0	13.2	22 658	94.0	13.7	15.3
1.1	3.5	99 837	-3.2	13.9	13.0	30.3	40.2	38.2	108 038	16.0	4.9	4.1
226.2	14.8	96 439	..	15.6	16.7	11.6	41.1	..	98 605	175.0	..	..
-1.9	-3.8	53 511	3.7	13.1	13.5	14.7	71.6	77.1	58 171	48.0	1.7	1.3
3.9	2.8	238 847	4.1	7.2	7.3	6.0	12.1	11.6	..	..	6.1	5.6
-1.8	9.9	103 626	1.5	6.4	6.2	8.4	27.2	25.1	24 455	14.0	6.9	17.6
5.7	8.3	64 200	6.3	17.8	18.3	22.3	43.6	42.0	59 035	2.0	5.0	6.6
-8.7	-1.6	141 966	-3.7	8.4	9.0	7.7	17.9	17.8	28 322	21.0	4.2	3.4
-19.2	-37.1	51 742	-9.5	16.7	24.9	21.8	47.1	56.7	43 334	37.0	1.9	3.0
-3.6	-2.2	113 825	-3.8	8.1	8.5	5.4	21.1	20.4	21 669	51.0	4.0	5.1
0.8	-2.9	110 662	1.4	7.2	7.3	7.0	20.7	20.1	22 087	35.0	10.4	9.1
-0.4	5.4	207 200	3.7	3.7	3.9	4.2	10.2	10.5	12 715	23.0	5.0	5.5
3.3	-0.0	130 886	-0.3	4.8	4.6	11.3	15.0	13.2	21 570	31.0	..	7.5
-12.0	-3.8	179 790	-6.6	3.5	3.3	-2.3	10.2	9.2	976	66.0	4.4	4.0
3.9	-10.7	69 400	0.7	12.2	13.1	-0.6	22.6	22.5	15 191	56.0	3.6	2.9
-24.4	-34.7	55 718	-7.9	12.7	12.7	1.5	27.9	26.3	12 849	9.0	1.8	1.1
8.3	4.8	46 401	3.2	19.3	16.4	-0.8	31.3	27.3	6 266	44.0	4.7	3.0
-2.6	13.2	35 284	3.8	15.1	15.9	16.8	34.9	34.6	..	..	5.2	7.0
18.1	..	34 127	8.3	16.9	17.6	1.1	35.7	34.4	5 808	-2.0	16.2	14.2
3.6	-0.9	81 958	-6.0	3.1	3.3	11.8	14.3	12.7	33 240	49.0	5.1	6.9
-11.6	-6.3	227 000	-5.4	2.6	2.5	8.6	4.6	4.4	54 212	15.0	2.5	2.4
-5.2	1.0	31 224	7.3	13.6	14.2	26.6	32.7	34.2	45 426	22.0	2.3	2.9
-1.6	-1.6	78 196	6.9	4.3	4.3	6.7	12.7	11.9	13 812	20.0	4.8	5.7
-3.9	3.7	26 131	-1.6	19.0	19.6	14.6	35.7	35.7	10 296	27.0	4.3	4.8
4.0	11.1	247 559	-1.5	1.6	1.6	14.9	3.6	3.6	73 547	38.0	8.8	9.9
-6.8	-0.8	63 600	-4.2	6.5	6.8	6.3	13.0	13.4	12 124	75.0	4.3	4.5
1.3	-7.9	35 451	-10.7	11.1	9.7	6.2	21.3	15.7	5 351	37.0	3.2	3.5
-0.3	-2.3	126 474	-0.6	4.3	4.6	6.7	5.3	5.6	7 435	27.0	6.8	6.7
2.1	-2.6	111 401	0.6	0.5	0.6	14.9	5.7	6.0	132 130	43.0	..	..
-3.6	-0.7	28 877	-15.6	10.2	8.4	10.9	20.7	17.7	3 712	73.0	4.0	3.9
5.4	5.9	19 520	6.2	15.0	15.8	23.6	30.0	30.7	11 908	8.0	10.8	9.4
-5.8	-4.2	55 540	-18.6	6.2	6.1	2.4	10.5	8.3	2 685	10.0	4.7	4.6
-1.1	8.4	204 826	-7.6	1.2	1.0	16.4	2.8	2.2	62 272	41.0	10.8	10.9
-3.1	-7.8	84 866	14.3	5.2	5.6	9.6	6.3	6.7	14 646	35.0	2.7	2.9
1.1	1.6	73 748	10.9	4.2	4.3	8.8	7.2	7.5	9 569	90.0	5.3	5.1
-2.6	35.6	54 523	1.9	5.3	5.9	3.8	9.5	9.8	..	..	5.7	6.9
-0.3	3.8	52 081	3.1	3.5	3.4	15.4	9.7	9.5	41 897	18.0	3.0	3.5
1.4	-8.1	156 819	4.9	1.5	1.6	18.0	2.9	2.9	67 911	30.0	10.5	10.4
4.8	13.0	10 691	6.1	15.0	15.1	20.6	41.6	40.9	6 405	14.0	6.2	6.2
-4.8	8.2	55 476	-3.4	4.2	3.6	3.9	7.9	6.6	6 057	38.0	3.2	3.6
-4.6	-9.3	29 300	-2.8	5.4	5.6	9.8	14.6	13.9	7 612	46.0	5.8	6.4
0.6	17.0	156 152	-6.7	0.9	0.8	7.1	2.7	2.3	..	..	12.3	13.1
12.4	32.7	114 000	-4.2	0.2	0.3	12.3	3.6	3.6	183 576	65.0	4.7	6.0
-0.1	-7.2	70 069	45.9	3.6	3.5	5.4	5.7	5.9	700	126.0	5.2	6.4
-6.4	-1.6	62 790	-13.3	2.7	2.7	4.0	6.4	5.6	5 869	47.0	4.0	3.9
-2.5	-8.5	35 200	-2.5	4.7	5.0	5.8	11.3	11.0	8 591	55.0	3.2	3.3
18.0	1.6	12 015	-0.6	12.3	9.1	13.8	31.3	22.3	6 589	31.0	..	5.5
-1.1	-8.9	99 600	-3.4	1.4	1.8	16.7	3.6	4.6	26 253	15.0	16.1	14.3

## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				<i>units</i> €m	%	%	%	€m	%
51	ALSTOM	Electronic & Electrical (25)	France	336	-29.0	-24.0	8.1	13 662	-18.1
52	ASML	IT hardware (93)	The Netherlands	331	15.4	-3.9	-26.9	2 465	59.8
53	BP	Oil & gas (7)	UK	323	25.8	-6.4	-3.1	208 141	21.6
54	Lagardere	Media & entertainment (54)	France	321	-2.7	3.8	2.6	13 389	7.5
55	Vodafone	Telecommunication services (67)	UK	309	28.1	4.3	49.1	48 213	1.7
56	TeliaSonera	Telecommunication services (67)	Sweden	308	9.4	117.9	-10.4	9 071	-0.6
57	Saint-Gobain	Construction & building (13)	France	304	-0.7	-1.9	-2.5	32 025	8.2
58	Deutsche Post	Support services (58)	Germany	290	85.9	-35.8	73.6	43 168	7.9
59	DSM	Chemicals (11)	The Netherlands	286	6.7	-1.1	-9.1	7 752	28.1
60	Thomson	Electronic & Electrical (25)	France	277	-6.1	-21.1	1.6	7 994	-5.5
61	Henkel	Personal care & household (47)	Germany	272	5.8	-0.8	-24.5	10 592	12.3
62	Autoliv	Automobiles & parts (31)	Sweden	271	20.6	32.9	14.4	4 520	15.9
63	Marconi	IT hardware (93)	UK	263	-5.6	-39.8	-47.9	1 889	-14.2
64	<i>Amersham (now GE Healthcare)</i>	Health (44)	UK	257	-1.2	6.0	16.6	2 218	2.1
65	ENI	Oil & gas (7)	Italy	257	8.0	36.0	-13.8	58 382	13.4
66	Scania	Engineering & machinery (26)	Sweden	255	7.0	4.2	5.7	6 382	13.2
67	Heidelberger Druckmaschinen	Engineering & machinery (26)	Germany	244	-33.3	-6.6	-15.2	3 360	-8.2
68	Electrolux	Household goods & textiles (34)	Sweden	227	23.2	-8.3	1.3	13 357	-2.8
69	Dassault Systemes	Software & computer services (97)	France	222	2.9	-3.3	6.6	797	5.6
70	<i>Carl Zeiss</i>	Health (44)	Germany	209	10.0	2.2	27.4	2 135	5.2
71	ICI	Chemicals (11)	UK	208	-5.8	5.4	-3.3	7 911	-4.2
72	Oce	IT hardware (93)	The Netherlands	207	-0.8	-2.1	6.6	2 652	-4.2
73	Pirelli	Diversified industrials (24)	Italy	198	-2.9	-6.9	-7.6	7 114	6.6
74	Schwarz Pharma	Pharma & biotech (48)	Germany	198	37.2	15.9	16.1	947	-36.7
75	Vivendi Universal	Media & entertainment (54)	France	196	15.3	45.3	-50.6	21 428	-15.9
76	<i>Behr</i>	Automobiles & parts (31)	Germany	195	6.0	5.1	12.9	3 050	1.5
77	Smiths	Aerospace & defence (21)	UK	193	5.5	11.3	6.4	3 861	-10.6
78	Agfa-Gevaert	Health (44)	Belgium	191	-18.0	-6.1	7.4	3 762	-10.7
79	ThyssenKrupp	Engineering & machinery (26)	Germany	191	4.4	-4.2	6.1	39 342	8.9
80	Linde	Chemicals (11)	Germany	188	5.0	4.1	2.2	9 421	4.8
81	Sandvik	Engineering & machinery (26)	Sweden	185	-0.3	10.5	15.0	6 046	11.9
82	Reuters	Media & entertainment (54)	UK	181	-25.1	-14.5	-32.0	4 075	-9.8
83	Invensys	Electronic & Electrical (25)	UK	175	-24.8	-25.7	-16.2	4 129	-24.9
84	Lundbeck	Pharma & biotech (48)	Denmark	173	-29.8	25.1	2.1	1 308	-2.1
85	<i>Hella</i>	Automobiles & parts (31)	Germany	172	2.3	11.6	11.8	3 141	3.7
86	Rhodia	Chemicals (11)	France	171	-15.8	1.0	2.0	5 281	-3.2
87	<i>Diehl Stiftung</i>	Diversified industrials (24)	Germany	162	-3.2	4.0	-9.6	1 595	2.8
88	Shire Pharmaceuticals	Pharma & biotech (48)	UK	159	-12.3	7.6	20.0	1 066	-0.8
89	Amadeus Global Travel	Leisure & hotels (53)	Spain	153	5.7	15.5	-3.1	2 057	6.6
90	Rheinmetall	Automobiles & parts (31)	Germany	152	-19.6	-9.1	5.6	3 413	-19.7
91	<i>Wacker-Chemie</i>	Chemicals (11)	Germany	152	-0.1	-3.8	3.7	2 543	3.0
92	JM Voith	Diversified industrials (24)	Germany	149	10.4	-2.9	0.7	3 262	4.9
93	<i>Freudenberg</i>	Diversified industrials (24)	Germany	148	6.2	40.1	..	4 418	14.2
94	<i>Pierre Fabre</i>	Pharma & biotech (48)	France	145	7.1	3.5	-5.2	1 426	6.8
95	Atlas Copco	Engineering & machinery (26)	Sweden	141	9.4	-3.9	9.5	5 387	9.1
96	Telecom Italia	Telecommunication services (67)	Italy	139	0.0	..	..	31 237	1.3
97	<i>Ipsen</i>	Pharma & biotech (48)	Luxembourg	136	4.1	13.8	..	737	2.6
98	Elan	Pharma & biotech (48)	Ireland	136	-27.3	-20.1	-20.8	341	-39.2
99	Arcelor	Steel & other metals (18)	Luxembourg	135	-4.9	-9.6	..	30 176	16.4
100	Fresenius	Health (44)	Germany	133	9.9	-12.3	12.2	7 271	2.9



Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
-21.8	-9.0	69 594	-9.4	2.5	2.8	-2.4	4.8	6.2	4 393	752.0	1.3	1.6
-21.2	6.2	5 038	-5.4	13.4	18.6	15.4	65.7	53.9	6 761	33.0	3.6	4.6
30.1	3.6	104 200	-3.7	0.2	0.2	8.3	3.1	2.4	192 751	21.0	4.6	5.7
-5.8	-0.6	47 287	9.9	2.4	2.7	5.1	6.8	7.7	8 362	34.0	5.1	4.0
10.5	33.0	57 378	-4.5	0.6	0.5	-12.7	5.4	4.0	133 326	19.0	14.8	14.2
38.6	4.0	25 381	-3.1	3.4	3.1	22.2	12.1	10.8	16 934	12.0	12.7	10.2
-2.3	-0.4	174 247	2.6	1.0	1.0	7.0	1.7	1.8	17 154	38.0	4.8	4.6
1.9	17.6	381 493	1.7	0.7	0.4	6.8	0.8	0.4	23 063	185.0	2.9	2.8
-9.2	-16.4	24 479	19.3	3.7	4.4	4.2	11.7	13.1	6 255	68.0	4.2	6.7
-17.0	-2.9	49 079	-16.0	3.5	3.5	-4.8	5.6	5.1	5 114	33.0	4.4	6.0
-2.3	-26.1	49 947	3.4	2.6	2.7	19.5	5.4	5.3	10 826	45.0	3.2	3.4
19.3	11.3	34 500	7.5	6.0	5.8	8.5	7.9	7.0	3 053	5.0	5.3	4.9
-22.2	-53.5	..	..	13.9	12.6	-7.4	..	18.6	852	-52.0	2.6	2.1
1.5	18.1	10 312	2.6	11.6	12.0	13.1	24.9	25.9	..	..	10.6	9.9
7.4	-2.1	71 497	-6.6	0.4	0.5	20.4	3.6	3.1	96 868	61.0	11.6	15.2
7.0	-10.3	29 064	5.1	4.0	4.2	10.9	8.8	8.6	6 306	29.0	11.4	15.4
-11.4	-17.3	19 451	-17.2	7.3	10.0	4.3	12.5	15.6	2 690	37.0	3.8	3.0
-6.8	-2.0	72 382	-6.2	1.7	1.3	3.9	3.1	2.4	5 295	33.0	3.7	2.8
-2.5	3.8	4 456	9.0	27.8	28.6	28.9	49.8	52.7	4 554	22.0	2.5	2.1
-10.1	9.8	13 543	-4.4	9.8	9.4	5.7	15.4	13.4	..	..	4.1	5.2
-4.5	-4.7	33 820	-6.6	2.6	2.7	7.9	6.1	6.1	4 948	30.0	2.9	2.6
-12.8	-1.8	21 760	-2.6	7.8	7.5	4.2	9.5	9.3	1 068	11.0	6.4	6.5
5.7	-16.0	33 704	-7.8	2.8	3.1	5.6	5.9	5.6	4 420	76.0	4.0	4.1
55.2	25.5	3 813	-1.0	20.9	9.6	2.2	51.8	37.4	2 206	94.0	2.0	1.7
-56.2	1.4	39 181	-21.0	0.9	0.7	14.1	5.0	3.4	27 676	42.0	5.4	4.1
6.8	25.2	16 986	5.6	6.4	6.1	4.0	11.5	11.4	..	..	5.4	..
-5.2	-35.0	26 729	-14.9	5.0	4.2	10.7	7.2	5.8	7 111	23.0	2.9	3.1
-10.0	-4.6	16 224	-12.8	5.1	5.5	12.5	11.8	12.5	2 926	29.0	2.7	3.6
-1.5	-3.4	187 678	-0.5	0.5	0.5	4.6	1.0	1.0	8 119	20.0	3.4	3.5
3.1	-3.9	45 536	-1.6	2.0	2.0	6.9	4.1	3.9	9 851	89.0	9.1	8.2
0.2	-0.4	37 673	1.4	3.1	3.4	13.1	4.9	5.0	7 986	20.0	4.7	5.9
-10.6	-8.0	15 980	-6.7	4.4	5.3	7.3	11.3	14.1	7 287	11.0	3.9	4.1
-22.5	-28.0	36 365	-16.6	4.2	4.2	-1.6	4.8	5.3	1 105	-14.0	2.0	3.2
4.7	24.0	5 155	-1.3	13.2	18.4	26.0	33.5	47.1	4 352	27.0	11.9	12.4
2.9	3.1	23 336	8.3	5.5	5.5	3.1	7.4	7.8	..	..	7.8	7.4
-17.6	-9.1	20 577	-10.8	3.2	3.7	-11.4	8.3	8.8	1 092	76.0	3.9	4.0
8.2	-2.5	10 666	-0.6	10.2	10.8	3.8	15.2	15.6	..	..	3.8	4.3
6.9	22.7	1 892	-0.7	14.9	16.9	8.7	84.0	95.2	4 455	36.0	4.4	4.1
3.9	4.0	5 760	12.3	7.4	7.5	16.3	26.6	28.3	4 354	56.0	3.8	2.8
-7.1	-0.7	19 045	-24.4	4.5	4.5	5.7	8.0	7.5	2 400	133.0	4.4	4.2
-7.8	-5.2	15 298	-5.4	6.0	6.1	5.4	9.9	9.4	..	..	13.7	12.5
-5.5	-1.0	..	..	4.6	4.3	5.7	..	5.5	..	..	3.2	3.5
-1.3	-2.2	32 044	12.8	3.4	3.6	6.8	4.6	4.9	..	..	7.2	6.2
6.8	7.5	9 179	4.5	10.2	10.2	4.0	15.8	15.4	..	..	3.1	4.2
-6.2	-7.0	26 828	4.4	2.6	2.6	13.6	5.3	5.0	7 985	48.0	10.2	7.6
-1.8	-1.9	88 892	-7.2	0.4	0.5	21.0	1.6	1.5	37 213	17.0	10.6	10.1
2.0	7.8	3 769	4.3	18.5	18.2	21.2	36.2	36.2	..	..	4.2	4.2
-42.8	-23.4	1 832	-31.8	39.9	33.4	-84.4	74.3	69.6	2 526	-57.0	14.1	4.6
5.7	..	95 829	-3.7	0.4	0.5	12.0	1.4	1.4	11 580	..	4.5	5.0
-5.9	2.6	67 838	4.0	1.8	1.7	11.6	2.0	1.9	3 382	-50.0	4.1	4.4

## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				units	€m	%	%	%	€m
101	Danone	Food producers (43)	France	131	0.8	-2.3	5.6	13 700	4.3
102	Misys	Software & computer services (97)	UK	128	2.6	-2.2	7.0	1 255	-1.3
103	RWE	Utilities - other (77)	Germany	128	-70.6	0.2	-33.1	40 996	-4.2
104	BioMerieux	Health (44)	France	127	-3.3	10.8	23.2	931	1.7
105	GKN	Automobiles & parts (31)	UK	126	9.9	-1.2	-16.3	4 921	4.5
106	Knorr-Bremse	Engineering & machinery (26)	Germany	124	3.3	0.8	12.3	2 423	9.8
107	Schott	Chemicals (11)	Germany	120	6.2	-0.9	-8.8	2 023	4.0
108	SNPE	Chemicals (11)	France	114	-0.9	7.5	..	793	1.1
109	Kerry	Food producers (43)	Ireland	111	25.5	12.6	33.8	4 129	11.8
110	Business Objects	Software & computer services (97)	France	111	57.8	27.2	35.7	681	64.9
111	Infogrames Entertainment	Software & computer services (97)	France	111	19.6	-17.3	10.2	701	-20.4
112	Novozymes	Pharma & biotech (48)	Denmark	109	8.0	5.1	5.2	810	3.8
113	Essilor International	Health (44)	France	107	3.1	19.5	8.8	2 260	6.8
114	Sage	Software & computer services (97)	UK	105	28.3	0.3	15.5	971	22.8
115	Merial	Pharma & biotech (48)	UK	104	6.0	2.1	1.6	1 375	8.3
116	Dragerwerk	Health (44)	Germany	104	7.3	24.9	6.8	1 520	7.6
117	L'Air Liquide	Chemicals (11)	France	103	9.5	2.4	2.2	9 376	11.7
118	Metso	Engineering & machinery (26)	Finland	103	-18.3	-13.7	6.6	3 976	-6.4
119	Beiersdorf	Personal care & household (47)	Germany	101	1.0	7.5	1.1	4 546	-2.7
120	Trumpf	Diversified industrials (24)	Germany	98	10.4	90.2	1.4	1 221	2.3
121	Veolia Environnement	Utilities - other (77)	France	95	3.0	-21.3	48.1	28 603	-4.9
122	Spirent	IT hardware (93)	UK	95	2.0	-15.1	-19.0	671	1.8
123	BAT	Tobacco (49)	UK	95	-8.2	17.7	5.1	15 204	1.8
124	GUS	General retailers (52)	UK	95	3.1	-4.4	-4.4	10 999	3.2
125	B Braun Melsungen	Health (44)	Germany	94	-10.7	2.7	34.0	2 793	5.5
126	Smith & Nephew	Health (44)	UK	94	-0.6	5.5	23.4	1 764	5.9
127	Amdocs	Software & computer services (97)	UK	93	6.0	-3.9	17.3	1 305	19.6
128	Gaz De France	Oil & gas (7)	France	90	1.1	-24.6	-7.1	18 129	8.9
129	SAAB	Aerospace & defence (21)	Sweden	89	-0.1	-1.1	13.8	1 976	3.5
130	Bouygues	Construction & building (13)	France	89	4.7	-73.4	66.1	23 402	7.2
131	Umicore	Steel & other metals (18)	Belgium	89	111.9	40.7	..	7 115	52.1
132	Corus	Steel & other metals (18)	UK	89	1.6	-4.6	8.3	13 181	17.3
133	Cadbury Schweppes	Food producers (43)	UK	89	18.9	65.6	10.4	9 517	4.6
134	SKF	Engineering & machinery (26)	Sweden	88	6.1	-2.2	-11.9	4 963	8.3
135	Adidas-Salomon	Household goods & textiles (34)	Germany	88	2.3	1.2	-1.2	6 478	3.4
136	Suez	Utilities - other (77)	France	85	7.6	-37.3	-49.6	40 739	2.8
137	ASM International	IT hardware (93)	The Netherlands	85	7.4	-10.5	10.9	754	29.6
138	Reckitt Benckiser	Personal care & household (47)	UK	85	5.3	5.5	8.0	5 468	4.3
139	British Nuclear Fuels (now British Nuclear Group Selffield)	Electricity (72)	UK	83	-11.9	24.1	-1.8	3 280	4.7
140	Stora Enso	Forestry & paper (15)	Finland	82	-7.5	-22.5	24.2	12 396	1.8
141	Industria de Turbo Propulsores	Aerospace & defence (21)	Spain	82	-24.3	185.4	10.4	379	-6.4
142	Avecia	Chemicals (11)	UK	82	-1.9	-2.8	9.8	685	-15.7
143	UBIsoft Entertainment	Software & computer services (97)	France	80	9.5	1 141.5	-92.5	508	13.1
144	Grundfos	Engineering & machinery (26)	Denmark	77	23.2	2.1	-0.9	1 634	9.0
145	Danfoss	Engineering & machinery (26)	Denmark	76	-2.1	20.1	14.5	2 197	5.9
146	Johnson Matthey	Chemicals (11)	UK	76	-1.1	12.6	8.5	6 552	3.2
147	Danisco	Food producers (43)	Denmark	75	10.1	-1.9	11.2	2 398	8.8
148	Italtel	IT hardware (93)	Italy	75	-7.7	-12.1	-23.1	542	-8.4
149	Wincor Nixdorf	Software & computer services (97)	Germany	73	10.3	5.2	20.0	1 576	9.4
150	Svenska Cellulosa	Forestry & paper (15)	Sweden	73	4.1	-29.2	7.2	9 960	5.4

Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
-3.1	-6.3	89 449	1.0	1.0	1.0	7.5	1.5	1.5	22 394	38.0	3.7	4.1
-11.2	-2.2	6 507	1.0	10.2	9.8	4.3	19.7	19.4	1 654	20.0	1.0	1.3
-1.6	-27.6	106 138	-23.9	0.3	1.0	12.3	1.2	3.1	30 918	55.0	8.1	9.5
-3.1	18.1	5 430	-0.9	13.6	14.3	13.8	23.4	23.9	1 607	55.0	8.1	8.2
0.9	-3.7	36 603	3.2	2.6	2.4	-0.3	3.4	3.2	3 043	28.0	5.4	4.8
4.5	28.2	10 954	0.9	5.1	5.4	9.1	11.3	11.1	..	..	2.9	2.5
-0.5	-2.4	18 616	-5.0	5.9	5.8	4.6	6.4	5.8	..	..	8.8	10.1
-2.1	..	5 094	-4.1	14.4	14.7	-8.3	22.4	21.7	..	..	6.9	8.3
-1.7	25.0	21 671	14.9	2.7	2.4	5.7	5.1	4.7	3 901	38.0	2.8	2.7
23.3	9.5	3 834	-2.3	16.3	17.0	9.2	28.9	17.9	2 315	64.0	3.2	2.2
14.4	14.2	1 511	-18.1	15.8	10.5	-1.4	73.1	50.1	273	85.0	0.6	0.7
2.9	6.9	3 928	3.0	13.4	12.9	17.8	27.7	26.4	..	..	4.7	6.8
0.6	3.6	24 045	10.7	4.7	4.9	15.0	4.5	4.8	6 130	31.0	6.4	6.1
1.5	13.9	7 635	31.5	10.8	10.4	26.9	13.8	14.1	4 281	37.0	6.4	7.7
4.0	3.2	6 246	-1.9	7.6	7.7	13.1	16.7	15.4	..	..	4.9	5.1
6.0	6.1	9 781	-5.4	6.8	6.9	6.6	10.6	9.4	310	25.0	3.0	3.5
6.3	-5.1	35 900	12.6	1.1	1.1	13.5	2.9	3.0	16 004	23.0	9.2	8.0
-9.4	8.0	24 363	-11.1	2.6	3.0	2.9	4.2	4.6	2 720	109.0	2.3	4.2
-1.5	4.4	16 492	-9.6	2.2	2.1	11.1	6.1	5.5	7 989	13.0	3.4	3.3
55.3	-4.0	5 847	2.1	8.0	7.4	8.3	16.7	15.5	..	..	6.6	5.4
3.3	10.4	207 561	-19.3	0.3	0.3	-2.8	0.5	0.4	13 193	..	7.4	7.1
-16.5	-30.4	4 521	0.5	14.2	14.1	7.2	21.0	20.7	736	-1.0	5.4	3.6
-0.3	-6.8	60 953	0.1	0.6	0.7	18.0	1.6	1.7	32 964	29.0	3.4	4.0
5.6	10.7	73 088	-4.2	0.9	0.9	9.6	1.3	1.2	13 112	6.0	4.5	3.4
-3.6	30.1	29 822	2.0	3.4	4.0	7.3	3.2	3.6	..	..	6.1	5.9
6.2	2.6	7 866	5.6	5.3	5.7	14.1	11.9	12.7	6 964	-5.0	7.6	6.1
-8.1	5.1	10 600	3.9	7.1	8.0	16.8	8.8	8.6	4 448	29.0	3.1	4.2
14.4	2.7	38 016	-0.7	0.5	0.5	8.9	2.4	2.3	28 040	..	8.9	10.1
4.3	5.4	12 115	-7.7	4.5	4.7	8.9	7.4	6.8	1 319	0.0	2.0	3.3
0.3	8.6	128 777	0.7	0.4	0.4	5.9	0.7	0.7	12 299	50.0	4.7	4.4
47.4	-9.7	11 521	19.5	1.3	0.9	3.9	7.7	4.4	1 866	55.0	2.2	3.0
10.6	-6.6	48 600	-3.4	0.7	0.8	6.5	1.8	1.7	3 030	6.0	4.0	2.1
21.6	-4.0	58 442	4.7	0.9	0.8	12.4	1.5	1.3	15 771	20.0	4.3	4.7
-2.5	-2.2	38 502	2.3	1.8	1.8	9.4	2.3	2.2	4 312	36.0	3.1	3.3
-3.9	6.7	16 342	6.0	1.4	1.4	8.9	5.4	5.6	7 540	72.0	1.8	1.8
-12.4	6.8	160 712	-7.3	0.2	0.2	7.9	0.5	0.5	25 182	74.0	5.3	6.5
12.1	-7.5	8 160	16.6	11.3	13.6	11.7	10.4	11.3	599	-2.0	7.7	5.2
5.2	2.7	19 900	-2.5	1.6	1.5	19.6	4.3	3.9	17 706	12.0	2.0	1.9
-1.9	5.4	23 149	0.8	2.5	3.0	-12.3	3.6	4.1	..	..	21.7	42.3
-4.8	-5.4	43 779	-1.1	0.7	0.7	4.9	1.9	2.0	9 069	6.0	7.8	10.1
4.4	4.6	2 244	1.9	21.6	26.7	9.9	36.4	49.0	..	..	..	..
-28.4	1.8	3 101	-9.9	11.9	10.2	-16.4	26.3	24.1	..	..	10.2	8.0
21.7	41.9	2 352	18.2	15.8	16.3	1.0	34.1	36.8	774	183.0	1.2	1.8
4.2	4.8	12 618	8.1	4.7	4.2	10.6	6.1	5.3	..	..	10.0	9.3
3.4	3.7	17 399	-0.5	3.5	3.8	6.1	4.4	4.5	..	..	7.4	2.5
3.9	-10.5	7 532	1.3	1.2	1.2	3.5	10.1	10.3	3 472	23.0	2.1	2.5
-0.9	-6.5	9 235	9.4	3.1	3.1	10.8	8.1	8.1	2 429	27.0	4.3	5.3
-14.3	-25.3	2 484	-6.8	13.8	13.6	-1.6	30.0	30.3	..	..	2.4	3.4
7.1	-8.0	5 575	16.2	4.6	4.6	5.4	13.1	13.8	1 237	..	1.7	1.5
-3.1	6.9	49 919	19.9	0.7	0.7	6.3	1.5	1.7	6 026	-6.0	7.8	8.4

## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				units	€m	%	%	%	€m
151	<i>Claas</i>	Engineering & machinery (26)	Germany	73	8.0	6.6	30.0	1 928	28.9
152	Tomkins	Engineering & machinery (26)	UK	73	-12.5	13.9	-4.9	4 210	-5.4
153	Gemplus International	Electronic & Electrical (25)	Luxembourg	72	0.3	-31.4	-8.7	865	15.5
154	Stork	Engineering & machinery (26)	The Netherlands	71	-4.1	131.3	28.0	1 824	-6.3
155	ARM	IT hardware (93)	UK	71	4.1	-3.7	28.5	216	19.3
156	EPCOS	Electronic & Electrical (25)	Germany	71	1.9	-26.2	0.4	1 362	7.1
157	Orion	Health (44)	Finland	71	-17.9	-21.6	30.5	1 944	-14.1
158	Deutz	Engineering & machinery (26)	Germany	70	26.6	16.6	-2.5	1 242	5.9
159	Barco	Electronic & Electrical (25)	Belgium	69	-1.0	-36.5	3.8	672	6.8
160	Cobham	Aerospace & defence (21)	UK	69	20.5	27.8	12.1	1 388	18.0
161	Trelleborg	Automobiles & parts (31)	Sweden	68	27.0	3.2	-5.1	2 537	27.6
162	Gambro	Health (44)	Sweden	68	-4.2	19.9	26.2	2 947	1.9
163	Kone	Engineering & machinery (26)	Finland	67	-23.9	39.7	54.4	4 450	-16.7
164	<i>Cognis Deutschland</i>	Chemicals (11)	Germany	66	1.5	-14.5	4.1	3 073	4.2
165	<i>Eberspaecher</i>	Automobiles & parts (31)	Germany	66	7.0	-5.4	..	1 468	9.9
166	<i>Giesecke &amp; Devrient</i>	Support services (58)	Germany	63	-15.1	-5.4	-11.0	1 157	10.5
167	Cambridge Antibody	Pharma & biotech (48)	UK	62	-1.9	43.7	46.3	22	83.3
168	<i>Chiesi Farmaceutici</i>	Pharma & biotech (48)	Italy	62	-4.7	..	..	474	14.2
169	Bang & Olufsen	Electronic & Electrical (25)	Denmark	61	28.2	6.8	-3.8	486	-9.0
170	Chr Hansen	Pharma & biotech (48)	Denmark	61	-9.6	16.9	31.4	601	3.1
171	Voest-Alpine	Steel & other metals (18)	Austria	60	16.3	12.2	27.8	5 779	24.4
172	Wartsila	Engineering & machinery (26)	Finland	59	-15.4	-19.9	9.8	2 478	5.1
173	IWKA	Engineering & machinery (26)	Germany	59	-0.7	-1.0	6.4	2 169	-5.2
174	BOC	Chemicals (11)	UK	59	4.3	-15.1	-21.7	5 488	4.5
175	Vattenfall	Electricity (72)	Sweden	59	10.7	-1.7	-21.1	12 551	1.3
176	MG Technologies	Engineering & machinery (26)	Germany	59	-37.4	2.9	-16.3	4 059	-36.6
177	Koenig & Bauer	Engineering & machinery (26)	Germany	58	0.9	16.6	34.6	1 423	15.5
178	LogicaCMG	Software & computer services (97)	UK	58	-28.5	-10.2	-22.4	2 359	-2.2
179	Repsol YPF	Oil & gas (7)	Spain	57	-57.5	2.3	4.0	40 585	12.5
180	Salzgitter	Steel & other metals (18)	Germany	57	-0.9	22.3	-2.1	5 942	22.7
181	VA Technologie	Engineering & machinery (26)	Austria	56	-2.5	-8.0	-33.8	4 073	3.8
182	Assa Abloy	Support services (58)	Sweden	55	11.9	4.2	16.9	2 826	6.0
183	<i>Eidos</i>	Software & computer services (97)	UK	55	20.3	-16.1	-8.4	189	-11.7
184	FastWeb	Telecommunication services (67)	Italy	55	43.6	-32.1	73.3	720	36.1
185	E ON	Utilities - other (77)	Germany	55	-20.3	-81.8	-25.5	44 745	5.2
186	Draka	Electronic & Electrical (25)	The Netherlands	54	24.2	-3.0	-21.8	1 743	22.7
187	<i>Symbian</i>	Software & computer services (97)	UK	54	15.9	3.6	15.8	64	52.4
188	Lafarge	Construction & building (13)	France	54	-3.6	1.8	3.8	14 436	5.7
189	Sorin	Health (44)	Italy	54	-11.3	21.3	11.3	719	-14.8
190	Bull	IT hardware (93)	France	54	-10.0	-17.8	-40.7	1 139	-10.0
191	Bekaert	Engineering & machinery (26)	Belgium	54	49.8	-13.6	24.0	2 173	20.9
192	HVB	Banks (81)	Germany	53	-41.8	-37.7	4.3	9 219	28.3
193	Intenia International	Software & computer services (97)	Sweden	52	1.2	-14.7	18.9	330	1.9
194	<i>Nyco</i>	Pharma & biotech (48)	Denmark	51	55.8	..	..	645	1.6
195	Genmab	Pharma & biotech (48)	Denmark	50	7.9	-12.7	101.3	1	-88.9
196	Gamesa	Engineering & machinery (26)	Spain	50	22.4	21.6	-31.0	1 736	10.4
197	Spectris	Electronic & Electrical (25)	UK	49	2.3	15.2	-2.0	868	8.2
198	Software	Software & computer services (97)	Germany	49	-16.0	-9.3	-2.4	411	-2.6
199	Axalto	Electronic & Electrical (25)	The Netherlands	48	-1.6	-8.5	..	707	-7.9
200	Deutsche Borse	Other financials (87)	Germany	47	-14.0	-37.8	-16.6	1 591	-0.2

Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
18.3	10.2	8 153	11.8	3.8	4.5	3.1	8.9	9.2	..	..	2.1	3.5
0.2	-6.8	36 720	-6.6	1.7	1.9	8.3	2.0	2.1	3 068	11.0	5.3	4.6
-4.8	-23.1	5 476	8.7	8.3	9.6	2.4	13.2	14.3	1 195	33.0	2.7	2.0
-6.4	-5.3	12 789	-11.7	3.9	3.8	5.2	5.6	5.1	1 316	153.0	2.6	2.5
-15.0	2.9	774	6.0	32.8	37.6	23.0	91.5	93.1	2 356	55.0	3.2	2.8
-3.1	-31.1	15 587	17.3	5.2	5.5	4.4	4.5	5.2	931	0.0	8.1	7.5
38.9	67.8	4 614	-17.2	3.6	3.8	6.6	15.3	15.4	1 602	26.0	1.2	1.4
1.0	-2.0	5 535	0.4	5.6	4.7	1.2	12.6	10.0	558	111.0	2.1	2.4
-6.0	-15.5	4 389	9.1	10.3	11.1	8.7	15.7	17.3	764	-3.0	3.4	3.0
13.3	1.8	9 863	9.7	5.0	4.9	13.7	7.0	6.3	2 178	1.0	5.9	4.8
1.8	-6.0	21 675	36.7	2.7	2.7	4.0	3.1	3.4	1 119	14.0	3.7	3.2
-5.2	3.2	21 391	0.6	2.3	2.5	-1.8	3.2	3.3	3 722	41.0	5.5	7.9
23.1	54.2	30 976	-10.2	1.5	1.7	9.6	2.2	2.6	3 010	29.0	2.1	1.4
-5.6	-0.2	8 059	-6.9	2.1	2.2	3.4	8.2	7.5	..	..	3.8	3.5
-5.5	..	5 123	0.1	4.5	4.6	1.8	12.8	12.0	..	..	3.9	3.9
-3.8	-2.5	7 337	7.4	5.4	7.1	5.7	8.5	10.8	..	..	3.8	9.1
-7.7	30.0	283	-4.4	283.3	529.5	-265.0	220.2	214.7	511	78.0	4.5	58.3
..	..	2 517	6.7	13.1	15.8	9.8	24.8	27.7	..	..	1.3	..
-5.7	10.5	2 717	-3.1	12.6	9.0	9.3	22.6	17.1	622	18.0	3.9	3.4
-7.0	0.3	3 644	2.3	10.1	11.6	7.2	16.7	18.9	1 070	153.0	10.8	10.1
6.0	30.7	23 877	1.2	1.0	1.1	8.9	2.5	2.2	2 540	84.0	8.4	9.2
-6.4	6.8	12 361	0.6	2.4	3.0	4.8	4.8	5.7	2 250	124.0	1.9	2.4
-1.1	1.3	13 311	2.4	2.7	2.6	3.7	4.5	4.6	501	15.0	1.9	2.4
1.6	-3.0	44 260	-2.6	1.1	1.1	13.9	1.3	1.2	7 479	13.0	6.6	7.6
16.6	39.2	33 017	-6.5	0.5	0.4	17.3	1.8	1.5	8 800	93.0	8.7	7.9
-21.3	-7.8	26 327	-15.4	1.4	1.5	4.3	2.2	3.0	1 948	9.0	2.4	4.0
-9.0	5.0	7 370	1.4	4.1	4.7	1.4	7.9	7.9	285	51.0	3.4	3.3
-3.3	-12.1	19 651	-7.0	2.5	3.4	4.1	3.0	3.8	1 908	9.0	1.6	1.5
1.4	-18.6	32 376	5.7	0.1	0.4	9.2	1.8	4.4	29 484	38.0	5.9	6.2
2.1	3.2	17 625	-2.9	1.0	1.2	6.8	3.2	3.2	1 871	234.0	3.7	3.8
1.3	-3.2	16 562	-5.2	1.4	1.5	-1.8	3.4	3.3	997	-11.0	1.3	1.1
-5.2	12.8	29 160	1.6	2.0	1.9	10.9	1.9	1.7	3 601	19.0	2.9	3.4
46.6	-28.1	696	29.9	29.3	21.5	-2.5	79.5	85.9	..	..	2.1	0.9
64.8	107.1	2 108	43.4	7.7	7.3	-16.8	26.1	26.1	2 741	..	50.0	75.4
17.8	-48.2	73 142	8.8	0.1	0.2	13.2	0.8	1.0	54 599	49.0	6.7	6.9
-5.3	-21.8	8 502	11.4	3.1	3.1	-0.3	6.4	5.7	367	7.0	1.3	1.9
68.0	25.0	734	12.4	84.7	111.3	-65.7	73.8	71.6	..	..	7.8	9.5
-6.5	6.7	77 075	2.3	0.4	0.4	12.9	0.7	0.7	13 686	27.0	7.3	5.8
-4.2	-7.9	4 776	-13.1	7.5	7.2	-3.5	11.3	11.1	868	1 834.0	5.0	5.5
-16.4	-40.5	7 531	-3.4	4.7	4.7	2.1	7.2	7.7	648	174.0	1.2	0.7
-3.5	3.7	12 291	9.7	2.5	2.0	10.6	4.4	3.2	1 463	50.0	7.6	6.1
13.6	-27.5	58 438	-8.0	0.6	1.3	-20.2	0.9	1.4	16 895	94.0	..	..
-18.6	-9.1	2 639	-15.0	15.6	15.7	-9.3	19.5	16.4	288	122.0	0.6	0.6
..	..	3 019	6.6	8.0	5.2	3.1	17.0	11.7	..	..	4.5	2.7
..	..	206	3.5	5 019.0	516.8	-10 766.4	243.6	233.7	403	33.0	300.0	33.3
44.1	47.8	7 222	17.2	2.9	2.6	16.0	6.9	6.6	2 851	13.0	6.0	4.6
15.9	-9.8	5 896	3.5	5.7	6.0	8.6	8.4	8.5	1 001	39.0	2.7	3.0
-11.2	-19.2	2 512	-11.7	11.9	13.8	20.4	19.5	20.5	1 081	63.0	1.5	1.9
5.2	..	4 823	12.2	6.8	6.4	9.4	10.0	11.4	1 074	..	3.8	2.5
44.3	45.4	3 080	1.0	3.0	3.4	31.1	15.3	18.0	8 190	107.0	..	..

## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				units	€m	%	%	%	€m
201	Wavecom	IT hardware (93)	France	47	-24.2	-3.1	96.4	152	-44.9
202	UPM-Kymmene	Forestry & paper (15)	Finland	47	-2.1	4.3	2.2	9 820	-1.3
203	Nexans	Electronic & Electrical (25)	France	47	0.0	-2.1	-4.0	4 900	21.1
204	Arla Foods	Food producers (43)	Denmark	46	-9.5	..	..	6 400	17.1
205	GN Store Nord	IT hardware (93)	Denmark	46	16.2	-50.3	-11.4	746	17.1
206	Kemira	Chemicals (11)	Finland	46	-4.6	3.7	17.9	2 533	-7.5
207	Alfa Laval	Engineering & machinery (26)	Sweden	45	9.7	3.6	4.1	1 659	7.7
208	Leoni	Electronic & Electrical (25)	Germany	44	21.0	12.3	..	1 247	15.5
209	HeidelbergCement	Construction & building (13)	Germany	44	2.3	-2.3	-6.4	6 929	8.7
210	Getinge	Health (44)	Sweden	44	53.8	3.9	14.2	1 206	18.9
211	William Demant	Health (44)	Denmark	44	9.9	8.3	7.6	578	11.2
212	Gedeon Richter	Pharma & biotech (48)	Hungary	43	12.3	15.9	23.8	606	2.5
213	Telekom Austria	Telecommunication services (67)	Austria	42	-0.9	40.9	39.1	4 056	2.2
214	Groupe SEB	Household goods & textiles (34)	France	42	3.9	8.8	28.6	2 339	-0.4
215	TTP Communications	IT hardware (93)	UK	42	31.3	4.8	2.6	88	25.7
216	Borealis	Chemicals (11)	Denmark	41	-4.7	4.9	-2.4	4 628	26.0
217	Outokumpu	Steel & other metals (18)	Finland	41	-14.6	2.1	14.6	7 136	20.5
218	Christian Dior	Household goods & textiles (34)	France	41	0.0	-12.8	-26.6	13 201	5.9
219	NKT	Electronic & Electrical (25)	Denmark	41	49.9	-15.1	11.2	1 038	32.6
220	Acambis	Pharma & biotech (48)	UK	41	45.2	22.1	-7.7	121	-49.4
221	Burelle	Automobiles & parts (31)	France	41	-0.8	9.1	31.5	2 038	4.5
222	CSM	Food producers (43)	The Netherlands	40	0.0	14.3	..	3 475	-1.2
223	SkyePharma	Pharma & biotech (48)	UK	40	11.6	66.4	30.2	88	17.3
224	Filtronic	IT hardware (93)	UK	39	-1.5	-11.9	0.5	335	-1.8
225	Patria	Aerospace & defence (21)	Finland	39	46.5	24.5	184.2	346	33.6
226	Meggitt	Aerospace & defence (21)	UK	39	38.4	-13.1	-10.3	677	19.2
227	Aegis	Media & entertainment (54)	UK	39	7.0	5.3	5.6	1 055	15.2
228	Vestas Wind Systems	Electronic & Electrical (25)	Denmark	39	39.6	38.3	..	2 561	54.9
229	IMMSI	Automobiles & parts (31)	Italy	39	2.1	..	..	1 137	748.5
230	Gildemeister	Engineering & machinery (26)	Germany	38	-8.1	-12.7	-4.5	1 052	7.6
231	Jungheinrich	Engineering & machinery (26)	Germany	38	15.1	11.0	4.3	1 531	4.1
232	IMI	Engineering & machinery (26)	UK	38	-5.0	0.0	17.6	2 276	2.4
233	Euronext	Other financials (87)	The Netherlands	38	75.2	20.6	..	887	-9.0
234	Recordati	Pharma & biotech (48)	Italy	37	13.9	-6.7	13.5	488	0.0
235	Novar	Construction & building (13)	UK	37	-12.4	15.4	-4.1	2 089	3.4
236	Metsaliitto	Forestry & paper (15)	Finland	37	2.8	12.5	6.7	8 554	2.8
237	PUMA	Household goods & textiles (34)	Germany	37	23.4	23.6	21.7	1 530	20.1
238	Pilkington	Construction & building (13)	UK	37	-10.3	-3.4	-6.2	3 382	-1.9
239	Zeltia	Pharma & biotech (48)	Spain	37	-28.3	14.9	38.8	79	6.8
240	Haldex	Automobiles & parts (31)	Sweden	37	11.8	2.1	-3.3	748	12.0
241	Danske Bank	Banks (81)	Denmark	37	..	..	..	3 623	-0.5
242	Krka	Pharma & biotech (48)	Slovenia	35	14.3	8.1	19.7	473	17.1
243	Vilmorin Clause	Food producers (43)	France	35	18.0	1.0	1.4	492	13.1
244	IBS	Software & computer services (97)	Sweden	35	8.3	-7.6	11.3	262	-1.5
245	Cookson	Engineering & machinery (26)	UK	34	-24.8	-2.1	-18.7	2 335	0.8
246	RAG	Diversified industrials (24)	Germany	34	-23.1	..	..	15 796	22.8
247	Ingenico	Electronic & Electrical (25)	France	34	-0.2	-20.2	57.4	427	19.9
248	Neopost	Electronic & Electrical (25)	France	34	3.7	-1.8	1.8	756	0.7
249	Phoenix Venture	Automobiles & parts (31)	UK	34	-73.6	98.9	135.8	2 361	-3.9
250	Auna	Telecommunication services (67)	Spain	34	58.7	-55.2	..	4 217	11.2



Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
-49.9	70.6	458	-33.8	31.0	22.5	-53.4	102.8	89.8	161	305.0	2.0	4.0
-5.0	5.6	34 815	-2.6	0.5	0.5	6.0	1.4	1.3	8 388	13.0	5.8	6.0
-6.0	-9.9	17 662	3.5	1.0	1.2	2.2	2.7	2.8	835	51.0	1.9	1.7
3.1	3.4	20 855	17.2	0.7	0.9	3.1	2.2	2.9	..	..	6.3	5.1
-14.0	-24.7	4 640	6.8	6.2	6.2	9.5	10.0	9.2	1 874	39.0	4.0	3.1
4.8	6.4	9 714	-7.8	1.8	1.7	5.1	4.7	4.5	1 435	22.0	5.9	5.2
-4.7	-7.8	9 400	2.2	2.7	2.6	8.1	4.8	4.4	1 440	9.0	2.3	1.8
-3.1	1.5	26 376	33.2	3.5	3.4	5.0	1.7	1.8	643	69.0	5.9	8.4
-2.5	-2.3	42 062	11.4	0.6	0.7	1.6	1.1	1.1	6 553	106.0	6.6	6.5
6.0	6.1	6 713	10.8	3.6	2.8	13.8	6.5	4.7	1 928	21.0	3.2	3.6
-1.3	11.9	4 490	5.1	7.5	7.6	23.3	9.7	9.3	2 373	33.0	7.1	3.5
21.1	13.8	..	..	7.1	6.5	25.1	..	..	2 148	59.0	..	..
27.7	16.9	13 639	-6.9	1.1	1.1	11.5	3.1	2.9	7 654	34.0	13.5	15.1
-5.9	34.6	14 359	-2.1	1.8	1.7	7.4	2.9	2.8	1 495	-1.0	3.6	4.1
0.0	22.8	560	13.8	47.4	45.3	-1.7	74.4	64.5	114	-36.0	8.0	4.3
4.5	-5.2	4 939	-1.9	0.9	1.2	7.1	8.3	8.5	..	..	4.1	3.3
6.5	4.4	19 761	2.1	0.6	0.8	7.6	2.1	2.5	2 235	7.0	4.7	11.3
-5.3	4.8	58 679	3.3	0.3	0.3	15.6	0.7	0.7	12 021	48.0	5.1	4.5
-1.1	-8.3	5 972	21.1	3.9	3.5	0.9	6.9	5.5	729	78.0	2.8	2.8
111.5	769.2	289	-6.8	33.7	11.8	25.8	141.2	90.7	397	-22.0	4.1	3.8
5.2	3.2	8 477	0.2	2.0	2.1	2.8	4.8	4.9	204	..	6.2	4.5
2.9	-5.6	13 614	-0.7	1.2	1.1	6.4	2.9	2.9	2 070	51.0	3.5	4.0
-23.5	50.8	438	-8.0	44.9	47.2	-33.3	90.2	74.4	520	6.0	6.8	8.0
-13.9	-5.7	3 369	16.5	11.8	11.7	1.2	11.7	13.8	281	52.0	4.8	3.5
11.2	6.4	1 988	-2.2	11.4	10.4	8.7	19.8	13.2	..	..	4.9	13.1
-0.4	-7.3	4 424	27.1	5.8	5.0	14.2	8.8	8.1	1 896	107.0	3.0	2.1
9.6	11.9	10 149	20.3	3.7	4.0	9.6	3.8	4.3	1 894	44.0	3.9	3.2
18.5	8.9	..	..	1.5	1.7	-0.4	..	4.3	2 662	62.0	3.5	5.1
..	..	6 599	40.5	3.4	28.3	4.3	5.9	8.1	484	..	5.8	..
-5.2	-9.8	5 117	1.4	3.6	4.2	4.0	7.5	8.2	268	10.0	1.2	2.4
-0.3	-4.8	9 012	-1.9	2.5	2.3	4.8	4.2	3.6	312	21.0	9.5	11.4
-2.4	-1.8	17 063	1.6	1.7	1.8	6.8	2.2	2.4	2 239	24.0	3.2	3.2
0.3	42.3	2 511	-7.9	4.2	2.2	25.9	15.0	7.9	3 307	42.0	..	..
-1.0	13.9	1 796	-16.8	7.6	6.7	17.5	20.8	15.2	1 268	73.0	3.9	3.5
-1.2	-2.2	13 405	-0.5	1.8	2.1	2.9	2.8	3.1	..	..	2.7	2.9
-6.2	1.1	29 515	-1.8	0.4	0.4	0.1	1.3	1.2	..	..	12.1	4.9
40.0	52.2	3 475	23.0	2.4	2.3	23.9	10.6	10.6	3 613	25.0	2.6	2.0
1.1	-2.3	24 100	-2.4	1.1	1.2	9.2	1.5	1.7	2 342	35.0	4.8	6.1
17.5	3.3	532	-9.8	46.5	69.2	-7.3	69.0	86.8	1 195	27.0	3.8	13.5
-5.9	3.1	4 317	7.4	4.9	4.9	4.6	8.5	8.2	299	27.0	4.0	3.7
5.1	-2.5	15 712	-4.1	1.0	..	50.0	2.3	..	14 801	..	..	..
9.5	10.5	4 678	5.7	7.4	7.6	15.4	7.5	6.9	1 109	17.0	16.9	21.0
-0.5	3.1	3 029	8.7	7.1	6.8	9.5	11.5	10.6	507	..	2.4	2.8
-4.7	-3.8	1 915	-2.4	13.2	12.0	1.6	18.1	16.3	162	129.0	1.1	1.1
-5.1	-14.3	16 263	-1.3	1.5	2.0	2.8	2.1	2.8	914	-3.0	2.6	3.0
-1.2	-14.8	93 657	17.6	0.2	0.3	-21.0	0.4	0.6	..	..	7.2	6.7
-16.2	9.5	1 438	-18.5	8.0	9.6	0.9	23.8	19.4	314	-26.0	1.4	2.5
-1.3	32.3	4 627	2.0	4.5	4.4	22.7	7.3	7.2	2 436	88.0	6.5	7.1
2.5	76.6	6 523	-1.2	1.4	5.2	-5.1	5.2	19.4	..	..	2.5	4.8
20.8	34.5	4 582	-8.2	0.8	0.6	7.2	7.3	4.2	..	..	16.2	13.4

## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				units	€m	%	%	%	€m
251	Compagnie Generale de Geophysique	Oil & gas (7)	France	34	24.5	-0.7	-23.2	693	13.2
252	<i>lastminute.com</i>	General retailers (52)	UK	33	7.6	82.3	-16.7	621	133.5
253	Technip	Oil & gas (7)	France	33	-0.3	-11.0	104.4	5 141	9.1
254	Anglo American	Mining (4)	UK	33	15.4	34.4	-3.3	18 341	33.8
255	Numico	Food producers (43)	The Netherlands	33	3.1	-25.6	..	1 722	-45.4
256	Micronic Laser Systems	IT hardware (93)	Sweden	33	-1.3	-5.4	46.7	93	97.9
257	Duerr	Engineering & machinery (26)	Germany	33	-1.7	-6.4	-3.2	2 136	-5.7
258	<i>JCB Service</i>	Engineering & machinery (26)	UK	32	31.4	-11.2	-9.2	1 274	10.5
259	Boots	General retailers (52)	UK	32	6.1	-17.1	-6.2	7 725	2.7
260	<i>Biovitrum</i>	Pharma & biotech (48)	Sweden	32	-10.8	-40.5	91.1	71	-61.2
261	Jenoptik	Engineering & machinery (26)	Germany	32	1.3	6.3	4.8	2 523	27.3
262	Amer (now Amer Sports)	Household goods & textiles (34)	Finland	31	2.0	28.5	4.8	1 059	-4.1
263	Sopra	Software & computer services (97)	France	31	6.5	2.1	10.8	629	19.8
264	Beru	Automobiles & parts (31)	Germany	31	5.9	69.0	-26.2	386	9.0
265	<i>Zambon</i>	Pharma & biotech (48)	Italy	31	-3.4	1.6	..	433	-5.7
266	Sud-Chemie	Chemicals (11)	Germany	31	6.2	2.7	-7.1	862	13.0
267	TUI	Leisure & hotels (53)	Germany	31	47.4	-22.0	..	18 046	-6.1
268	<i>Tioxide</i>	Chemicals (11)	UK	31	4.3	260.5	-29.8	2 921	19.8
269	Pace Micro Technology	Household goods & textiles (34)	UK	30	-21.2	-26.5	9.3	339	44.3
270	Sartorius	Pharma & biotech (48)	Germany	30	8.1	9.4	-0.4	468	5.9
271	Intracom	IT hardware (93)	Greece	29	-46.1	-16.9	-11.0	620	-3.3
272	Dialog Semiconductor	IT hardware (93)	UK	29	-5.0	-1.9	12.0	116	24.7
273	Kontron	IT hardware (93)	Germany	28	8.1	1.3	46.7	262	14.4
274	Industrial and Financial Systems	Software & computer services (97)	Sweden	28	-4.8	17.5	11.4	241	-7.0
275	Tessenderlo	Chemicals (11)	Belgium	28	2.9	5.4	4.0	2 078	5.4
276	Innogenetics	Pharma & biotech (48)	Belgium	28	10.4	17.0	19.5	71	9.2
277	GPC Biotech	Pharma & biotech (48)	Germany	28	86.4	-19.2	-8.2	13	-38.1
278	<i>Ahlstrom</i>	Chemicals (11)	Finland	28	-16.1	18.8	-52.6	1 568	0.8
279	Sudzucker	Food producers (43)	Germany	28	6.2	2.0	11.8	4 827	5.5
280	Coloplast	Health (44)	Denmark	27	-1.4	..	..	816	7.1
281	Phoenix	Automobiles & parts (31)	Germany	27	-37.7	-9.9	-3.2	1 023	-11.3
282	Imagination Technologies	IT hardware (93)	UK	27	19.5	24.9	17.8	43	-2.3
283	Vernalis	Pharma & biotech (48)	UK	27	-38.6	33.3	10.4	21	16.7
284	Eramet	Steel & other metals (18)	France	27	22.7	..	..	1 990	-2.6
285	<i>Delft Instruments</i>	Engineering & machinery (26)	The Netherlands	27	60.0	-1.8	33.8	279	17.7
286	Tate & Lyle	Food producers (43)	UK	27	11.8	-5.6	5.9	4 239	4.4
287	<i>BBC</i>	Media & entertainment (54)	UK	27	-10.0	22.9	11.8	5 417	3.5
288	Active Biotech	Pharma & biotech (48)	Sweden	27	-15.7	1.0	4.6	8	..
289	<i>Campina</i>	Food producers (43)	The Netherlands	26	-1.5	10.8	-2.0	3 559	-2.6
290	<i>LK</i>	Mining (4)	Sweden	26	102.6	14.8	-12.9	995	20.3
291	Flamel Technologies	Pharma & biotech (48)	France	26	74.8	65.3	14.8	41	115.8
292	Fortum	Oil & gas (7)	Finland	26	-25.7	-7.9	-28.3	11 665	2.4
293	ISOFT	Software & computer services (97)	UK	26	44.1	60.8	49.9	370	75.4
294	<i>Henlys</i>	Engineering & machinery (26)	UK	26	12.5	164.7	-25.9	443	-34.3
295	Qiagen	Pharma & biotech (48)	The Netherlands	25	15.5	8.0	8.5	280	8.1
296	Nutreco	Food producers (43)	The Netherlands	25	4.2	12.1	3.9	3 858	5.0
297	Elekta	Health (44)	Sweden	25	19.6	31.2	13.4	321	4.2
298	Societe BIC	Household goods & textiles (34)	France	25	-17.9	-17.5	-20.4	1 386	1.9
299	MGI Coutier	Automobiles & parts (31)	France	25	6.7	12.7	-5.5	461	-1.7
300	KSB	Engineering & machinery (26)	Germany	25	2.1	2.5	-5.6	1 267	7.6



Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
-12.7	-12.7	3 669	15.2	4.8	4.4	4.4	9.1	8.4	973	114.0	6.2	5.9
442.9	88.5	2 220	81.4	5.4	11.7	-16.9	15.0	25.3	..	..	5.6	9.4
5.8	25.6	19 000	0.0	0.6	0.7	2.4	1.7	1.8	4 516	77.0	2.3	2.6
23.1	2.4	209 000	8.3	0.2	0.2	17.7	0.2	0.1	39 633	28.0	14.4	17.7
-20.6	-8.6	10 901	-58.4	1.9	1.0	18.5	3.0	1.2	6 186	..	5.2	2.4
-14.5	-28.6	359	15.1	35.0	70.2	15.2	90.7	105.7	324	59.0	2.2	12.8
8.8	-5.4	13 079	0.9	1.5	1.5	1.6	2.5	2.6	217	-2.0	0.9	0.8
5.7	-9.7	4 233	2.1	2.5	2.1	1.5	7.5	5.9	..	..	4.5	4.9
0.0	-0.1	69 631	1.1	0.4	0.4	9.2	0.5	0.4	6 239	-15.0	5.3	4.0
27.1	121.5	579	3.8	45.0	19.6	-12.5	55.1	64.1	..	..	22.5	5.5
25.1	-20.8	10 052	-0.1	1.3	1.6	1.1	3.2	3.1	413	28.0	1.4	1.7
0.2	0.2	4 174	2.1	3.0	2.8	9.6	7.5	7.5	1 118	11.0	1.4	1.6
0.8	3.2	7 500	23.8	5.0	5.6	6.2	4.2	4.9	551	59.0	1.7	0.8
16.8	0.0	2 664	-1.1	8.1	8.3	13.3	11.7	11.0	700	42.0	9.6	10.2
4.8	..	2 352	-2.9	7.2	7.0	6.3	13.2	13.2	..	..	5.5	5.4
0.9	-3.8	5 060	2.3	3.6	3.8	5.7	6.1	5.9	526	73.0	5.5	5.5
-5.4	-9.4	62 674	-7.3	0.2	0.1	4.6	0.5	0.3	4 199	62.0	3.3	2.8
-2.5	4.0	6 020	-7.7	1.1	1.2	1.1	5.1	4.5	..	..	3.0	5.8
-52.7	-32.8	598	-21.5	8.9	16.3	1.7	50.4	50.2	243	27.0	1.2	1.3
-7.3	6.2	3 711	-0.1	6.3	6.2	6.5	8.0	7.4	410	..	1.9	2.0
-20.0	-16.7	..	..	4.7	8.4	9.4	..	..	604	52.0	..	1.9
36.8	-22.7	281	2.9	25.1	32.9	-5.7	103.5	112.1	110	-6.0	10.3	6.5
6.5	13.8	1 803	17.5	10.9	11.5	6.7	15.8	17.2	389	54.0	2.7	2.6
-14.0	-13.8	2 661	-6.5	11.8	11.5	-9.6	10.7	10.5	180	150.0	0.8	1.9
2.0	2.3	8 330	2.1	1.4	1.4	3.6	3.4	3.4	807	15.0	8.5	6.0
18.2	3.8	589	-0.3	39.5	39.1	-20.8	47.6	43.0	284	-11.0	4.2	4.6
-4.5	83.3	171	-12.3	212.4	70.5	-335.6	161.5	75.9	318	24.0	7.7	..
-12.5	-4.2	6 121	-6.4	1.8	2.1	2.8	4.5	5.0	..	..	7.3	5.7
4.4	-8.2	17 494	-2.7	0.6	0.6	11.0	1.6	1.4	3 252	28.0	10.2	5.1
0.8	38.2	6 085	5.4	3.3	3.6	16.3	4.5	4.8	1 989	27.0	8.9	10.2
1.9	-0.2	8 820	-9.3	2.7	3.8	5.1	3.1	4.5	380	54.0	4.2	5.0
57.1	47.4	303	11.0	63.2	51.7	-25.0	89.7	83.3	168	2.0	7.0	6.8
38.5	550.0	131	-37.9	129.2	245.4	-202.8	207.1	209.4	191	24.0	4.8	5.6
-8.3	-2.6	13 612	7.4	1.4	1.1	-3.3	2.0	1.7	2 246	..	9.4	5.9
22.2	3.2	1 199	5.5	9.6	7.1	8.7	22.4	14.8	..	..	0.7	3.4
0.9	-21.2	6 687	0.6	0.6	0.6	6.9	4.0	3.6	3 196	43.0	4.0	4.1
4.9	4.4	27 264	-1.3	0.5	0.6	-5.5	1.0	1.1	..	..	12.8	6.5
..	..	151	-15.6	331.1	..	-291.2	175.4	175.5	182	47.0	..	..
-1.4	-5.2	7 099	2.3	0.7	0.7	0.4	3.7	3.8	..	..	3.9	3.8
44.1	6.5	3 482	1.4	2.6	1.6	21.8	7.5	3.7	..	..	10.8	8.9
35.7	40.0	224	28.7	63.4	78.3	15.9	116.1	85.5	266	-10.0	24.4	10.5
2.2	7.1	12 859	-3.6	0.2	0.3	16.1	2.0	2.6	13 685	58.0	5.7	7.1
63.6	51.8	2 546	90.3	7.0	8.5	18.5	10.1	13.4	1 388	18.0	1.4	1.9
4.0	-32.5	2 864	-3.4	5.8	3.4	-7.8	9.0	7.7	..	..	2.3	1.3
17.7	13.4	1 322	-14.9	9.0	8.4	21.8	19.0	14.0	1 362	29.0	3.2	5.4
-3.6	-0.7	12 615	-4.3	0.7	0.7	3.1	2.0	1.8	1 269	67.0	2.2	2.4
1.7	26.8	1 136	12.4	7.8	6.8	10.9	22.0	20.7	1 054	106.0	2.8	1.3
-8.8	-2.7	8 650	-0.6	1.8	2.2	11.5	2.9	3.5	2 497	48.0	4.5	4.9
-4.1	0.4	4 395	1.7	5.3	4.9	5.2	5.6	5.3	91	37.0	2.4	1.7
-0.2	2.3	12 523	2.0	1.9	2.0	2.0	2.0	2.0	257	12.0	2.1	3.1

## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				units	€m	%	%	%	€m
301	Dunlop Standard Aerospace	Aerospace & defence (21)	UK	24	20.2	34.4	122.2	645	1.1
302	Renishaw	Electronic & Electrical (25)	UK	24	10.5	8.8	2.3	218	21.1
303	KPN	Telecommunication services (67)	The Netherlands	24	4.3	-28.1	-30.4	11 731	-1.2
304	Guerbet	Pharma & biotech (48)	France	24	0.0	33.3	-10.0	248	10.2
305	De La Rue	Support services (58)	UK	24	-21.1	-17.1	4.9	909	-5.7
306	Unit 4 Agresso	Software & computer services (97)	The Netherlands	24	8.9	-3.1	4.2	276	26.0
307	Nolato	Chemicals (11)	Sweden	24	-13.4	3.8	-30.3	266	-10.1
308	Singulus Technologies	Engineering & machinery (26)	Germany	24	44.6	0.8	94.5	440	21.2
309	Stada Arzneimittel	Pharma & biotech (48)	Germany	23	12.2	28.8	-66.3	814	9.3
310	La Poste	Support services (58)	France	23	76.9	..	..	18 677	3.7
311	ACTIELEC Technologies	Electronic & Electrical (25)	France	23	-24.5	-9.9	-2.4	228	14.6
312	IMERYS	Construction & building (13)	France	23	23.4	-25.8	..	2 873	5.3
313	Bolloré Investissement	Transport (59)	France	22	16.1	9.7	5.4	5 608	4.0
314	Vaisala	Electronic & Electrical (25)	Finland	22	5.7	-4.5	16.7	181	-4.2
315	ElringKlinger	Automobiles & parts (31)	Germany	22	12.7	3.7	58.3	454	8.9
316	ELMOS Semiconductor	IT hardware (93)	Germany	22	-8.0	24.4	13.3	143	18.2
317	Ultra Electronics	Aerospace & defence (21)	UK	22	22.2	18.5	6.6	452	12.4
318	Rockwool International	Construction & building (13)	Denmark	22	1.4	7.6	0.7	1 229	11.2
319	Fuchs Petrolub	Chemicals (11)	Germany	21	-5.3	-4.4	24.0	1 096	5.3
320	Auriga Industries	Chemicals (11)	Denmark	21	-7.6	-9.2	-3.6	714	18.8
321	Andritz	Engineering & machinery (26)	Austria	21	-17.1	-15.5	63.5	1 481	20.9
322	BTG	Support services (58)	UK	21	-21.8	23.2	14.4	54	-21.7
323	Galen (now Warner Chilcott)	Pharma & biotech (48)	UK	21	7.4	50.5	15.2	318	11.6
324	Systems Union	Software & computer services (97)	UK	21	36.3	3.6	-12.5	147	32.4
325	Dyson Technology (now Dyson James)	Household goods & textiles (34)	UK	21	25.3	48.1	-20.3	391	17.8
326	Abengoa	Diversified industrials (24)	Spain	21	3.9	102.7	-72.2	1 687	3.2
327	Seco Tools	Engineering & machinery (26)	Sweden	21	-8.3	13.9	42.9	480	10.6
328	RM	Software & computer services (97)	UK	21	24.0	-15.2	18.8	372	22.4
329	AMS (now BAE Systems Integrated System)	Aerospace & defence (21)	UK	21	54.3	-7.2	46.2	671	-3.3
330	Clarins	Personal care & household (47)	France	21	1.8	19.6	24.2	939	5.6
331	Q-Med	Pharma & biotech (48)	Sweden	20	19.6	3.3	23.5	91	35.8
332	Dynea International	Chemicals (11)	Finland	20	1.0	13.6	12.8	1 065	8.8
333	Enodis	Engineering & machinery (26)	UK	20	8.3	-1.5	-2.9	927	-3.4
334	Xenova	Pharma & biotech (48)	UK	20	-5.3	-14.6	14.8	6	-45.5
335	CSR	IT hardware (93)	UK	20	64.5	31.6	-12.5	186	272.0
336	Compagnie Industriali Riunite	Diversified industrials (24)	Italy	20	11.1	11.1	58.8	3 061	7.8
337	Enel	Electricity (72)	Italy	20	-52.4	-58.0	0.0	34 329	18.6
338	Recticel	Chemicals (11)	Belgium	20	9.2	18.6	22.5	1 276	3.1
339	Pohjolan Voima	Electricity (72)	Finland	20	59.7	-3.1	-3.8	667	1.2
340	Same Deutz-Fahr	Engineering & machinery (26)	Italy	20	..	..	..	905	..
341	British Energy	Electricity (72)	UK	20	-6.7	-6.2	-5.9	2 141	-20.4
342	Egis Pharmaceuticals	Pharma & biotech (48)	Hungary	20	-1.7	30.4	10.2	354	8.3
343	GW Pharmaceuticals	Pharma & biotech (48)	UK	20	9.9	18.0	61.8	0	-100.0
344	Telelogic	Software & computer services (97)	Sweden	20	-16.8	-17.2	-1.6	115	10.6
345	FAES Farma	Pharma & biotech (48)	Spain	20	..	..	..	163	..
346	RHI	Construction & building (13)	Austria	20	21.9	2.6	..	1 297	5.2
347	Finland Post	Support services (58)	Finland	20	-12.9	16.7	-8.6	1 235	7.8
348	FLS Industries (now FLSmidth)	Engineering & machinery (26)	Denmark	20	29.4	-26.3	-16.0	1 979	-1.3
349	Thrane & Thrane	Electronic & Electrical (25)	Denmark	19	85.2	63.4	-39.7	123	43.0
350	Tenaris	Oil & gas (7)	Luxembourg	19	331.0	..	..	3 043	30.1

Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
1.6	15.7	3 962	-0.1	3.8	3.2	12.8	6.2	5.1	..	..	2.5	7.5
15.4	5.4	1 865	11.1	11.1	12.2	18.7	13.0	13.0	852	52.0	10.6	12.2
0.7	0.5	28 911	-7.5	0.2	0.2	20.4	0.8	0.7	17 143	28.0	14.6	12.6
4.2	3.4	1 140	1.7	9.7	10.7	12.4	21.1	21.4	251	66.0	7.7	5.3
17.1	-10.5	6 516	-4.8	2.6	3.1	5.9	3.6	4.4	953	13.0	3.2	5.0
1.9	3.4	1 677	18.9	8.6	9.9	7.2	14.1	15.4	327	34.0	1.1	1.4
38.3	-18.0	2 700	14.7	8.9	9.2	8.1	8.7	11.6	137	21.0	4.9	3.7
24.7	28.8	707	18.0	5.4	4.5	16.6	33.3	27.2	384	-15.0	1.4	2.2
17.5	17.8	2 586	4.9	2.9	2.8	10.3	9.0	8.4	1 564	100.0	0.9	1.5
3.9	..	309 286	-1.9	0.1	0.1	3.3	0.1	0.0	..	..	3.5	3.8
13.1	-4.3	1 873	0.0	10.0	15.2	2.9	12.2	16.1	101	..	2.2	1.5
-4.7	-1.2	14 088	2.1	0.8	0.7	12.3	1.6	1.3	3 945	35.0	7.6	4.4
0.6	6.1	32 808	-1.8	0.4	0.4	1.1	0.7	0.6	2 160	..	2.1	2.7
-3.6	6.5	1 092	-4.3	12.3	11.2	13.2	20.4	18.5	309	31.0	2.2	6.9
6.1	7.1	3 122	2.2	4.9	4.7	15.6	7.1	6.4	622	..	9.0	10.8
10.0	2.8	928	6.2	15.4	19.8	20.0	23.7	27.4	255	25.0	18.9	16.5
9.2	8.9	2 678	6.9	4.8	4.5	11.5	8.2	7.1	805	38.0	1.5	2.5
3.8	0.0	7 385	1.3	1.8	1.9	7.3	2.9	2.9	504	-29.0	8.5	6.6
-1.7	12.7	4 221	0.8	2.0	2.2	7.6	5.1	5.4	716	72.0	1.9	1.7
4.7	-0.2	3 000	0.1	3.0	3.8	12.8	7.1	7.7	43	-70.0	2.1	3.7
10.4	-15.8	5 314	15.6	1.4	2.1	4.8	4.0	5.5	1 009	119.0	1.8	1.6
53.3	2.3	146	-9.9	39.1	39.1	-99.5	144.5	166.6	384	74.0	7.4	11.6
10.5	111.5	1 045	-33.9	6.6	6.9	28.5	20.2	12.4	..	..	1.6	5.6
5.7	-5.4	1 252	47.3	14.3	13.9	4.7	16.8	18.2	202	55.0	2.7	2.7
-0.9	5.0	1 420	-15.1	5.3	5.0	14.1	14.7	10.0	..	..	4.1	2.7
7.4	10.3	9 318	5.6	1.2	1.2	5.8	2.2	2.3	1 040	81.0	2.5	2.4
-2.9	-5.7	3 886	-1.3	4.3	5.2	18.7	5.4	5.8	71	-87.0	5.0	4.6
6.3	-16.4	1 875	21.4	5.5	5.5	2.2	11.0	10.7	219	44.0	4.3	2.3
14.7	2.5	4 093	-6.3	3.1	1.9	5.2	5.0	3.0	..	..	3.0	3.6
-2.7	7.4	5 459	4.0	2.2	2.3	13.0	3.8	3.8	1 823	31.0	2.5	3.7
17.5	35.7	495	18.1	22.2	25.2	-3.8	40.8	40.4	85	-13.0	14.3	16.4
2.4	-9.0	3 135	-0.6	1.9	2.0	3.4	6.4	6.3	..	..	2.1	3.1
-13.2	-27.6	6 048	-0.4	2.2	1.9	6.4	3.3	3.1	722	40.0	2.2	1.5
-35.3	466.7	93	-11.4	336.2	193.5	-324.8	216.9	202.8	25	-55.0	16.7	9.1
150.0	17.6	248	33.3	10.8	24.4	23.3	80.9	65.6	873	51.0	3.2	8.0
10.0	25.0	10 324	-0.5	0.7	0.6	12.8	1.9	1.7	1 937	85.0	5.2	4.7
2.5	4.0	62 218	-7.4	0.1	0.1	13.1	0.3	0.6	42 674	20.0	10.2	12.5
5.2	1.9	11 034	38.5	1.6	1.5	2.6	1.8	2.3	215	32.0	6.3	7.4
-1.6	17.5	873	1.0	3.0	1.9	-0.3	22.7	14.4	..	..	78.7	17.9
..	..	2 542	..	2.2	..	3.6	7.8	..	..	..	0.9	..
-7.1	-3.5	5 165	-34.6	0.9	0.8	23.9	3.8	2.7	3 704	1 800.0	..	15.4
6.2	7.7	..	..	5.6	6.1	8.1	..	4.3	497	105.0	..	..
..	..	128	8.5	..	255.9	..	153.8	151.8	113	-39.0	..	..
-16.1	-25.3	674	-1.2	17.0	22.6	15.8	29.0	34.5	473	70.0	1.7	1.0
..	..	747	..	12.0	..	12.3	26.1	..	902	..	2.5	..
-8.6	-27.7	7 807	-0.4	1.5	1.3	10.4	2.5	2.0	602	..	5.5	4.5
3.1	6.3	23 544	-0.2	1.6	2.0	6.8	0.8	1.0	..	..	4.4	6.6
-9.3	-13.1	5 667	-44.6	1.0	0.8	0.3	3.4	1.5	770	45.0	2.7	4.4
4.9	20.6	651	60.3	15.7	12.2	11.5	29.8	25.8	141	1.0	2.4	2.3
-1.1	1.3	16 447	14.3	0.6	0.2	24.3	1.2	0.3	1 652	..	3.9	4.3

## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				units	€m	%	%	%	€m
351	SGL Carbon	Electronic & Electrical (25)	Germany	19	-8.1	-17.7	-18.3	926	-11.5
352	Biacore International	Health (44)	Sweden	19	40.4	18.3	-0.3	55	-3.5
353	Hexagon	Engineering & machinery (26)	Sweden	19	22.8	26.1	70.7	914	16.3
354	Boliden	Mining (4)	Sweden	19	90.0	-6.4	-12.0	1 985	87.8
355	WEB DE	Software & computer services (97)	Germany	19	36.3	16.9	-0.6	43	30.3
356	OMV	Oil & gas (7)	Austria	19	-17.7	-0.4	10.9	9 880	29.3
357	Urenco	Support services (58)	UK	19	-9.6	8.2	22.1	707	2.8
358	Biotest	Pharma & biotech (48)	Germany	19	0.9	-1.6	3.6	218	-1.8
359	Oxford Instruments	Electronic & Electrical (25)	UK	19	4.8	-1.3	-4.1	257	0.0
360	Oberthur Card Systems	Electronic & Electrical (25)	France	18	4.6	-12.2	-12.2	451	4.9
361	Rexam	Support services (58)	UK	18	-18.8	-20.0	-28.6	4 352	-1.0
362	Beta Systems Software	Software & computer services (97)	Germany	18	60.7	28.9	16.0	101	80.4
363	Transgene	Pharma & biotech (48)	France	18	2.7	1.6	-11.7	3	0.0
364	ML Laboratories (now Innovata)	Pharma & biotech (48)	UK	18	18.2	0.7	-1.0	11	22.2
365	YIT	Support services (58)	Finland	18	12.5	23.1	8.3	3 033	26.9
366	Huhtamaki	Support services (58)	Finland	18	27.9	16.7	-6.3	2 092	-0.8
367	Cardo	Engineering & machinery (26)	Sweden	18	20.1	-42.5	..	851	0.0
368	London Bridge Software	Software & computer services (97)	UK	18	-6.9	-5.2	40.8	82	-6.8
369	Aixtron	IT hardware (93)	Germany	18	23.8	17.6	-8.1	140	53.8
370	Ardana Bioscience (now Ardana)	Pharma & biotech (48)	UK	18	..	..	..	0	-100.0
371	Psion	IT hardware (93)	UK	18	-1.7	0.1	-35.5	191	4.9
372	Funkwerk	Support services (58)	Germany	18	43.4	41.1	64.1	249	39.1
373	JoWood Productions Software	Software & computer services (97)	Austria	17	91.8	27.4	..	17	-26.1
374	Heraeus	Steel & other metals (18)	Germany	17	-61.0	..	..	8 338	12.5
375	IMA Industria Macchine Automatiche	Engineering & machinery (26)	Italy	17	-5.9	-0.9	-2.2	363	4.9
376	ESI	Software & computer services (97)	France	17	34.7	18.2	11.1	58	18.4
377	Lenzing	Chemicals (11)	Austria	17	11.4	13.1	-1.2	871	40.0
378	Rautaruukki	Steel & other metals (18)	Finland	17	0.0	0.0	-10.5	3 569	20.9
379	Hunter Douglas	Household goods & textiles (34)	The Netherlands	17	0.0	-19.1	..	1 720	3.9
380	Elisa	Telecommunication services (67)	Finland	17	-29.2	-33.3	0.0	1 356	-11.8
381	Melexis	IT hardware (93)	Belgium	17	42.6	20.4	169.8	153	14.2
382	Rio Tinto	Mining (4)	UK	17	0.0	-8.0	-35.9	8 346	22.9
383	Anoto	IT hardware (93)	Sweden	17	-12.6	-31.5	11.9	16	-23.8
384	BBA	Transport (59)	UK	17	26.6	-7.8	-19.1	1 942	3.4
385	Ilog	Software & computer services (97)	France	17	20.8	23.4	3.3	76	11.8
386	Torex Retail	Software & computer services (97)	UK	17	..	..	..	105	..
387	Telekomunikacja Polska	Telecommunication services (67)	Poland	17	15.3	0.0	210.3	4 560	1.5
388	Halma	Engineering & machinery (26)	UK	17	4.7	16.9	17.3	423	2.4
389	Morgan Crucible	Engineering & machinery (26)	UK	17	-25.5	-21.5	5.3	1 124	-6.3
390	Bavarian Nordic	Pharma & biotech (48)	Denmark	17	92.6	4.7	-12.7	22	-67.6
391	Spector Photo	Media & entertainment (54)	Belgium	16	-7.5	-3.1	11.1	358	-5.0
392	Aliaxis	Construction & building (13)	Belgium	16	2.0	-28.4	-3.2	1 680	4.2
393	WET Automotive Systems	Automobiles & parts (31)	Germany	16	25.1	26.9	44.2	177	21.2
394	NSB	Software & computer services (97)	UK	16	-21.6	-15.1	-11.7	64	-29.7
395	Intec Telecom Systems	Software & computer services (97)	UK	16	14.1	25.5	36.8	97	34.7
396	Astex Technology (now Astex Therapeutics)	Pharma & biotech (48)	UK	16	31.2	30.6	92.2	4	0.0
397	Bohler-Uddeholm	Steel & other metals (18)	Austria	16	4.2	-8.6	5.0	1 934	28.9
398	Uponor	Engineering & machinery (26)	Finland	16	0.0	0.0	-5.3	1 073	5.1
399	Crucell	Pharma & biotech (48)	The Netherlands	16	-20.3	-9.3	36.7	18	260.0
400	James Hardie Industries	Construction & building (13)	The Netherlands	16	-4.5	24.9	28.4	891	23.4

Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
-5.9	-9.2	5 228	-26.1	2.1	2.0	4.8	3.7	3.0	680	54.0	4.0	3.2
-16.2	13.3	342	1.8	34.9	24.0	-1.1	56.1	40.7	1 427	1 316.0	1.8	3.5
1.4	12.8	5 935	9.9	2.1	2.0	7.2	3.2	2.9	853	97.0	3.0	2.3
-0.1	-6.8	4 479	15.0	0.9	0.9	9.4	4.2	2.5	1 054	196.0	8.6	6.4
37.5	41.2	456	38.6	43.5	41.6	-15.1	41.0	41.7	371	50.0	20.9	9.1
8.0	-8.5	6 232	2.3	0.2	0.3	9.0	3.0	3.7	12 225	176.0	5.7	8.7
8.9	15.3	1 899	3.5	2.6	3.0	35.4	9.8	11.2	..	..	35.4	39.0
-14.0	2.8	1 025	-5.8	8.5	8.3	8.4	18.1	16.9	114	118.0	6.4	8.6
-3.0	-12.3	1 581	2.9	7.2	6.9	0.2	11.7	11.5	148	14.0	1.9	1.2
-2.3	-8.1	2 943	2.0	4.1	4.1	7.4	6.2	6.1	544	37.0	4.7	3.3
0.8	-8.9	22 300	2.3	0.4	0.5	9.0	0.8	1.0	4 060	17.0	5.9	5.4
24.4	0.0	864	134.8	18.2	20.4	3.9	21.2	31.0	50	-14.0	8.9	3.6
50.0	100.0	168	1.2	608.0	592.0	-862.4	108.6	107.0	105	66.0	..	33.3
-52.6	46.2	115	-25.8	165.7	171.3	-152.4	158.5	99.5	179	226.0	27.3	11.1
35.6	8.6	21 884	35.0	0.6	0.7	4.4	0.8	1.0	1 882	..	0.7	1.2
-5.9	-6.0	15 652	-1.3	0.9	0.7	4.8	1.1	0.9	1 389	40.0	4.4	5.5
-25.9	-3.7	5 947	-4.1	2.1	1.7	4.1	3.0	2.4	555	0.0	3.5	3.2
-16.2	31.3	737	-6.9	21.7	21.7	0.6	24.1	24.1	..	..	2.4	2.3
-39.7	-37.1	416	1.5	12.6	15.6	5.8	42.3	34.7	245	-3.0	2.9	4.4
..	..	20	33.3	..	..	-17 352.4	878.5	..	89	..	..	..
-6.7	-23.8	1 002	4.9	9.2	9.8	-14.1	17.5	18.7	376	5.0	3.1	2.7
64.2	62.7	1 223	34.7	7.0	6.8	9.1	14.3	13.4	271	9.0	3.2	3.9
-46.5	2.4	184	17.9	101.3	39.0	-95.1	93.6	57.6	22	..	..	..
15.5	-6.2	9 603	2.9	0.2	0.6	2.0	1.8	4.7	..	..	0.8	0.9
-1.4	2.6	2 480	3.3	4.7	5.3	8.8	6.9	7.6	391	..	2.2	5.2
14.0	0.0	492	..	29.5	25.9	-3.3	34.8	..	96	72.0	1.7	..
-0.6	0.5	4 763	62.5	2.0	2.5	12.3	3.6	5.2	692	28.0	6.9	18.8
2.4	-0.8	12 273	-4.0	0.5	0.6	13.1	1.4	1.3	2 215	145.0	2.9	3.3
-2.2	-2.2	16 066	1.0	1.0	1.0	10.5	1.1	1.1	1 772	26.0	2.8	3.3
-1.6	8.6	5 590	-22.1	1.3	1.6	14.7	3.0	3.3	1 952	50.0	10.8	11.0
13.6	28.3	643	16.9	11.1	8.9	18.9	26.4	21.7	465	32.0	7.2	8.2
9.3	3.6	33 040	13.8	0.2	0.3	25.6	0.5	0.6	44 607	40.0	23.7	17.6
-12.5	41.2	132	-27.5	105.4	91.8	-75.6	127.7	105.9	175	24.0	..	..
-3.7	1.0	12 620	-0.4	0.9	0.7	6.8	1.3	1.1	2 120	18.0	4.2	5.2
11.5	5.2	632	5.0	22.1	20.4	1.5	26.5	23.1	222	62.0	1.3	1.5
..	..	1 000	..	16.0	..	13.2	16.8	..	415	..	1.0	..
1.6	3.9	36 589	-17.9	0.4	0.3	18.6	0.5	0.3	6 971	..	13.1	19.0
9.3	0.0	3 002	2.6	3.9	3.8	15.0	5.5	5.4	766	-2.0	3.1	3.4
-3.5	-14.1	12 787	-8.8	1.5	1.8	-1.5	1.3	1.6	848	58.0	5.1	3.7
325.0	..	117	42.7	74.9	12.6	-52.2	140.8	104.3	429	36.0	118.2	5.9
-1.1	-26.0	1 710	5.1	4.6	4.7	0.7	9.6	10.9	42	-25.0	1.7	2.1
-52.3	-8.4	11 610	-3.6	1.0	1.0	9.5	1.4	1.3	..	..	4.3	3.5
13.2	16.2	3 231	33.8	9.2	8.9	16.0	5.1	5.4	168	..	10.2	11.0
-12.5	-21.8	742	-22.5	25.5	22.8	-19.6	22.0	21.7	151	20.0	..	..
7.5	19.6	687	29.9	16.7	19.8	-1.9	23.6	26.9	267	48.0	5.2	4.2
100.0	100.0	103	12.0	401.8	306.3	-365.2	156.0	133.2	..	..	25.0	75.0
4.1	-4.5	11 711	15.3	0.8	1.0	9.7	1.4	1.5	1 573	143.0	3.8	5.2
-10.2	-4.6	4 684	-5.6	1.5	1.6	8.8	3.4	3.2	1 306	40.0	3.3	3.3
-28.6	-12.5	210	15.4	88.8	401.2	-150.0	76.1	110.2	680	236.0	11.1	60.0
22.2	32.2	3 122	1.6	1.8	2.3	16.1	5.1	5.4	2 400	..	..	7.6

## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				units	€m	%	%	%	€m
401	AVEVA	Software & computer services (97)	UK	16	63.6	15.6	2.7	81	50.0
402	Simcorp	Software & computer services (97)	Denmark	16	24.3	-15.8	28.9	82	22.4
403	Intercell	Pharma & biotech (48)	Austria	16	17.9	35.1	68.7	3	200.0
404	Wagon	Automobiles & parts (31)	UK	16	-22.9	69.4	2.5	688	9.9
405	Diageo	Beverages (41)	UK	16	-26.7	-46.4	-60.6	12 559	-5.8
406	Gerling-Konzern Versicherungs	Insurance (83)	Germany	16	14.0	-65.0	31.9	4 172	-15.4
407	TT electronics	Electronic & Electrical (25)	UK	15	25.6	6.2	-15.6	844	11.9
408	Cez	Electricity (72)	Czech Republic	15	..	..	..	3 300	18.1
409	Lectra	Software & computer services (97)	France	15	4.9	4.7	-14.4	208	12.4
410	Dynaction	Chemicals (11)	France	15	0.0	-10.4	25.0	259	0.8
411	Yule Catto	Chemicals (11)	UK	15	-6.3	-8.2	12.6	776	1.8
412	Aviagen	Food producers (43)	UK	15	-29.5	-13.2	-8.8	199	-11.2
413	Carlsberg	Beverages (41)	Denmark	15	142.1	0.0	28.5	4 838	3.9
414	Gewiss	Electronic & Electrical (25)	Italy	15	4.9	9.6	2.9	312	4.0
415	Medigene	Pharma & biotech (48)	Germany	14	-28.8	-36.7	42.6	13	550.0
416	AEA Technology	Support services (58)	UK	14	6.3	-32.4	-22.0	334	-5.9
417	Wanderer-Werke	Engineering & machinery (26)	Germany	14	125.0	-5.9	-12.5	410	-7.9
418	Anite	Software & computer services (97)	UK	14	-13.9	15.6	64.5	268	-3.3
419	Option	IT hardware (93)	Belgium	14	59.7	28.5	-43.5	103	80.7
420	Brembo	Automobiles & parts (31)	Italy	14	24.5	25.4	-18.4	678	6.9
421	Raisio	Food producers (43)	Finland	14	-32.7	3.9	10.9	627	-27.2
422	Axis-Shield	Pharma & biotech (48)	UK	14	-22.2	30.1	48.6	74	4.2
423	Augusta Technologie	IT hardware (93)	Germany	14	9.8	-13.9	20.2	234	-0.8
424	Radox Laboratories	Pharma & biotech (48)	UK	14	2.0	23.3	74.6	44	15.8
425	Axis	IT hardware (93)	Sweden	14	2.3	5.4	-22.0	77	11.6
426	Muhlbauer	Engineering & machinery (26)	Germany	14	23.0	5.9	5.1	128	34.7
427	InBev	Beverages (41)	Belgium	14	0.0	-6.7	50.0	8 568	21.6
428	BHP Billiton	Mining (4)	UK	14	-52.5	33.3	..	16 838	46.6
429	Bioinvent	Pharma & biotech (48)	Sweden	14	-3.8	113.1	35.9	7	0.0
430	ProStrakan	Pharma & biotech (48)	UK	14	92.8	-44.6	39.7	30	150.0
431	Steag Hamatech	Engineering & machinery (26)	Germany	14	62.4	-10.7	-2.0	149	1.4
432	Vossloh	Engineering & machinery (26)	Germany	14	87.8	12.1	-32.7	922	0.2
433	Hoganas	Mining (4)	Sweden	14	-8.8	3.0	15.7	461	11.1
434	SCI Entertainment	Software & computer services (97)	UK	14	19.6	91.1	-20.7	44	10.0
435	Sanitec	Construction & building (13)	Finland	14	-13.8	-19.2	-0.5	899	-5.5
436	Evotec OAI	Pharma & biotech (48)	Germany	14	-10.9	-32.8	0.0	73	-5.2
437	Omega Pharma	Pharma & biotech (48)	Belgium	14	102.8	104.5	564.0	833	14.9
438	Microscience	Pharma & biotech (48)	UK	14	-6.3	-2.8	155.0	0	..
439	Autonomy	Software & computer services (97)	UK	14	16.7	34.8	5.3	50	6.4
440	Domino Printing Sciences	Electronic & Electrical (25)	UK	14	12.4	2.8	-4.7	252	8.6
441	SAES Getters	Electronic & Electrical (25)	Italy	13	5.0	-6.0	10.7	142	12.7
442	Gamma	Household goods & textiles (34)	The Netherlands	13	-16.4	..	..	861	-4.8
443	OMX	Other financials (87)	Sweden	13	-45.7	-13.0	-35.5	322	8.4
444	Union Electrica Fenosa	Electricity (72)	Spain	13	-28.1	-81.2	-25.7	5 717	3.8
445	Radiall	IT hardware (93)	France	13	4.8	3.3	-17.1	163	12.4
446	Latecoere	Aerospace & defence (21)	France	13	225.0	..	..	260	32.7
447	Oxford Biomedica	Pharma & biotech (48)	UK	13	-14.7	-0.5	26.3	1	0.0
448	Ark Therapeutics	Pharma & biotech (48)	UK	13	70.4	6.9	10.6	0	..
449	Channel Four Television	Media & entertainment (54)	UK	13	21.3	5.6	-9.0	1 188	9.3
450	K+S	Chemicals (11)	Germany	13	-2.4	-0.5	-3.0	2 582	12.9



Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
5.9	13.3	474	45.4	19.6	17.9	10.0	33.4	29.7	256	56.0	2.5	3.7
-1.5	11.5	519	-1.3	19.3	19.0	20.2	30.4	24.2	359	145.0	1.2	1.5
..	..	140	16.7	524.0	1 333.0	-601.5	112.3	111.1	255	..	33.3	..
-13.3	4.0	5 322	-5.6	2.3	3.3	2.8	2.9	3.6	162	-3.0	5.2	5.9
-16.3	-12.0	23 720	-39.1	0.1	0.2	25.4	0.7	0.5	32 545	11.0	3.6	4.2
-51.7	-1.4	7 756	-23.6	0.4	0.3	7.6	2.0	1.3	810	..	..	..
2.6	-20.9	8 715	7.7	1.8	1.6	4.9	1.8	1.5	335	-6.0	4.1	4.4
52.6	-1.8	17 855	-1.4	0.5	..	22.8	0.8	..	10 160	..	10.5	65.5
0.0	-4.6	1 500	15.8	7.2	7.8	3.5	10.0	11.1	174	-21.0	1.4	1.1
-2.7	-6.7	1 815	-4.2	5.8	5.8	4.3	8.3	7.9	60	34.0	4.2	5.8
5.7	15.0	3 314	-5.8	1.9	2.1	5.2	4.5	4.5	494	-14.0	2.8	4.5
4.2	7.0	1 515	1.4	7.4	9.4	23.1	9.8	14.0	..	..	3.5	3.6
-2.6	3.1	23 602	-25.1	0.3	0.1	4.6	0.6	0.2	3 184	..	8.5	10.7
1.0	-11.6	1 686	-6.6	4.7	4.6	19.0	8.7	7.7	600	..	3.2	2.0
-33.3	-57.1	117	-5.6	110.9	1 013.0	-110.3	123.2	163.4	133	69.0	7.7	..
-7.3	-18.2	2 648	-12.8	4.3	3.8	-5.2	5.4	4.5	153	..	2.4	2.8
47.4	-5.0	3 306	-3.6	3.5	1.4	8.1	4.4	1.9	106	..	2.2	2.0
-9.5	7.0	1 700	-11.3	5.4	6.0	0.3	8.4	8.7	326	33.0	5.2	2.5
119.2	18.2	196	25.6	13.9	15.8	18.0	73.2	57.6	390	..	1.9	3.5
12.0	6.6	3 951	1.4	2.1	1.8	8.1	3.6	2.9	429	22.0	10.9	7.4
2.1	2.4	2 005	-29.0	2.3	2.5	32.4	7.1	7.5	405	55.0	4.3	6.9
7.6	10.0	440	-3.3	19.1	25.6	-4.3	32.2	40.0	226	86.0	6.8	7.0
-9.9	-5.4	954	-8.6	6.0	5.4	-2.8	14.8	12.3	45	456.0	1.3	1.3
22.6	10.7	510	32.1	32.0	36.3	-11.6	27.6	35.8	..	..	4.5	5.3
-6.8	-3.9	343	-3.7	18.3	19.9	7.1	41.0	38.7	241	160.0	..	..
4.4	2.2	1 338	6.0	10.9	12.0	18.7	10.5	9.0	273	67.0	11.7	6.3
0.7	-4.3	74 694	95.4	0.2	0.2	9.7	0.2	0.4	19 252	101.0	9.5	7.7
-12.2	-0.1	35 070	0.8	0.1	0.3	23.3	0.4	0.8	29 929	71.0	13.0	20.4
-30.0	66.7	101	-15.1	199.4	207.3	-166.8	138.2	121.9	41	..	..	..
50.0	166.7	158	79.5	46.5	60.3	-84.8	88.4	82.3	..	..	36.7	..
11.4	7.3	294	-24.4	9.3	5.8	0.6	47.4	22.1	54	..	1.3	..
23.5	-17.5	4 600	4.0	1.5	0.8	10.8	3.0	1.7	649	..	3.1	2.5
15.3	0.3	..	..	3.0	3.7	14.7	..	9.2	648	13.0	6.3	13.0
60.0	733.3	139	135.6	31.4	28.9	14.6	99.4	195.9	394	..	2.3	..
-3.5	-1.0	6 950	-11.8	1.5	1.7	-3.6	2.0	2.0	..	..	..	..
10.0	11.1	639	-1.1	18.9	20.1	-126.3	21.6	23.9	174	88.0	4.1	18.2
24.4	35.6	2 723	16.9	1.7	0.9	5.4	5.1	2.9	1 279	..	2.2	1.7
..	-100.0	70	-2.8	..	..	-26 250.8	193.7	201.0	..	..	..	..
-2.1	-7.7	219	3.8	27.1	24.7	0.1	61.9	55.0	524	102.0	6.0	2.1
1.8	4.6	1 807	11.4	5.4	5.2	13.7	7.5	7.4	396	21.0	2.8	1.7
-10.6	-11.9	946	-11.1	9.5	10.2	18.8	14.2	12.0	257	218.0	5.6	6.4
-5.2	5.3	9 293	-0.2	1.6	1.8	5.4	1.4	1.7	274	..	3.9	4.0
1.7	-7.3	1 517	-9.8	4.1	8.2	18.8	8.8	14.5	1 111	..	..	..
-4.3	5.7	20 798	-2.2	0.2	0.3	12.7	0.6	0.9	7 468	40.0	17.7	26.7
-6.5	-32.0	1 673	6.8	8.0	8.6	1.8	7.8	8.0	125	4.0	3.7	2.8
16.7	-7.7	2 171	21.6	5.0	2.0	4.5	6.0	2.2	297	..	4.6	1.5
..	-100.0	62	-13.9	1 298.0	1 522.0	-2 423.7	209.4	211.4	192	127.0	..	..
..	..	86	68.6	..	..	-10 420.2	150.2	148.6	178	4.0	..	..
0.9	4.4	884	6.0	1.1	1.0	7.3	14.5	12.7	..	..	0.6	0.5
1.4	3.6	11 068	4.3	0.5	0.6	6.4	1.2	1.2	2 230	93.0	4.5	5.2

## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				units	€m	%	%	%	€m
451	Lucite International	Chemicals (11)	UK	13	0.0	-10.1	11.2	999	1.9
452	National Grid Transco	Utilities - other (77)	UK	13	-10.1	-44.4	12.5	12 036	-5.7
453	Arakis	Pharma & biotech (48)	UK	13	..	..	..	0	..
454	EYBL International	Automobiles & parts (31)	Austria	13	53.3	..	..	342	-0.9
455	IONA Technologies	Software & computer services (97)	Ireland	13	-37.0	-31.1	-1.5	50	-9.1
456	Genus	Support services (58)	UK	13	11.4	-6.7	-2.2	259	6.1
457	Bacou-Dalloz	Household goods & textiles (34)	France	13	3.3	-3.9	398.0	706	-11.3
458	Swedish Match	Tobacco (49)	Sweden	13	13.0	1.0	-1.0	1 440	-0.2
459	CODASciSys	Software & computer services (97)	UK	12	-1.2	..	..	96	0.0
460	ADVA	IT hardware (93)	Germany	12	0.8	7.1	55.9	102	13.3
461	Morphosys	Pharma & biotech (48)	Germany	12	37.7	-54.1	98.1	22	46.7
462	Vectura	Pharma & biotech (48)	UK	12	23.8	162.8	149.3	4	-20.0
463	Exact	Software & computer services (97)	The Netherlands	12	-22.9	-15.6	4.8	212	2.9
464	Tarkett	Household goods & textiles (34)	Germany	12	12.8	-3.5	-19.3	1 437	6.5
465	BWT	Engineering & machinery (26)	Austria	12	23.5	-21.3	11.5	488	17.3
466	Stallergenes	Pharma & biotech (48)	France	12	43.3	46.6	13.0	95	10.5
467	SSL International	Personal care & household (47)	UK	12	-24.5	-12.3	12.0	648	-23.9
468	BE Semiconductor Industries	IT hardware (93)	The Netherlands	12	-8.8	6.3	-19.3	126	46.5
469	Gameloft	Software & computer services (97)	France	12	208.7	19 400.0	-80.0	23	130.0
470	Elektrobit	Engineering & machinery (26)	Finland	12	22.3	0.8	83.3	203	36.2
471	Cerep	Pharma & biotech (48)	France	12	1.0	8.2	-4.3	51	50.0
472	Empire Interactive	Software & computer services (97)	UK	12	-12.7	-11.1	118.5	42	-2.3
473	Teleca	Software & computer services (97)	Sweden	12	104.0	148.7	..	302	11.0
474	XRT	Software & computer services (97)	France	12	2.4	12.9	-4.0	40	2.6
475	FKI	Engineering & machinery (26)	UK	12	-25.9	43.6	8.4	1 823	-4.1
476	Wolfson Microelectronics	IT hardware (93)	UK	12	69.7	49.0	71.5	88	57.1
477	Royal Cosun	Food producers (43)	The Netherlands	12	26.1	4.5	0.0	1 317	-0.3
478	Voca	Banks (81)	UK	12	-66.8	-16.3	716.7	110	3.8
479	ARC International	IT hardware (93)	UK	12	-34.0	-4.7	-1.8	17	13.3
480	Pharmagene	Pharma & biotech (48)	UK	12	4.1	-7.8	85.0	6	-14.3
481	Raymarine	Electronic & Electrical (25)	UK	12	-5.1	51.1	37.3	150	13.6
482	Tecnomen	IT hardware (93)	Finland	12	22.3	-16.1	-28.7	51	13.3
483	Head	Household goods & textiles (34)	The Netherlands	11	13.9	23.7	15.7	351	10.7
484	Soitec	IT hardware (93)	France	11	0.8	57.0	28.0	139	58.0
485	Balfour Beatty	Construction & building (13)	UK	11	-20.0	-16.6	-7.7	4 942	10.7
486	Miba	Automobiles & parts (31)	Austria	11	8.7	-3.7	17.4	328	11.6
487	Wittington Investments	Food producers (43)	UK	11	33.3	0.0	-14.3	7 394	5.1
488	O2	Telecommunication services (67)	UK	11	-20.0	11.2	12.5	9 440	17.4
489	Zentiva	Pharma & biotech (48)	The Netherlands	11	0.3	66.5	..	276	10.8
490	DICOM	Software & computer services (97)	UK	11	9.0	-2.1	41.1	221	0.0
491	Vitec	Engineering & machinery (26)	UK	11	-10.2	11.4	3.9	262	-3.7
492	Gunnebo	Support services (58)	Sweden	11	0.0	..	..	811	5.2
493	Eureko	Life assurance (84)	The Netherlands	11	400.0	450.0	-96.4	6 534	13.1
494	Skanditek	Electronic & Electrical (25)	Sweden	11	1.3	16.5	-30.1	68	19.3
495	F-Secure	Software & computer services (97)	Finland	11	24.5	-10.3	-21.6	47	20.5
496	Laird	Electronic & Electrical (25)	UK	11	28.3	9.1	61.9	661	9.1
497	Villeroy & Boch	Household goods & textiles (34)	Germany	11	-13.3	-5.4	-5.4	960	1.2
498	PSI	Software & computer services (97)	Germany	11	20.5	-22.4	3.6	115	-16.7
499	Northgate Information Solutions	Software & computer services (97)	UK	11	10.8	-6.4	-1.9	193	60.8
500	Arup	Engineering & machinery (26)	UK	11	-18.2	..	..	578	3.8



Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
19.2	0.9	2 091	5.5	1.3	1.3	9.5	6.1	6.4	..	..	5.9	4.8
-3.9	24.4	24 406	-4.9	0.1	0.1	21.6	0.5	0.6	19 580	3.0	16.8	16.4
..	..	36	..	..	..	..	353.1	..	..	..	..	..
-19.0	13.0	3 606	10.5	3.7	2.4	3.3	3.5	2.5	..	..	4.7	7.5
-39.6	-31.6	346	-2.0	25.3	36.5	0.3	36.6	56.9	84	18.0	2.0	1.8
7.5	-1.3	1 325	-2.0	4.9	4.7	4.9	9.5	8.4	181	71.0	2.3	3.7
-9.3	86.0	6 050	-3.3	1.8	1.5	1.6	2.1	2.0	569	75.0	2.4	2.0
-4.4	0.0	15 039	-0.5	0.9	0.8	25.9	0.8	0.7	3 189	26.0	3.8	4.2
2.1	2.2	845	-4.8	13.0	13.1	5.3	14.7	14.2	144	..	9.4	2.1
2.3	-2.2	450	12.8	12.2	13.7	7.2	27.6	30.9	232	47.0	2.9	3.3
-11.8	6.3	117	23.2	56.3	60.0	0.6	105.9	94.7	209	91.0	9.1	6.7
25.0	0.0	101	3.1	308.3	199.2	-311.7	122.1	101.6	119	35.0	25.0	100.0
-3.7	3.9	2 153	6.3	5.8	7.7	20.2	5.7	7.9	569	24.0	2.4	1.9
-6.1	4.0	6 883	-1.3	0.9	0.8	6.2	1.8	1.6	718	68.0	3.6	3.5
-3.5	2.6	2 734	6.1	2.5	2.4	4.8	4.5	3.9	584	91.0	1.2	1.2
14.7	19.1	509	6.9	12.9	9.9	16.6	24.0	17.9	341	..	3.2	3.5
-3.4	5.3	5 095	-20.8	1.9	1.9	1.0	2.4	2.5	784	-1.0	2.0	2.2
3.6	-44.7	781	12.5	9.6	15.4	-7.7	15.5	19.1	131	3.0	2.4	14.0
150.0	33.3	722	305.6	52.3	39.0	11.3	16.7	21.9	356	..	4.3	..
41.9	38.2	1 385	24.6	5.9	6.6	16.4	8.7	8.8	324	21.0	1.0	0.7
0.0	21.4	465	36.0	23.4	34.7	0.3	25.6	34.5	113	10.0	5.9	11.8
22.9	118.8	121	-23.4	28.3	31.7	1.6	98.3	86.3	8	0.0	..	..
17.7	-15.7	2 810	12.6	3.9	2.1	0.3	4.2	2.3	214	..	1.7	1.5
-2.5	-11.1	394	7.1	29.4	29.4	5.8	29.8	31.2	48	151.0	..	2.6
-7.4	-9.8	13 311	-5.7	0.6	0.8	5.1	0.9	1.1	852	-14.0	2.5	1.9
75.0	100.0	189	47.7	13.3	12.3	14.0	62.0	53.9	275	-9.0	9.1	30.4
19.7	12.8	3 993	-7.7	0.9	0.7	8.8	2.9	2.1	..	..	4.8	3.8
29.3	7.9	393	-1.5	10.5	32.9	1.6	29.5	87.4	..	..	..	..
-11.8	6.3	147	-26.1	68.2	117.1	-79.7	78.8	88.3	75	47.0	5.9	26.7
75.0	0.0	76	-3.8	193.0	158.9	-195.9	152.4	140.8	17	-52.0	..	..
29.4	0.0	566	35.1	7.7	9.2	3.4	20.3	28.9	247	..	4.0	4.5
12.5	-4.8	355	-19.3	22.6	20.9	3.1	32.4	21.4	48	-27.0	2.0	..
11.2	-1.0	..	..	3.2	3.2	1.9	..	..	93	6.0	4.8	3.8
-12.9	8.6	542	15.1	8.2	12.8	-0.7	20.9	23.9	622	..	24.5	28.4
2.0	13.4	28 125	1.1	0.2	0.3	3.6	0.4	0.5	2 311	25.0	3.3	1.5
0.0	0.7	2 586	5.7	3.4	3.5	9.0	4.4	4.3	36	9.0	7.3	8.2
7.8	3.5	36 365	0.5	0.2	0.1	7.8	0.3	0.2	..	..	4.4	3.5
16.8	14.0	13 911	12.7	0.1	0.2	4.8	0.8	1.1	18 377	68.0	20.3	19.9
27.0	..	2 885	49.7	4.1	4.5	23.6	3.9	5.8	1 045	..	6.9	5.6
4.7	6.6	846	2.4	5.1	4.7	6.3	13.3	12.5	295	30.0	1.8	1.4
5.8	-4.5	1 550	-4.6	4.3	4.6	7.0	7.2	7.7	216	14.0	5.3	5.1
-0.1	4.5	8 188	-1.0	1.4	1.4	3.6	1.4	1.3	323	..	1.9	2.2
-24.3	2.9	14 405	-5.4	0.2	0.0	10.0	0.8	0.1	..	..	..	..
1.8	-56.3	335	-2.1	16.1	18.9	4.6	32.6	31.5	149	17.0	..	..
0.0	-7.1	291	-1.4	23.2	22.4	13.2	37.4	29.7	258	23.0	2.1	..
-13.1	-15.1	5 238	26.4	1.6	1.4	8.8	2.1	2.1	740	34.0	3.6	3.5
-2.9	0.2	10 390	-3.9	1.1	1.3	3.5	1.1	1.2	182	65.0	5.2	5.6
-8.6	-8.5	1 106	-9.4	9.4	6.5	-7.9	9.8	7.3	55	78.0	0.9	1.5
-8.4	-13.2	1 888	84.9	5.6	8.1	-6.4	5.7	9.5	595	52.0	15.0	2.5
-2.1	26.2	6 399	1.2	1.8	2.3	2.4	1.7	2.1	..	..	2.6	1.6

## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				units	€m	%	%	%	€m
501	Portugal Telecom	Telecommunication services (67)	Portugal	11	-25.9	-17.8	..	6 023	4.3
502	First Technology	Electronic & Electrical (25)	UK	11	-6.3	-2.4	100.0	168	-6.7
503	Staffware (now TIBCO BPM)	Software & computer services (97)	UK	11	5.7	-5.4	18.3	60	9.1
504	Eniro	Media & entertainment (54)	Sweden	11	-5.0	2.0	63.4	544	0.2
505	Valio	Food producers (43)	Finland	11	2.9	5.2	-2.2	1 582	1.0
506	Linedata Services	Software & computer services (97)	France	11	32.9	16.2	28.3	113	13.0
507	Royalblue	Software & computer services (97)	UK	11	8.6	12.9	-1.2	84	5.0
508	NicOx	Pharma & biotech (48)	France	10	-31.4	7.0	15.9	2	100.0
509	Datalogic	Support services (58)	Italy	10	8.9	12.3	-4.7	146	12.3
510	Rational	Engineering & machinery (26)	Germany	10	-8.5	12.1	40.1	222	18.7
511	SUSS MicroTec	IT hardware (93)	Germany	10	-1.2	-16.3	-25.1	116	20.8
512	Teligent	Software & computer services (97)	Sweden	10	66.7	4.7	-40.8	40	42.9
513	Croda International	Chemicals (11)	UK	10	7.3	11.5	0.0	416	-3.0
514	Gyrus	Health (44)	UK	10	12.3	-18.1	10.3	123	11.8
515	Pfeiffer Vacuum Technology	Engineering & machinery (26)	Germany	10	14.8	-14.1	29.0	156	8.3
516	Plasmon	IT hardware (93)	UK	10	-14.0	-16.8	-11.1	63	-11.3
517	LISI	Aerospace & defence (21)	France	10	-10.5	-17.4	2.2	541	6.9
518	Sygen International	Food producers (43)	UK	10	-6.5	11.6	25.5	183	-2.1
519	NPM/CNP	Other financials (87)	Belgium	10	22.4	..	..	9 229	21.7
520	Palfinger	Engineering & machinery (26)	Austria	10	34.7	5.6	10.9	404	21.0
521	Vacon	Electronic & Electrical (25)	Finland	10	12.3	13.5	-12.0	129	15.2
522	Edison	Utilities - other (77)	Italy	10	-23.1	-74.0	-45.7	5 696	5.0
523	Danieli	Engineering & machinery (26)	Italy	10	-16.7	-25.0	-52.0	1 008	2.1
524	Photo-Me	Media & entertainment (54)	UK	10	-7.5	54.5	12.4	333	7.1
525	PPL Therapeutics	Pharma & biotech (48)	UK	10	-27.7	-13.4	19.6	0	..
526	BG	Oil & gas (7)	UK	10	-12.5	-27.3	-15.4	5 766	13.8
527	Zetex	IT hardware (93)	UK	10	-20.1	17.1	-11.2	102	-20.9
528	Avon Rubber	Automobiles & parts (31)	UK	10	26.5	-3.7	8.5	338	-3.7
529	Biotage	Pharma & biotech (48)	Sweden	10	-3.5	-30.0	11.9	41	115.8
530	Isra Vision Systems	Engineering & machinery (26)	Germany	10	41.8	11.9	40.0	40	48.1
531	Roxboro	Electronic & Electrical (25)	UK	10	-14.8	-15.0	-4.4	168	-13.0
532	Sydsvenska Kemi	Chemicals (11)	Sweden	10	-1.1	23.9	77.4	723	13.7
533	Observer	Support services (58)	Sweden	10	10.6	..	..	179	4.7
534	Charter	Engineering & machinery (26)	UK	10	-52.1	3.7	7.9	1 229	-0.2
535	Nokian Tyres	Automobiles & parts (31)	Finland	10	15.7	-2.4	2.4	602	13.8
536	Carraro	Automobiles & parts (31)	Italy	10	15.1	-0.4	-16.9	514	31.8
537	Ion Beam Applications	Health (44)	Belgium	9	-48.5	-13.0	8.1	175	-25.2
538	Kyro	Engineering & machinery (26)	Finland	9	-4.1	48.5	-33.1	232	2.2
539	Karo Bio	Pharma & biotech (48)	Sweden	9	3.3	3 670.8	-90.9	4	-55.6
540	MBDA	Aerospace & defence (21)	UK	9	-3.3	85.1	-11.2	921	117.7
541	Tekla	Software & computer services (97)	Finland	9	-25.6	1.7	24.7	38	-5.0
542	VOGT Electronic	Electronic & Electrical (25)	Germany	9	-7.1	..	..	306	-42.8
543	JCB Compact Products	Engineering & machinery (26)	UK	9	28.6	30.2	-1.5	159	2.6
544	Phytopharm	Pharma & biotech (48)	UK	9	-12.1	20.4	48.8	2	-33.3
545	Baltimore Technologies (now Baltimore)	Other financials (87)	UK	9	-43.2	-53.9	64.0	26	-48.0
546	ICOS Vision Systems	IT hardware (93)	Belgium	9	36.6	-2.3	27.6	89	97.8
547	Thomas Cook	Leisure & hotels (53)	Germany	9	76.1	-4.6	..	7 479	3.3
548	Alizyme	Pharma & biotech (48)	UK	9	-45.0	17.6	25.3	2	0.0
549	Baxi	General retailers (52)	UK	9	-15.1	12.8	-5.3	636	-36.1
550	Compagnie de Fives-Lille	Diversified industrials (24)	France	9	9.0	-10.9	..	877	24.9

Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
4.9	-3.9	29 483	18.5	0.2	0.2	16.5	0.4	0.6	9 332	..	..	2.0
-7.2	-5.4	1 805	4.8	6.3	6.3	12.7	5.9	6.6	333	4.0	3.0	3.3
1.9	1.9	348	2.7	17.6	18.1	6.5	30.3	29.4	..	..	1.7	3.6
3.6	4.8	4 752	3.4	1.9	2.0	18.5	2.2	2.4	1 319	39.0	1.3	2.6
-2.1	5.3	4 389	0.5	0.7	0.7	4.3	2.4	2.3	..	..	8.1	7.2
5.3	20.3	698	3.1	9.3	7.9	11.6	15.0	11.7	208	..	0.9	3.0
-1.2	-13.8	485	1.5	12.5	12.1	13.6	21.6	20.2	315	54.0	7.1	5.0
-80.0	..	56	-6.7	522.0	1 522.0	-762.0	186.4	253.7	140	121.0	..	..
12.1	5.5	875	12.9	7.1	7.4	11.5	11.9	12.3	291	..	4.1	3.1
5.7	6.0	742	9.3	4.7	6.1	24.1	14.0	16.7	1 014	100.0	2.3	3.2
-25.0	-42.6	..	..	8.9	10.9	-8.2	..	14.2	79	-1.0	0.9	1.0
0.0	-17.6	290	18.4	25.8	22.1	-6.1	35.6	25.3	57	..	2.5	3.6
-3.2	0.5	1 585	-6.3	2.5	2.2	16.0	6.5	5.7	744	33.0	5.1	4.2
3.8	49.3	617	-3.7	8.3	8.3	6.4	16.6	14.3	643	168.0	3.3	4.5
-4.6	-11.2	750	-3.5	6.6	6.2	11.6	13.7	11.5	367	46.0	1.9	1.4
-16.5	-2.3	430	4.4	16.3	16.8	-18.3	23.8	28.9	138	-18.0	4.8	9.9
-0.4	-7.6	5 223	7.4	1.9	2.3	8.2	2.0	2.3	586	61.0	5.0	4.7
-19.7	-2.9	1 261	8.1	5.6	5.8	4.9	8.1	9.3	178	37.0	5.5	3.7
24 358.1	-8.8	13 678	-1.5	0.1	0.1	7.9	0.7	0.6	4 128	..	..	..
9.2	-7.8	2 563	11.8	2.5	2.2	10.3	3.9	3.3	573	..	3.2	4.5
15.5	6.6	458	4.8	7.8	8.0	11.5	22.0	20.6	242	59.0	3.1	2.7
-55.4	-22.3	3 878	-14.1	0.2	0.2	9.9	2.6	2.9	7 675	49.0	8.0	6.5
68.1	-23.3	3 470	23.7	1.0	1.2	7.1	2.9	4.3	371	73.0	2.1	0.6
17.4	0.4	1 671	-8.1	3.0	3.5	14.6	6.0	5.9	633	8.0	12.6	6.4
-100.0	..	126	-37.9	..	..	-39 024.6	78.8	67.6	..	..	..	..
37.4	-2.3	4 836	5.2	0.2	0.2	36.5	2.1	2.5	25 621	50.0	26.0	16.9
5.7	-6.2	755	-29.9	9.7	9.6	6.3	13.1	11.5	137	-37.0	19.6	5.4
-0.8	-9.9	4 334	-1.0	2.9	2.2	4.3	2.3	1.8	85	-6.0	3.0	3.4
72.7	-8.3	246	48.2	23.8	53.2	-27.8	39.6	60.8	74	47.0	2.4	..
22.7	37.5	244	45.2	24.3	25.4	14.0	39.9	40.8	31	..	..	..
-12.3	-10.9	1 456	-15.4	5.8	5.9	7.7	6.7	6.6	167	23.0	1.2	1.0
-4.2	77.5	2 091	-4.3	1.3	1.5	7.4	4.6	4.5	..	..	2.9	5.3
-9.0	..	2 487	2.6	5.4	5.1	2.0	3.9	3.6	224	..	2.8	3.5
-3.2	-6.4	9 038	-6.9	0.8	1.6	4.0	1.1	2.1	725	119.0	1.3	0.8
10.4	13.2	2 843	7.3	1.6	1.6	18.3	3.4	3.1	2 049	..	7.0	7.2
2.4	-1.3	2 142	2.1	1.9	2.1	5.0	4.5	3.9	183	..	3.7	4.4
-11.4	2.3	804	-53.2	5.4	7.8	5.9	11.7	10.6	161	22.0	8.6	13.2
57.6	-2.7	1 175	15.8	4.1	4.3	7.7	8.0	9.7	353	34.0	2.6	3.5
-55.0	33.3	85	-27.4	233.8	100.6	-293.2	110.0	77.4	37	70.0	..	11.1
-10.6	6.3	3 197	8.3	1.0	2.3	-0.2	2.9	3.2	..	..	4.3	12.3
-2.4	5.1	368	-14.0	24.1	30.7	-5.6	24.8	28.7	70	..	2.6	..
-2.4	-23.5	3 614	-31.1	3.0	1.8	-0.2	2.5	1.9	14	..	2.0	1.7
16.5	-10.1	524	3.6	5.7	4.6	-1.4	17.3	14.0	..	..	0.6	..
-25.0	100.0	40	17.6	448.5	340.3	-652.1	224.3	300.3	58	-36.0	..	..
-49.5	-5.7	223	-56.0	34.3	31.4	-98.2	40.1	31.0	..	..	..	2.0
45.2	72.2	262	51.4	10.0	14.5	30.6	33.9	37.6	261	..	2.2	..
-10.2	2.3	24 628	-5.2	0.1	0.1	-1.4	0.4	0.2	..	..	0.5	1.7
..	..	16	6.7	443.0	805.0	-352.0	553.8	1 073.3	233	-27.0	..	..
7.2	-2.3	5 513	-2.2	1.4	1.0	11.0	1.6	1.8	..	..	3.1	3.0
-3.7	..	3 954	6.1	1.0	1.1	3.9	2.2	2.1	..	..	0.9	1.6

## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				units	€m	%	%	%	€m
551	Radstone Technology	IT hardware (93)	UK	9	35.1	14.7	13.4	70	12.9
552	Chemring	Aerospace & defence (21)	UK	9	27.2	4.2	-9.7	177	4.1
553	KCI Konecranes	Engineering & machinery (26)	Finland	9	7.6	-49.0	101.3	728	9.5
554	Marlborough Stirling	Software & computer services (97)	UK	8	29.7	-10.3	3.9	133	-14.2
555	Karstadt Quelle	General retailers (52)	Germany	8	-60.6	27.6	-16.9	13 447	-11.9
556	WEDECO	Engineering & machinery (26)	Germany	8	-3.3	103.1	57.7	126	-12.5
557	Biotie Therapies	Pharma & biotech (48)	Finland	8	-21.6	-50.7	112.7	4	100.0
558	P&I Personal & Informatik	Software & computer services (97)	Germany	8	-5.5	17.6	57.8	40	5.3
559	Delcam	Software & computer services (97)	UK	8	12.1	15.5	11.3	30	3.4
560	Franz Haniel & Cie	Pharma & biotech (48)	Germany	8	300.0	..	..	24 317	5.6
561	Servier	Pharma & biotech (48)	UK	8	1.7	7.5	9.1	10	11.1
562	Glunz & Jensen	IT hardware (93)	Denmark	8	-7.2	30.1	-6.3	83	-9.8
563	Pharmexa	Pharma & biotech (48)	Denmark	8	-35.7	-28.5	25.2	3	0.0
564	IDS Scheer	Software & computer services (97)	Germany	8	4.4	7.4	4.5	280	26.7
565	Weir	Engineering & machinery (26)	UK	8	11.3	21.7	-13.5	1 044	7.0
566	Basler	Electronic & Electrical (25)	Germany	8	50.5	-9.5	-24.4	52	44.4
567	Huntleigh Technology	Health (44)	UK	8	2.5	-3.5	1.2	281	6.4
568	JC Decaux	Media & entertainment (54)	France	8	-7.2	-15.3	-29.0	1 631	5.6
569	E2V (now e2v Technologies)	Electronic & Electrical (25)	UK	8	25.4	..	..	138	3.8
570	Robotic Technology Systems	Support services (58)	UK	8	13.2	43.9	320.7	69	-19.8
571	Mensch und Maschine Software	Software & computer services (97)	Germany	8	-6.4	-7.0	18.9	135	3.1
572	Napp Pharmaceutical	Pharma & biotech (48)	UK	8	-61.4	-0.4	7.5	147	1.4
573	Biolipox	Pharma & biotech (48)	Sweden	8	25.1	..	..	0	..
574	Mariella Burani Fashion	Household goods & textiles (34)	Italy	8	56.7	..	..	412	17.7
575	Biocompatibles International	Health (44)	UK	8	17.0	-7.3	-47.3	4	33.3
576	Energie Baden	Electricity (72)	Germany	8	-29.9	..	..	9 844	-7.2
577	BPB	Construction & building (13)	UK	8	-1.8	17.4	7.1	3 272	6.7
578	Ubizen	Software & computer services (97)	Belgium	8	-25.1	4.9	-21.5	43	-40.3
579	GfK	Support services (58)	Germany	7	-12.9	19.7	-15.5	672	12.9
580	Walter	Engineering & machinery (26)	Germany	7	-28.0	-0.5	-17.7	261	1.6
581	Chloride	Electronic & Electrical (25)	UK	7	1.0	12.4	-7.0	233	7.9
582	NXT	Electronic & Electrical (25)	UK	7	-19.6	2.6	14.0	9	-18.2
583	Torotrak	Automobiles & parts (31)	UK	7	-11.4	18.5	-24.1	1	..
584	Nedap	Electronic & Electrical (25)	The Netherlands	7	-21.7	..	..	124	0.0
585	Constantia-ISO	Construction & building (13)	Austria	7	-7.5	..	..	594	-8.8
586	Spirax-Sarco Engineering	Engineering & machinery (26)	UK	7	3.5	10.6	-4.0	460	3.6
587	SurfControl	Software & computer services (97)	UK	7	28.5	18.4	12.0	64	18.5
588	Macro 4	Software & computer services (97)	UK	7	-13.9	3.0	16.6	44	-4.3
589	Telindus	IT hardware (93)	Belgium	7	36.2	-34.3	..	532	2.7
590	Northumbrian Water	Utilities - other (77)	UK	7	1.6	-10.6	3.7	817	9.1
591	Games Workshop	Household goods & textiles (34)	UK	7	-24.8	6.0	39.9	193	-9.8
592	Atria	Food producers (43)	Finland	7	4.5	9.8	10.9	834	9.0
593	Orc Software	Software & computer services (97)	Sweden	7	-16.9	7.6	56.8	27	3.8
594	NIBE Industrier	Household goods & textiles (34)	Sweden	7	27.3	..	..	350	29.2
595	Epigenomics	Pharma & biotech (48)	Germany	7	-26.9	0.5	16.8	8	-27.3
596	Prima Industrie	Engineering & machinery (26)	Italy	7	16.4	-20.7	22.2	100	5.3
597	Teleste	IT hardware (93)	Finland	7	19.0	-12.1	-28.3	66	22.2
598	Net Insight	IT hardware (93)	Sweden	7	40.3	-27.7	-62.0	4	0.0
599	Sodra	Forestry & paper (15)	Sweden	7	0.0	14.7	1.9	1 511	3.6
600	PiroNet NDH	Software & computer services (97)	Germany	7	192.7	-32.4	3.0	35	66.7

Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
-8.8	17.2	430	-2.5	12.3	10.3	16.4	20.1	14.5	126	6.0	10.0	24.2
25.0	0.7	1 633	-0.5	4.8	3.9	13.7	5.2	4.1	226	33.0	3.4	4.7
-6.9	-5.6	4 369	-1.2	1.2	1.2	5.0	1.9	1.8	545	..	1.5	1.5
-6.1	66.7	1 532	-8.4	6.3	4.2	-14.0	5.5	3.9	..	..	9.8	4.5
-3.3	-1.8	74 340	-7.1	0.1	0.1	-10.3	0.1	0.3	2 521	42.0	1.3	1.7
77.8	62.0	733	1.2	6.6	5.9	-7.0	11.3	11.8	220	..	2.4	2.1
..	..	47	-28.8	206.8	527.5	-181.1	176.0	159.8	40	..	..	..
2.7	32.1	239	1.3	20.7	23.0	10.7	34.6	37.0	94	..	..	2.6
7.4	3.8	343	11.0	27.3	25.2	5.8	23.8	23.6	25	29.0	3.3	3.4
2.7	10.5	53 200	21.7	0.0	0.0	4.1	0.2	0.1	..	..	1.2	1.2
0.0	-10.0	66	-9.6	79.9	87.3	5.4	121.1	107.7	..	..	..	22.2
-1.1	-15.5	371	-4.6	9.6	9.3	2.9	21.4	22.0	22	131.0	1.2	2.2
-25.0	33.3	60	-43.4	264.7	411.3	-289.6	132.3	116.4	96	191.0	..	33.3
22.1	13.1	1 945	18.7	2.8	3.4	11.5	4.0	4.6	553	..	1.4	1.4
-1.4	-3.9	7 777	1.8	0.7	0.7	7.2	1.0	0.9	1 055	27.0	3.4	3.0
33.3	0.0	309	18.4	14.8	14.3	11.2	25.0	19.7	52	..	1.9	2.8
6.0	3.3	2 530	8.6	2.7	2.8	13.9	3.0	3.2	268	10.0	8.2	9.5
-1.0	2.2	6 933	3.4	0.5	0.5	12.3	1.1	1.2	4 376	26.0	8.5	9.3
..	..	1 292	-3.5	5.5	4.6	10.1	5.9	4.6	170	..	8.7	6.0
-14.0	-46.2	308	-47.4	11.0	7.8	-9.9	24.7	11.5	42	-19.0	1.5	1.2
-8.4	-2.7	355	-12.3	5.6	6.2	-2.3	21.4	20.1	69	184.0	0.7	0.8
12.4	12.2	662	-5.8	5.2	13.6	11.6	11.5	28.0	..	..	4.1	4.1
..	..	33	94.1	..	..	..	229.7	356.5	..	..	..	..
31.1	24.2	2 172	26.6	1.8	1.4	7.2	3.5	2.8	308	..	2.2	2.3
-90.3	-68.0	72	7.5	188.0	214.3	-293.6	104.4	96.0	133	15.0	..	..
22.5	10.1	..	..	0.1	0.1	11.3	..	0.3	4 978	108.0	4.7	4.7
12.4	16.2	12 689	-1.7	0.2	0.2	13.5	0.6	0.6	5 167	87.0	6.7	4.8
-40.5	22.2	299	-14.3	17.4	13.9	-17.9	25.0	28.6	85	12.0	2.3	1.4
6.4	5.1	5 417	8.3	1.1	1.4	14.2	1.4	1.7	969	..	2.2	2.4
-3.0	-9.9	1 865	-5.2	2.8	4.0	15.4	3.9	5.2	388	..	9.6	3.9
6.9	-3.8	1 406	-0.6	3.1	3.3	3.0	5.2	5.1	283	77.0	3.9	..
57.1	0.0	147	-14.5	80.1	81.5	-161.5	49.1	52.2	90	31.0	..	..
..	..	96	-5.9	720.0	..	-1 191.5	75.0	79.7	95	-6.0	..	..
6.0	0.0	602	-1.3	5.8	7.4	14.6	12.0	15.1	189	..	8.9	6.5
2.4	4.6	4 062	-9.4	1.2	1.2	1.3	1.8	1.7	..	..	5.9	5.5
6.0	1.7	4 104	1.2	1.6	1.6	15.7	1.7	1.7	821	40.0	4.6	3.8
35.0	37.9	464	8.4	11.1	10.3	14.0	15.3	12.9	198	-17.0	3.1	1.9
-17.9	-16.4	262	-17.4	16.2	18.0	4.3	27.1	26.1	89	70.0	2.3	2.2
-6.3	-13.2	2 233	2.2	1.3	1.0	-1.2	3.2	2.4	375	..	3.4	7.9
5.2	3.0	3 792	3.0	0.9	0.9	35.0	1.9	1.9	1 684	74.0	36.4	35.8
17.6	19.0	3 161	-0.5	3.7	4.4	10.2	2.2	3.0	182	-40.0	8.8	9.8
8.2	11.0	..	..	0.8	0.9	4.7	..	2.0	190	..	3.5	6.3
-10.3	26.1	157	14.6	25.9	32.3	12.4	44.5	61.3	83	..	3.7	3.8
26.1	15.6	3 755	30.4	2.0	2.0	12.1	1.8	1.9	417	..	7.7	8.9
450.0	..	145	1.4	86.8	86.3	-135.1	47.9	66.4	134	..	12.5	9.1
-5.9	-9.8	465	4.5	6.9	6.2	4.9	14.8	13.3	49	..	..	1.1
-19.4	-35.0	492	8.9	10.5	10.7	8.0	14.0	12.8	115	..	1.5	..
0.0	100.0	65	-5.8	172.3	122.8	-208.9	106.0	71.2	86	..	..	..
9.4	14.8	3 601	-2.6	0.5	0.5	6.5	1.9	1.9	..	..	5.3	0.3
5.0	-16.7	320	53.8	19.6	11.1	9.7	21.4	11.3	63	..	5.7	9.5

## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				units	€m	%	%	%	€m
601	Techem	Support services (58)	Germany	7	94.3	-2.8	-20.0	432	5.9
602	Proha	Software & computer services (97)	Finland	7	-13.9	-8.1	-26.1	66	-14.3
603	Grupo Empresarial ENCE	Forestry & paper (15)	Spain	7	112.9	17.4	-10.9	470	-2.7
604	Trintech	Software & computer services (97)	Ireland	7	10.8	-20.0	-49.8	41	28.1
605	DSV	Transport (59)	Denmark	7	31.5	-9.6	..	2 432	2.4
606	Leifheit	Household goods & textiles (34)	Germany	7	-1.0	16.0	12.1	317	-5.4
607	Newport Networks	IT hardware (93)	UK	7	51.1	..	..	0	-100.0
608	CAF	Engineering & machinery (26)	Spain	7	..	..	..	578	..
609	Global Graphics	Software & computer services (97)	France	7	5.1	-14.9	-41.5	19	5.6
610	Provimi	Food producers (43)	France	7	-56.7	40.2	-28.7	1 580	2.3
611	Body Shop International	General retailers (52)	UK	7	-13.2	8.2	8.8	592	10.0
612	Punch International	Electronic & Electrical (25)	Belgium	7	..	..	..	215	22.2
613	Oriflame Cosmetics	Personal care & household (47)	Belgium	6	2.9	18.2	35.5	671	2.9
614	Protherics	Pharma & biotech (48)	UK	6	23.6	130.2	80.0	27	-10.0
615	Lorantis	Pharma & biotech (48)	UK	6	17.2	3.0	39.5	0	..
616	HK Ruokatalo	Food producers (43)	Finland	6	4.3	18.3	25.9	680	5.1
617	Wavelight Laser Technologie	Health (44)	Germany	6	50.6	7.7	62.2	62	29.2
618	Sanochemia Pharmazeutika	Pharma & biotech (48)	Austria	6	52.1	3.8	17.0	26	36.8
619	Rosenbauer International	Engineering & machinery (26)	Austria	6	0.0	12.5	51.4	299	-7.4
620	Clearswift Systems	Software & computer services (97)	UK	6	-2.3	209.6	50.7	33	3.1
621	Constantia Packaging	Support services (58)	Austria	6	31.7	3.5	15.9	945	-3.2
622	Ricardo	Support services (58)	UK	6	-13.6	10.4	-12.1	207	7.3
623	ATB-Austria Antriebstechnik	Electronic & Electrical (25)	Austria	6	23.8	197.1	..	181	19.9
624	Greencore	Food producers (43)	Ireland	6	-15.7	-5.4	-2.0	1 446	-1.8
625	Acerinox	Steel & other metals (18)	Spain	6	244.4	12.5	-5.9	4 041	38.7
626	Otto	General retailers (52)	Germany	6	4.6	..	..	14 424	0.8
627	AIT (now Portrait Software)	Software & computer services (97)	UK	6	-31.2	-33.1	64.9	28	12.0
628	Waterford Wedgwood	Household goods & textiles (34)	Ireland	6	-34.4	-3.1	62.7	832	-12.5
629	EVS Broadcast Equipment	Electronic & Electrical (25)	Belgium	6	3.4	-4.5	22.1	50	28.2
630	SolarWorld	Engineering & machinery (26)	Germany	6	22.0	-40.5	68.0	200	104.1
631	Infovista	Software & computer services (97)	France	6	-2.9	-13.4	50.6	29	11.5
632	Senior	Engineering & machinery (26)	UK	6	13.0	0.0	18.8	460	-8.2
633	Deceuninck	Construction & building (13)	Belgium	6	-4.6	-1.6	-36.8	582	23.8
634	Wienerberger	Construction & building (13)	Austria	6	-8.2	..	..	1 759	-3.7
635	Larox	Support services (58)	Finland	6	..	..	8.6	97	70.2
636	Lufthansa	Transport (59)	Germany	6	-25.0	-44.4	-50.0	16 965	6.3
637	SoftM Software und Beratung	Software & computer services (97)	Germany	6	-6.3	0.0	10.3	88	27.5
638	Microgen	Software & computer services (97)	UK	6	76.9	-3.4	92.3	60	62.2
639	TELES AG Informationstechnologien	Software & computer services (97)	Germany	6	33.3	4.4	-26.7	79	3.9
640	Serco	Support services (58)	UK	6	..	..	..	1 951	4.3
641	AudioDev	IT hardware (93)	Sweden	6	15.6	15.3	13.5	30	0.0
642	GFT Technologies	Software & computer services (97)	Germany	6	25.8	-5.7	82.5	126	-8.7
643	Group 4 Securicor	Support services (58)	UK	6	1 278.6	-98.1	-33.6	4 483	23.5
644	Nordex	Engineering & machinery (26)	Germany	6	16.7	4.5	-30.7	222	13.3
645	MWG-Biotech	Pharma & biotech (48)	Germany	6	170.3	-60.2	-27.7	33	-23.3
646	MTL Instruments	Electronic & Electrical (25)	UK	6	9.4	-34.9	-8.0	90	5.9
647	Devro	Food producers (43)	UK	6	-0.7	15.9	-47.5	210	1.9
648	Progress-Werk Oberkirch	Automobiles & parts (31)	Germany	6	-18.7	218.6	69.2	201	4.7
649	PZ Cussons	Personal care & household (47)	UK	6	7.4	3.3	12.0	690	4.9
650	LDV	Engineering & machinery (26)	UK	6	152.0	-60.1	-15.1	199	-14.2

Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-	Capital expenditures		
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
7.7	6.8	2 153	-9.2	1.6	0.9	19.8	3.2	1.5	913	..	10.2	2.0
-23.8	21.7	569	-11.4	10.3	10.3	-10.5	12.0	12.3	27	..	..	..
3.0	-1.3	1 437	0.8	1.4	0.7	2.8	4.7	2.2	588	..	16.4	14.1
0.0	-36.0	315	-6.3	16.5	19.0	2.7	21.4	18.1	42	..	..	..
-1.5	-0.3	9 225	-0.3	0.3	0.2	3.9	0.7	0.6	1 722	..	2.0	2.7
-5.6	-8.3	2 070	-11.2	2.1	2.0	-4.1	3.2	2.9	113	..	2.2	3.3
..	..	65	12.1	..	440.0	-2 365.3	102.3	75.9	78	..	..	..
..	..	3 846	..	1.1	..	3.1	1.7	..	298	..	3.8	..
-10.0	-74.7	98	1.0	34.5	34.6	3.1	66.8	64.2	111	..	..	..
1.2	1.7	8 170	1.8	0.4	1.0	4.5	0.8	1.9	498	44.0	1.8	1.8
0.0	0.4	6 836	15.9	1.1	1.4	8.9	1.0	1.3	705	52.0	6.8	3.3
2.3	57.8	3 359	-4.0	3.0	..	5.4	1.9	..	144	..	16.3	15.9
19.9	21.7	4 527	8.3	1.0	1.0	15.6	1.4	1.5	1 086	..	2.8	4.1
87.5	45.5	212	-3.2	23.7	17.3	-12.5	30.2	23.7	182	28.0	7.4	16.7
..	..	49	2.1	..	..	..	130.6	113.8	..	..	..	..
2.2	8.2	4 713	-7.1	0.9	0.9	4.6	1.3	1.2	269	..	4.1	4.5
26.3	58.3	215	39.6	10.2	8.8	8.8	29.5	27.3	135	..	8.1	2.1
5.6	38.5	149	0.7	24.3	21.8	-7.0	42.3	28.0	86	..	11.5	21.1
12.9	4.4	1 376	4.8	2.1	2.0	6.7	4.6	4.8	102	..	1.7	2.2
700.0	33.3	213	-12.3	19.1	20.1	-53.7	29.5	26.5	..	..	3.0	6.3
7.5	10.2	5 203	-3.1	0.7	0.5	7.6	1.2	0.9	542	..	7.9	5.5
-4.5	2.0	1 738	10.1	3.0	3.7	-1.3	3.6	4.6	188	..	7.2	6.2
86.4	-5.8	1 774	26.7	3.5	3.3	3.5	3.5	3.6	157	..	2.8	1.3
-17.2	-1.2	10 512	-6.5	0.4	0.5	5.8	0.6	0.7	677	..	4.2	4.1
16.5	37.3	6 508	1.8	0.2	0.1	12.7	1.0	0.3	3 912	..	4.6	9.7
2.1	-2.6	54 428	-1.8	0.0	0.0	3.1	0.1	0.1	..	..	1.8	1.3
-51.0	6.3	159	-53.6	22.0	35.8	11.8	38.7	26.1	18	-55.0	3.6	..
14.7	-23.5	8 482	-5.0	0.7	1.0	-2.2	0.7	1.0	252	..	4.2	2.3
8.3	2.9	143	-10.6	12.2	15.1	53.4	42.7	36.9	357	..	2.0	5.1
-10.1	32.9	570	13.1	3.1	5.1	16.5	10.7	9.9	1 131	..	15.5	30.6
-10.3	3.6	190	0.5	21.0	24.1	-22.6	32.0	33.1	92	..	3.4	3.8
-12.3	-12.8	5 014	-2.6	1.3	1.1	3.6	1.2	1.0	223	27.0	3.3	2.2
29.8	3.1	3 043	11.1	1.0	1.4	3.9	2.0	2.3	567	..	9.5	10.4
11.5	6.9	11 441	28.0	0.3	0.4	14.3	0.5	0.7	2 758	..	12.7	8.5
-3.4	-11.9	436	55.7	6.2	..	5.2	13.8	..	36	..	3.1	1.8
-6.0	1.7	92 743	-2.2	0.0	0.1	2.8	0.1	0.1	5 106	..	9.4	5.2
-9.2	22.6	476	6.0	6.8	9.3	1.3	12.6	14.3	21	..	1.1	..
2.8	20.0	499	72.7	10.0	9.1	0.4	12.0	11.7	113	60.0	1.7	2.7
8.6	11.1	503	29.3	7.6	5.9	5.4	11.9	11.5	172	..	12.7	7.9
20.7	20.1	28 073	6.1	0.3	..	4.3	0.2	..	1 658	..	1.8	2.7
30.4	-4.2	123	17.1	19.5	16.8	13.3	47.5	48.1	50	..	..	3.3
-11.5	5.4	952	-8.7	4.6	3.3	-1.2	6.1	4.4	51	..	0.8	0.7
83.5	23.3	306 313	32.9	0.1	0.0	-0.9	0.0	0.0	2 766	40.0	3.2	..
-55.4	26.5	726	-16.3	2.6	2.5	-12.9	7.9	5.7	97	..	1.8	4.1
-14.0	-3.8	325	-14.5	17.4	4.9	-112.3	17.6	5.6	11	..	12.1	7.0
0.0	-5.6	764	6.3	6.4	6.2	7.6	7.5	7.3	99	67.0	2.2	1.2
5.6	-33.7	2 152	4.7	2.7	2.8	14.4	2.7	2.8	283	10.0	7.6	4.9
9.7	9.4	987	4.6	2.8	3.7	7.3	5.8	7.4	67	..	8.5	8.3
5.6	8.5	11 627	-0.3	0.8	0.8	9.9	0.5	0.5	781	8.0	2.8	4.3
-11.5	-15.8	932	-12.7	2.9	1.0	-8.8	6.1	2.1	..	..	9.5	2.2



## II.1.1. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				units	€m	%	%	%	€m
651	<i>Sveaskog</i>	Forestry & paper (15)	Sweden	6	50.3	-15.1	..	923	-1.0
652	Efore	Electronic & Electrical (25)	Finland	6	48.7	15.2	-17.5	73	14.1
653	IPTE	Engineering & machinery (26)	Belgium	6	-5.5	2.8	-3.6	129	17.3
654	<i>Luxfer</i>	Engineering & machinery (26)	UK	6	-2.4	13.8	-5.2	321	2.9
655	GFI Informatique	Software & computer services (97)	France	6	24.5	..	..	518	3.6
656	Dyson	Chemicals (11)	UK	6	7.5	42.0	51.0	83	-1.2
657	Schouw	Diversified industrials (24)	Denmark	6	-41.0	12.5	464.4	454	9.7
658	Pharming	Pharma & biotech (48)	The Netherlands	6	4.7	180.9	-33.6	1	..
659	Netia	Telecommunication services (67)	Poland	6	-26.2	-36.7	295.3	220	29.4
660	LION Bioscience	Pharma & biotech (48)	Germany	6	-56.2	-63.5	4.5	10	-50.0
661	Innovation	Software & computer services (97)	UK	6	-40.5	-18.6	23.1	82	-1.2
662	ALTEC	Software & computer services (97)	Greece	5	58.1	60.0	42.4	289	12.9
663	Surteco	Household goods & textiles (34)	Germany	5	2.5	22.3	..	380	7.0
664	Aga Foodservice	Engineering & machinery (26)	UK	5	15.2	32.0	-26.5	614	10.8
665	Karolin Machine Tool	Engineering & machinery (26)	Sweden	5	14.1	15.5	-29.5	160	37.9
666	NeuroSearch	Pharma & biotech (48)	Denmark	5	..	..	-92.2	16	-27.3
667	<i>Thomas Swan</i>	Chemicals (11)	UK	5	-11.1	195.5	55.4	40	11.1
668	Pankl Racing Systems	Automobiles & parts (31)	Austria	5	-2.6	144.1	61.8	76	15.2
669	Severn Trent	Utilities - other (77)	UK	5	15.7	-18.0	11.5	2 940	3.3
670	Xaar	Electronic & Electrical (25)	UK	5	-20.1	44.2	-25.0	50	22.0
671	Infor Business Solutions	Software & computer services (97)	Germany	5	-57.8	-15.3	6.1	57	-13.6
672	<i>Posten</i>	Support services (58)	Sweden	5	-81.9	-20.5	48.6	2 828	4.2
673	Elexis	Electronic & Electrical (25)	Germany	5	-1.9	-3.6	-27.6	125	17.9
674	<i>MessageLabs</i>	Software & computer services (97)	UK	5	69.5	67.6	7.7	81	35.0
675	IHC Caland (now SBM Offshore)	Oil & gas (7)	The Netherlands	5	-16.7	-45.8	39.0	970	-28.7
676	Superscape	Software & computer services (97)	UK	5	18.9	1.6	108.8	6	200.0
677	<i>Linn Products</i>	Household goods & textiles (34)	UK	5	33.2	56.9	68.5	50	0.0
678	<i>Norbrook Laboratories</i>	Pharma & biotech (48)	UK	5	3.6	16.7	34.9	97	9.0
679	Stonesoft	Software & computer services (97)	Finland	5	-22.2	-11.3	-16.0	22	-4.3
680	Virbac	Pharma & biotech (48)	France	5	..	..	..	355	-1.1
681	Umbro	Household goods & textiles (34)	UK	5	31.0	14.2	..	198	10.0
682	CML Microsystems	IT hardware (93)	UK	5	26.9	23.6	17.5	33	43.5
683	Bespak	Health (44)	UK	5	-44.0	15.2	51.1	117	-6.4
684	Norddeutsche Affinerie	Steel & other metals (18)	Germany	5	-16.7	-13.0	25.5	2 481	36.6
685	Gorenje	Household goods & textiles (34)	Slovenia	5	7 042.9	..	..	903	10.3
686	Fiskars	Household goods & textiles (34)	Finland	5	25.0	-20.0	-16.7	597	-3.7
687	Kaessbohrer Gelaendefahrzeug	Engineering & machinery (26)	Germany	5	-2.0	2.0	31.6	154	18.5
688	Kingspan	Construction & building (13)	Ireland	5	0.2	3.3	23.4	958	22.2
689	CeNeS Pharmaceuticals	Pharma & biotech (48)	UK	5	18.3	-17.0	-58.2	0	-100.0
690	Proteome Sciences	Pharma & biotech (48)	UK	5	-2.2	100.8	145.1	0	..
691	Victrex	Chemicals (11)	UK	5	33.5	13.3	13.3	122	20.8
692	HITT	Electronic & Electrical (25)	The Netherlands	5	31.4	23.5	-26.5	17	-19.1
693	Stralfors	Media & entertainment (54)	Sweden	5	..	..	..	339	2.4
694	Artwork Systems	Software & computer services (97)	Belgium	5	11.0	3.1	27.0	47	6.8
695	<i>OFCOM</i>	Media & entertainment (54)	UK	5	-0.4	198.8	-3.0	205	345.7
696	<i>British Vita</i>	Chemicals (11)	UK	5	-5.7	3.0	0.0	1 355	2.0
697	Alphameric	Software & computer services (97)	UK	5	-17.8	-5.2	3.0	99	11.2
698	Sondagsavisen	Media & entertainment (54)	Denmark	5	39.2	54.8	..	165	-2.4
699	<i>TTP</i>	Software & computer services (97)	UK	5	-17.7	1.2	8.0	32	-8.6
700	Intrum Justitia	Other financials (87)	Sweden	5	-23.5	-9.0	253.6	315	-0.6



Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	change 04/03
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
0.3	1 835.4	1 791	-19.0	0.6	0.4	14.1	3.2	1.7	..	..	3.1	3.5
64.1	-30.4	512	24.6	7.7	5.9	11.6	11.0	9.2	77	..	4.1	3.1
32.5	-23.1	1 302	11.5	4.4	5.4	-1.4	4.3	5.1	26	..	2.3	2.7
-2.8	-5.6	2 034	-1.1	1.8	1.9	5.2	2.8	2.8	..	..	3.7	2.9
-7.9	-9.1	6 305	1.9	1.1	0.9	-3.0	0.9	0.7	235	..	0.6	0.6
-3.4	-13.0	903	5.6	6.7	6.2	-0.6	6.2	6.1	184	40.0	14.5	31.0
4.8	34.4	2 690	10.2	1.2	2.3	5.2	2.1	3.9	327	64.0	10.1	8.0
-100.0	-77.8	39	8.3	553.0	..	-2 076.3	141.8	146.7	284	..	100.0	..
14.9	12.1	..	..	2.5	4.4	10.4	..	5.8	1 301	..	17.7	15.9
-33.3	-25.0	85	-52.0	54.8	62.6	-144.2	64.5	70.7	9	11.0	10.0	5.0
-41.1	72.0	983	-2.1	6.7	11.1	-14.8	5.6	9.2	185	24.0	2.4	1.2
-7.6	-9.2	942	-2.1	1.9	1.3	0.0	5.8	3.6	36	..	2.1	2.3
-3.5	35.8	1 998	2.9	1.4	1.5	11.7	2.7	2.7	282	..	3.4	4.2
18.6	-10.7	5 139	8.3	0.9	0.8	6.6	1.1	1.0	547	41.0	3.4	4.5
0.9	-22.8	747	6.6	3.3	4.0	5.3	7.2	6.7	81	..	..	..
-18.5	350.0	175	-2.2	33.4	..	-57.3	30.6	..	160	..	12.5	..
5.9	-2.9	267	8.5	13.3	16.6	-0.5	19.9	24.3	..	..	5.0	5.6
8.2	13.0	609	6.8	6.9	8.1	3.5	8.6	9.4	84	..	10.5	18.2
8.8	3.2	16 374	3.7	0.2	0.2	18.6	0.3	0.3	4 701	21.0	25.5	24.6
-6.8	29.4	235	-10.0	10.4	15.9	16.4	22.2	25.0	242	217.0	4.0	9.8
-10.8	-1.3	457	-23.7	9.1	18.7	-16.3	11.4	20.6	76	..	1.8	..
3.8	-1.8	35 731	-5.7	0.2	1.1	3.1	0.1	0.8	..	..	2.7	2.7
-34.6	-12.9	719	3.2	4.2	5.0	6.6	7.2	7.6	126	..	0.8	..
42.9	75.0	557	46.2	6.4	5.1	-8.2	9.3	8.0	..	..	18.5	10.0
46.2	-3.6	4 023	-5.0	0.5	0.5	9.3	1.3	1.5	1 950	..	18.2	28.7
0.0	-33.3	67	24.1	85.8	216.5	-143.8	76.9	80.2	69	14.0	..	..
11.1	18.4	370	6.9	10.3	7.7	1.0	13.9	11.2	..	..	8.0	6.0
6.0	21.7	734	-0.3	5.3	5.6	6.7	7.0	6.7	..	..	4.1	12.4
-23.3	-48.3	258	-13.4	23.1	28.4	-46.6	19.7	21.9	34	..	..	..
5.6	4.6	2 248	1.7	1.4	..	6.0	2.3	..	289	..	3.4	2.8
15.4	12.2	198	2.6	2.6	2.2	12.8	25.6	20.1	281	..	1.0	1.1
35.3	-26.1	222	1.4	15.3	17.3	-0.8	22.7	18.2	78	-8.0	6.1	4.3
-3.1	16.2	667	-19.3	4.3	7.2	10.4	7.5	10.8	205	12.0	6.0	17.6
-5.4	-4.5	3 079	-6.5	0.2	0.3	2.3	1.6	1.8	610	..	1.1	1.3
8.1	13.1	9 503	3.9	0.6	0.0	3.2	0.5	0.0	320	..	7.1	12.7
-14.6	-4.7	3 782	4.1	0.8	0.6	10.1	1.3	1.1	863	..	2.8	4.0
-1.5	116.4	427	-0.7	3.2	3.9	11.1	11.7	11.9	98	..	0.7	3.1
5.9	-10.7	3 351	5.4	0.5	0.6	9.9	1.5	1.6	1 795	..	6.0	5.4
-71.4	0.0	14	7.7	..	207.5	-10 610.5	350.7	319.2	47	83.0	..	..
..	..	42	-2.3	..	..	-7 958.3	116.9	116.7	161	50.0	..	..
21.7	-18.6	257	7.1	4.0	3.6	32.7	19.1	15.3	578	53.0	11.5	8.9
-34.4	-13.5	154	-8.9	28.8	17.8	-0.3	31.8	22.1	29 808	..	..	..
-6.8	-2.2	1 728	-0.7	1.4	..	2.7	2.8	..	127	..	3.5	5.1
-4.3	-4.2	227	4.6	10.3	9.9	36.0	21.3	20.1	172	..	2.1	2.3
76.9	4.0	768	300.0	2.4	10.5	18.8	6.3	25.2	..	..	3.9	50.0
5.2	-1.9	7 839	-5.1	0.4	0.4	4.8	0.6	0.6	..	..	3.4	4.1
2.3	8.8	776	3.7	4.8	6.5	-5.7	6.1	7.8	157	31.0	8.1	7.9
19.9	4.4	969	22.8	2.9	2.0	3.5	4.9	4.3	127	..	20.6	11.8
16.7	3.4	280	-6.7	14.8	16.5	-3.9	16.9	19.2	..	..	..	2.9
3.3	19.5	2 945	2.6	1.5	2.0	11.5	1.6	2.2	437	..	..	..

## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

Explanations of the terms in the header are to be found in Volume II, page nr. 195, Glossary of Definitions

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>Austria</b>				
				<i>number of companies for calculation</i>
1	Voest-Alpine	171	Steel & other metals (18)	Wholesale & commission trade except motor vehicles (510)
2	VA Technologie	181	Engineering - general (267)	Manufacture of electrical machinery & apparatus n e c (310)
3	Telekom Austria	213	Telecommunication services (67)	Post & telecommunications (640)
4	Andritz	321	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
5	RHI	346	Construction & building (13)	Manufacture of other non-metallic mineral products (268)
6	OMV	356	Oil & gas (7)	Extraction of crude petroleum/natural gas & incidental services (111)
7	JoWood Productions Software	373	Software (977)	Computer & related activities (720)
8	Lenzing	377	Chemicals (11)	Manufacture of chemicals & chemical products (240)
9	Bohler-Uddeholm	397	Steel & other metals (18)	Manufacture of basic metals (270)
10	Intercell	403	Pharmaceuticals (486)	Research & development (730)
11	EYBL International	454	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
12	BWT	465	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
13	Miba	486	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
14	Palfinger	520	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
15	Constantia-ISO	585	Construction & building (13)	Manufacture of wood;cork products articles of straw (205)
16	Sanochemia Pharmazeutika	618	Pharmaceuticals (486)	Wholesale & commission trade except motor vehicles (510)
17	Rosenbauer International	619	Commercial vehicles & trucks (263)	Manufacture of motor vehicles trailers & semi-trailers (340)
18	Constantia Packaging	621	Support services (58)	Manufacture of pulp paper & paper products (211)
19	ATB-Austria Antriebstechnik	623	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
20	Wienerberger	634	Construction & building (13)	Wholesale & commission trade except motor vehicles (510)
21	Pankl Racing Systems	668	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
<b>Belgium</b>				
				<i>number of companies for calculation</i>
1	Solvay	43	Chemicals (11)	Manufacture of chemicals & chemical products (240)
2	UCB	49	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
3	Agfa-Gevaert	78	Health (44)	Manufacture of chemicals & chemical products (240)
4	Umicore	131	Steel & other metals (18)	Manufacture of basic metals (270)
5	Barco	159	Electronic equipment (253)	Manufacture of electrical machinery & apparatus n e c (310)
6	Bekaert	191	Engineering - general (267)	Manufacture of fabricated metal products (not machinery & equip) (280)
7	Tessenderlo	275	Chemicals (11)	Manufacture of chemicals & chemical products (240)
8	Innogenetics	276	Biotechnology (482)	Research & development (730)
9	Recticel	338	Chemicals (11)	Manufacture of rubber & plastic products (250)
10	Melexis	381	Semiconductors (936)	Manufacture of office machinery & computers (300)
11	Spector Photo	391	Media & entertainment (54)	Other business activities (740)
12	Aliaxis	392	Construction & building (13)	Manufacture of rubber & plastic products (250)
13	Option	419	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
14	InBev	427	Beverages (41)	Manufacture of food products & beverages (150)
15	Omega Pharma	437	Pharmaceuticals (486)	Wholesale & commission trade except motor vehicles (510)
16	NPM/CNP	519	Other financials (87)	Other business activities (740)
17	Ion Beam Applications	537	Health (44)	Manufacture of electrical machinery & apparatus n e c (310)
18	ICOS Vision Systems	546	Semiconductors (936)	Wholesale & commission trade except motor vehicles (510)
19	Ubizen	578	Internet (974)	Computer & related activities (720)
20	Telindus	589	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
21	Punch International	612	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
22	Oriflame Cosmetics	613	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
23	EVS Broadcast Equipment	629	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
24	Deceuninck	633	Construction & building (13)	Manufacture of rubber & plastic products (250)
25	IPTE	653	Engineering - contractors (264)	Manufacture of machinery & equipment n e c (290)
26	Artwork Systems	694	Software (977)	Computer & related activities (720)

– R&D Investment –			— Net Sales —			— Employees 2004 —			– R&D/Net Sales ratio –		– Operating Profit –		– R&D per employee –		– Market Capitalisation –	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
374	8.3	4.6	34 833	15.4	7.7	126 332	4.9	2.2	1.1	1.1	7.8	6.7	3.0	2.9	32 491	86.9
21	21	15	21	21	21	21	21	21	21	21	21	21	21	21	19	9
60	16.3	18.6	5 779	24.4	19.9	23 877	1.2	12.4	1.0	1.1	8.9	5.3	2.5	2.2	2 540	84.0
56	-2.5	-15.9	4 073	3.8	0.6	16 562	-5.2	-4.2	1.4	1.5	-1.8	1.5	3.4	3.3	997	-11.0
42	-0.9	24.8	4 056	2.2	15.1	13 639	-6.9	-8.1	1.1	1.1	11.5	9.6	3.1	2.9	7 654	34.0
21	-17.1	4.6	1 481	20.9	3.9	5 314	15.6	5.3	1.4	2.1	4.8	3.9	4.0	5.5	1 009	119.0
20	21.9	..	1 297	5.2	-11.4	7 807	-0.4	-11.0	1.5	1.3	10.4	10.0	2.5	2.0	602	..
19	-17.7	-3.1	9 880	29.3	8.5	6 232	2.3	3.0	0.2	0.3	9.0	8.4	3.0	3.7	12 225	176.0
17	91.8	..	17	-26.1	-26.0	184	17.9	-12.7	101.3	39.0	-95.1	30.4	93.6	57.6	22	..
17	11.4	7.6	871	40.0	11.8	4 763	62.5	13.7	2.0	2.5	12.3	11.7	3.6	5.2	692	28.0
16	4.2	0.0	1 934	28.9	8.6	11 711	15.3	7.0	0.8	1.0	9.7	7.5	1.4	1.5	1 573	143.0
16	17.9	39.0	3	200.0	..	140	16.7	21.5	524.0	1 333.0	-601.5	-1 600.0	112.3	111.1	255	..
13	53.3	..	342	-0.9	-3.2	3 606	10.5	6.1	3.7	2.4	3.3	2.3	3.5	2.5	..	..
12	23.5	2.7	488	17.3	5.1	2 734	6.1	3.1	2.5	2.4	4.8	2.9	4.5	3.9	584	91.0
11	8.7	7.1	328	11.6	4.0	2 586	5.7	3.2	3.4	3.5	9.0	8.2	4.4	4.3	36	9.0
10	34.7	16.4	404	21.0	6.8	2 563	11.8	7.3	2.5	2.2	10.3	8.1	3.9	3.3	573	..
7	-7.5	..	594	-8.8	-0.8	4 062	-9.4	-4.1	1.2	1.2	1.3	3.1	1.8	1.7	..	..
6	52.1	22.7	26	36.8	26.0	149	0.7	2.6	24.3	21.8	-7.0	-26.3	42.3	28.0	86	..
6	0.0	19.4	299	-7.4	3.0	1 376	4.8	2.2	2.1	2.0	6.7	5.6	4.6	4.8	102	..
6	31.7	16.5	945	-3.2	4.7	5 203	-3.1	3.2	0.7	0.5	7.6	5.9	1.2	0.9	542	..
6	23.8	..	181	19.9	28.2	1 774	26.7	36.3	3.5	3.3	3.5	3.3	3.5	3.6	157	..
6	-8.2	..	1 759	-3.7	4.7	11 441	28.0	9.6	0.3	0.4	14.3	10.5	0.5	0.7	2 758	..
5	-2.6	56.7	76	15.2	12.1	609	6.8	15.3	6.9	8.1	3.5	-4.5	8.6	9.4	84	..
<b>1 453</b>	<b>11.7</b>	<b>6.9</b>	<b>51 549</b>	<b>14.5</b>	<b>9.3</b>	<b>227 146</b>	<b>21.1</b>	<b>5.5</b>	<b>2.8</b>	<b>2.9</b>	<b>8.4</b>	<b>7.6</b>	<b>6.4</b>	<b>7.0</b>	<b>51 316</b>	<b>58.5</b>
26	25	23	26	26	26	26	26	24	26	25	26	26	26	25	25	14
427	1.7	105.1	7 877	4.2	95.7	29 300	-2.8	105.4	5.4	5.6	9.8	7.9	14.6	13.9	7 612	46.0
376	39.3	126.7	3 068	3.4	106.4	12 015	-0.6	104.3	12.3	9.1	13.8	15.8	31.3	22.3	6 589	31.0
191	-18.0	92.9	3 762	-10.7	90.5	16 224	-12.8	90.6	5.1	5.5	12.5	7.1	11.8	12.5	2 926	29.0
89	111.9	..	7 115	52.1	125.5	11 521	19.5	111.6	1.3	0.9	3.9	2.2	7.7	4.4	1 866	55.0
69	-1.0	85.7	672	6.8	93.7	4 389	9.1	95.1	10.3	11.1	8.7	9.2	15.7	17.3	764	-3.0
54	49.8	116.1	2 173	20.9	105.6	12 291	9.7	104.9	2.5	2.0	10.6	7.4	4.4	3.2	1 463	50.0
28	2.9	103.1	2 078	5.4	102.2	8 330	2.1	102.2	1.4	1.4	3.6	4.8	3.4	3.4	807	15.0
28	10.4	114.6	71	9.2	109.2	589	-0.3	99.6	39.5	39.1	-20.8	-26.2	47.6	43.0	284	-11.0
20	9.2	115.6	1 276	3.1	102.4	11 034	38.5	103.9	1.6	1.5	2.6	0.7	1.8	2.3	215	32.0
17	42.6	165.7	153	14.2	117.5	643	16.9	112.8	11.1	8.9	18.9	18.7	26.4	21.7	465	32.0
16	-7.5	98.9	358	-5.0	87.6	1 710	5.1	98.0	4.6	4.7	0.7	4.5	9.6	10.9	42	-25.0
16	2.0	88.1	1 680	4.2	76.0	11 610	-3.6	71.3	1.0	1.0	9.5	8.6	1.4	1.3	..	..
14	59.7	104.0	103	80.7	166.3	196	25.6	106.2	13.9	15.8	18.0	12.3	73.2	57.6	390	..
14	0.0	110.9	8 568	21.6	104.5	74 694	95.4	124.7	0.2	0.2	9.7	11.6	0.2	0.4	19 252	101.0
14	102.8	301.0	833	14.9	123.7	2 723	16.9	124.6	1.7	0.9	5.4	9.0	5.1	2.9	1 279	..
10	22.4	..	9 229	21.7	646.5	13 678	-1.5	..	0.1	0.1	7.9	7.1	0.7	0.6	4 128	..
9	-48.5	77.5	175	-25.2	86.9	804	-53.2	80.2	5.4	7.8	5.9	-43.6	11.7	10.6	161	22.0
9	36.6	118.4	89	97.8	169.4	262	51.4	..	10.0	14.5	30.6	13.3	33.9	37.6	261	..
8	-25.1	84.1	43	-40.3	74.7	299	-14.3	79.6	17.4	13.9	-17.9	-52.8	25.0	28.6	85	12.0
7	36.2	..	532	2.7	93.2	2 233	2.2	96.3	1.3	1.0	-1.2	-2.7	3.2	2.4	375	..
7	..	100.3	215	22.2	124.4	3 359	-4.0	119.7	3.0	..	5.4	5.7	1.9	..	144	..
6	2.9	117.1	671	2.9	113.5	4 527	8.3	111.3	1.0	1.0	15.6	17.5	1.4	1.5	1 086	..
6	3.4	105.4	50	28.2	111.6	143	-10.6	93.8	12.2	15.1	53.4	28.2	42.7	36.9	357	..
6	-4.6	83.1	582	23.8	117.4	3 043	11.1	121.4	1.0	1.4	3.9	11.5	2.0	2.3	567	..
6	-5.5	96.8	129	17.3	105.1	1 302	11.5	111.4	4.4	5.4	-1.4	0.9	4.3	5.1	26	..
5	11.0	112.3	47	6.8	98.3	227	4.6	109.1	10.3	9.9	36.0	34.1	21.3	20.1	172	..

## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>Czech Republic</b> <i>number of companies for calculation</i>				
1	Cez	408	Electricity (72)	Electricity, gas, steam & hot water supply (400)
<b>Denmark</b> <i>number of companies for calculation</i>				
1	Novo Nordisk	33	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
2	Lundbeck	84	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
3	Novozymes	112	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
4	Grundfos	144	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
5	Danfoss	145	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
6	Danisco	147	Food producers (43)	Manufacture of food products & beverages (150)
7	Bang & Olufsen	169	Electrical equipment (252)	Manufacture of radio TV & communication equip & apparatus (320)
8	Chr Hansen	170	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
9	Nyco	194	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
10	Genmab	195	Biotechnology (482)	Research & development (730)
11	Arla Foods	204	Food producers (43)	Manufacture of food products & beverages (150)
12	GN Store Nord	205	Telecommunications equipment (938)	Manufacture of medical/precision/optical instruments & watches (330)
13	William Demant	211	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
14	Borealis	216	Chemicals (11)	Wholesale & commission trade except motor vehicles (510)
15	NKT	219	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
16	Vestas Wind Systems	228	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
17	Danske Bank	241	Banks (81)	Financial intermediation except insurance & pension funding (650)
18	Coloplast	280	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
19	Rockwool International	318	Construction & building (13)	Manufacture of other non-metallic mineral products (268)
20	Auriga Industries	320	Chemicals (11)	Manufacture of chemicals & chemical products (240)
21	FLS Industries (now FLSmidth)	348	Engineering - general (267)	Other business activities (740)
22	Thrane & Thrane	349	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
23	Bavarian Nordic	390	Biotechnology (482)	Research & development (730)
24	Simcorp	402	Software (977)	Computer & related activities (720)
25	Carlsberg	413	Beverages (41)	Manufacture of food products & beverages (150)
26	Glunz & Jensen	562	Computer hardware (932)	Manufacture of medical/precision/optical instruments & watches (330)
27	Pharmexa	563	Biotechnology (482)	Research & development (730)
28	DSV	605	Transport (59)	Supporting & auxiliary transport activities; travel agencies (630)
29	Schouw	657	Diversified industrials (24)	Manufacture of machinery & equipment n e c (290)
30	NeuroSearch	666	Biotechnology (482)	Research & development (730)
31	Sondagsavisen	698	Media & entertainment (54)	Publishing, printing & reproduction of recorded media (220)
<b>Finland</b> <i>number of companies for calculation</i>				
1	Nokia	6	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
2	Metso	118	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
3	Stora Enso	140	Forestry & paper (15)	Manufacture of pulp paper & paper products (211)
4	Orion	157	Health (44)	Manufacture of chemicals & chemical products (240)
5	Kone	163	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
6	Wartsila	172	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
7	UPM-Kymmene	202	Forestry & paper (15)	Manufacture of pulp paper & paper products (211)
8	Kemira	206	Chemicals (11)	Manufacture of chemicals & chemical products (240)
9	Outokumpu	217	Steel & other metals (18)	Manufacture of basic metals (270)
10	Patria	225	Aerospace & defence (21)	Manufacture of machinery & equipment n e c (290)
11	Metsaliitto	236	Forestry & paper (15)	Forestry logging & related service activities (020)

- R&D Investment -			- Net Sales -			- Employees 2004 -			- R&D/Net Sales ratio -		- Operating Profit -		- R&D per employee -		- Market Capitalisation -	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	3 300	18.1	21.0	17 855	-1.4	30.6	0.5	..	22.8	13.4	0.8	..	10 160	..
<b>1 806</b>	<b>3.4</b>	<b>3.9</b>	<b>46 513</b>	<b>10.7</b>	<b>4.5</b>	<b>194 565</b>	<b>-2.3</b>	<b>-0.3</b>	<b>3.9</b>	<b>4.4</b>	<b>11.2</b>	<b>10.1</b>	<b>9.1</b>	<b>9.0</b>	<b>53 096</b>	<b>24.3</b>
31	29	25	31	31	30	30	31	30	31	29	31	31	30	29	25	20
585	3.8	3.1	3 903	9.4	6.9	19 520	6.2	9.7	15.0	15.8	23.6	24.1	30.0	30.7	11 908	8.0
173	-29.8	-3.6	1 308	-2.1	8.3	5 155	-1.3	13.1	13.2	18.4	26.0	21.4	33.5	47.1	4 352	27.0
109	8.0	6.1	810	3.8	4.5	3 928	3.0	5.5	13.4	12.9	17.8	16.9	27.7	26.4	..	..
77	23.2	7.6	1 634	9.0	6.0	12 618	8.1	4.1	4.7	4.2	10.6	9.7	6.1	5.3	..	..
76	-2.1	10.4	2 197	5.9	4.3	17 399	-0.5	0.9	3.5	3.8	6.1	4.7	4.4	4.5	..	..
75	10.1	6.3	2 398	8.8	0.3	9 235	9.4	0.5	3.1	3.1	10.8	10.8	8.1	8.1	2 429	27.0
61	28.2	9.6	486	-9.0	-1.7	2 717	-3.1	-0.8	12.6	9.0	9.3	7.5	22.6	17.1	622	18.0
61	-9.6	11.6	601	3.1	-1.3	3 644	2.3	0.2	10.1	11.6	7.2	5.3	16.7	18.9	1 070	153.0
51	55.8	71.6	645	1.6	8.2	3 019	6.6	7.7	8.0	5.2	3.1	-2.4	17.0	11.7	..	..
50	7.9	23.8	1	-88.9	..	206	3.5	43.3	5 019.0	516.8	-10 766.4	-522.2	243.6	233.7	403	33.0
46	-9.5	..	6 400	17.1	7.7	20 855	17.2	4.6	0.7	0.9	3.1	3.0	2.2	2.9	..	..
46	16.2	-20.0	746	17.1	-8.8	4 640	6.8	-9.3	6.2	6.2	9.5	2.0	10.0	9.2	1 874	39.0
44	9.9	8.6	578	11.2	7.1	4 490	5.1	4.0	7.5	7.6	23.3	22.1	9.7	9.3	2 373	33.0
41	-4.7	-0.8	4 628	26.0	7.7	4 939	-1.9	-2.0	0.9	1.2	7.1	1.9	8.3	8.5	..	..
41	49.9	12.3	1 038	32.6	6.3	5 972	21.1	1.6	3.9	3.5	0.9	1.5	6.9	5.5	729	78.0
39	39.6	..	2 561	54.9	26.0	..	..	..	1.5	1.7	-0.4	4.6	..	4.3	2 662	62.0
37	..	..	3 623	-0.5	0.7	15 712	-4.1	-6.1	1.0	..	50.0	47.1	2.3	..	14 801	..
27	-1.4	..	816	7.1	14.3	6 085	5.4	13.9	3.3	3.6	16.3	16.4	4.5	4.8	1 989	27.0
22	1.4	3.2	1 229	11.2	4.9	7 385	1.3	-0.2	1.8	1.9	7.3	6.4	2.9	2.9	504	-29.0
21	-7.6	-6.8	714	18.8	7.5	3 000	0.1	0.6	3.0	3.8	12.8	6.0	7.1	7.7	43	-70.0
20	29.4	-7.1	1 979	-1.3	-8.0	5 667	-44.6	-25.2	1.0	0.8	0.3	-21.3	3.4	1.5	770	45.0
19	85.2	22.2	123	43.0	21.8	651	60.3	31.9	15.7	12.2	11.5	14.0	29.8	25.8	141	1.0
17	92.6	20.7	22	-67.6	..	117	42.7	17.6	74.9	12.6	-52.2	42.6	140.8	104.3	429	36.0
16	24.3	10.5	82	22.4	10.4	519	-1.3	-3.1	19.3	19.0	20.2	9.0	30.4	24.2	359	145.0
15	142.1	46.0	4 838	3.9	1.5	23 602	-25.1	-4.8	0.3	0.1	4.6	8.0	0.6	0.2	3 184	..
8	-7.2	4.2	83	-9.8	-9.0	371	-4.6	-7.4	9.6	9.3	2.9	-8.7	21.4	22.0	22	131.0
8	-35.7	-16.8	3	0.0	0.0	60	-43.4	-20.6	264.7	411.3	-289.6	-533.3	132.3	116.4	96	191.0
7	31.5	..	2 432	2.4	0.2	9 225	-0.3	-4.1	0.3	0.2	3.9	4.0	0.7	0.6	1 722	..
6	-41.0	55.3	454	9.7	15.6	2 690	10.2	15.6	1.2	2.3	5.2	1.5	2.1	3.9	327	64.0
5	..	-33.8	16	-27.3	38.7	175	-2.2	3.9	33.4	..	-57.3	-18.2	30.6	..	160	..
5	39.2	..	165	-2.4	6.9	969	22.8	3.3	2.9	2.0	3.5	5.9	4.9	4.3	127	..
<b>4 856</b>	<b>-4.5</b>	<b>2.6</b>	<b>119 040</b>	<b>1.3</b>	<b>1.2</b>	<b>412 675</b>	<b>-1.7</b>	<b>0.3</b>	<b>4.1</b>	<b>4.3</b>	<b>9.0</b>	<b>7.1</b>	<b>11.7</b>	<b>12.0</b>	<b>118 681</b>	<b>41.1</b>
43	42	43	43	43	42	42	43	42	43	42	43	43	42	42	35	22
3 834	-3.6	3.9	29 267	-0.6	-2.1	53 511	3.7	-2.5	13.1	13.5	14.7	16.8	71.6	77.1	58 171	48.0
103	-18.3	-9.1	3 976	-6.4	-2.9	24 363	-11.1	-1.7	2.6	3.0	2.9	-5.7	4.2	4.6	2 720	109.0
82	-7.5	-3.8	12 396	1.8	-2.8	43 779	-1.1	-0.4	0.7	0.7	4.9	3.7	1.9	2.0	9 069	6.0
71	-17.9	-5.6	1 944	-14.1	26.0	4 614	-17.2	-5.4	3.6	3.8	6.6	3.9	15.3	15.4	1 602	26.0
67	-23.9	18.0	4 450	-16.7	16.5	30 976	-10.2	10.5	1.5	1.7	9.6	6.3	2.2	2.6	3 010	29.0
59	-15.4	-9.4	2 478	5.1	1.7	12 361	0.6	4.5	2.4	3.0	4.8	-1.8	4.8	5.7	2 250	124.0
47	-2.1	1.5	9 820	-1.3	-0.3	34 815	-2.6	0.3	0.5	0.5	6.0	5.9	1.4	1.3	8 388	13.0
46	-4.6	5.3	2 533	-7.5	1.1	9 714	-7.8	-1.6	1.8	1.7	5.1	4.7	4.7	4.5	1 435	22.0
41	-14.6	0.0	7 136	20.5	10.3	19 761	2.1	1.3	0.6	0.8	7.6	1.0	2.1	2.5	2 235	7.0
39	46.5	73.1	346	33.6	16.5	1 988	-2.2	-4.1	11.4	10.4	8.7	6.2	19.8	13.2	..	..
37	2.8	7.2	8 554	2.8	-0.8	29 515	-1.8	-0.3	0.4	0.4	0.1	1.4	1.3	1.2	..	..

## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>Finland continued</b>				
12	Amer (now Amer Sports)	262	Household goods & textiles (34)	Manufacture of tobacco products (160)
13	Ahlstrom	278	Chemicals (11)	Manufacture of pulp paper & paper products (211)
14	Fortum	292	Oil & gas (7)	Manufacture of coke, refined petroleum products & nuclear fuel (230)
15	Vaisala	314	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
16	Dynea International	332	Chemicals (11)	Manufacture of chemicals & chemical products (240)
17	Pohjolan Voima	339	Electricity (72)	Electricity, gas, steam & hot water supply (400)
18	Finland Post	347	Support services (58)	Post & telecommunications (640)
19	YIT	365	Support services (58)	Construction (450)
20	Huhtamaki	366	Support services (58)	Manufacture of rubber & plastic products (250)
21	Rautaruukki	378	Steel & other metals (18)	Manufacture of basic metals (270)
22	Elisa	380	Telecommunication services (67)	Post & telecommunications (640)
23	Uponor	398	Engineering - general (267)	Manufacture of rubber & plastic products (250)
24	Raisio	421	Food producers (43)	Manufacture of food products & beverages (150)
25	Sanitec	435	Construction & building (13)	Manufacture of other non-metallic mineral products (268)
26	Elektrobit	470	Engineering - general (267)	Manufacture of radio TV & communication equip & apparatus (320)
27	Tecnomen	482	Telecommunications equipment (938)	Computer & related activities (720)
28	F-Secure	495	Computer services (972)	Computer & related activities (720)
29	Valio	505	Food producers (43)	Manufacture of food products & beverages (150)
30	Vacon	521	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
31	Nokian Tyres	535	Automobiles & parts (31)	Manufacture of rubber & plastic products (250)
32	Kyro	538	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
33	Tekla	541	Software (977)	Computer & related activities (720)
34	KCI Konecranes	553	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
35	Biotie Therapies	557	Biotechnology (482)	Research & development (730)
36	Atria	592	Food producers (43)	Manufacture of food products & beverages (150)
37	Teleste	597	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
38	Proha	602	Software (977)	Computer & related activities (720)
39	HK Ruokatalo	616	Food producers (43)	Manufacture of food products & beverages (150)
40	Larox	635	Support services (58)	Manufacture of machinery & equipment n e c (290)
41	Efore	652	Electronic equipment (253)	Manufacture of electrical machinery & apparatus n e c (310)
42	Stonesoft	679	Computer services (972)	Computer & related activities (720)
43	Fiskars	686	Household goods & textiles (34)	Manufacture of fabricated metal products (not machinery & equip) (280)
<b>France</b>				
				<i>number of companies for calculation</i>
1	Sanofi-Aventis	5	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
2	Peugeot (PSA)	14	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
3	Renault	15	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
4	Alcatel	18	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
5	Snecma	29	Aerospace & defence (21)	Manufacture of other transport equipment (350)
6	Michelin	30	Automobiles & parts (31)	Manufacture of rubber & plastic products (250)
7	Total	31	Oil & gas (7)	Extraction of crude petroleum/natural gas & incidental services (111)
8	Valeo	34	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
9	France Telecom	35	Telecommunication services (67)	Post & telecommunications (640)
10	Schneider	36	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
11	L'Oreal	39	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
12	Thales	42	Aerospace & defence (21)	Manufacture of medical/precision/optical instruments & watches (330)
13	Electricite de France	44	Electricity (72)	Electricity, gas, steam & hot water supply (400)
14	AREVA	46	Electricity (72)	Manufacture of coke, refined petroleum products & nuclear fuel (230)
15	ALSTOM	51	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)



R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
31	2.0	11.1	1 059	-4.1	-1.3	4 174	2.1	1.3	3.0	2.8	9.6	9.0	7.5	7.5	1 118	11.0
28	-16.1	-22.1	1 568	0.8	-5.5	6 121	-6.4	-5.7	1.8	2.1	2.8	2.8	4.5	5.0	..	..
26	-25.7	-21.1	11 665	2.4	3.9	12 859	-3.6	-4.6	0.2	0.3	16.1	11.8	2.0	2.6	13 685	58.0
22	5.7	5.6	181	-4.2	-0.5	1 092	-4.3	-0.7	12.3	11.2	13.2	13.2	20.4	18.5	309	31.0
20	1.0	9.0	1 065	8.8	0.5	3 135	-0.6	-1.8	1.9	2.0	3.4	1.5	6.4	6.3	..	..
20	59.7	14.2	667	1.2	5.4	873	1.0	3.7	3.0	1.9	-0.3	-3.8	22.7	14.4	..	..
20	-12.9	-2.4	1 235	7.8	5.7	23 544	-0.2	0.3	1.6	2.0	6.8	6.5	0.8	1.0	..	..
18	12.5	14.5	3 033	26.9	23.2	21 884	35.0	29.3	0.6	0.7	4.4	2.9	0.8	1.0	1 882	..
18	27.9	11.8	2 092	-0.8	-4.2	15 652	-1.3	-3.2	0.9	0.7	4.8	4.6	1.1	0.9	1 389	40.0
17	0.0	-3.6	3 569	20.9	7.1	12 273	-4.0	-3.5	0.5	0.6	13.1	4.3	1.4	1.3	2 215	145.0
17	-29.2	-22.1	1 356	-11.8	-2.0	5 590	-22.1	-10.4	1.3	1.6	14.7	-2.2	3.0	3.3	1 952	50.0
16	0.0	-1.8	1 073	5.1	-3.4	4 684	-5.6	-6.5	1.5	1.6	8.8	2.4	3.4	3.2	1 306	40.0
14	-32.7	-8.1	627	-27.2	-8.7	2 005	-29.0	-9.3	2.3	2.5	32.4	-1.6	7.1	7.5	405	55.0
14	-13.8	-11.5	899	-5.5	-3.3	6 950	-11.8	-7.8	1.5	1.7	-3.6	-5.3	2.0	2.0	..	..
12	22.3	31.2	203	36.2	38.7	1 385	24.6	25.8	5.9	6.6	16.4	10.7	8.7	8.8	324	21.0
12	22.3	-9.9	51	13.3	6.7	355	-19.3	-14.5	22.6	20.9	3.1	-15.6	32.4	21.4	48	-27.0
11	24.5	-4.4	47	20.5	3.8	291	-1.4	-8.2	23.2	22.4	13.2	7.7	37.4	29.7	258	23.0
11	2.9	1.9	1 582	1.0	1.4	4 389	0.5	0.3	0.7	0.7	4.3	1.1	2.4	2.3	..	..
10	12.3	3.9	129	15.2	12.3	458	4.8	4.2	7.8	8.0	11.5	10.7	22.0	20.6	242	59.0
10	15.7	5.0	602	13.8	12.5	2 843	7.3	1.9	1.6	1.6	18.3	14.9	3.4	3.1	2 049	..
9	-4.1	-1.6	232	2.2	16.2	1 175	15.8	35.6	4.1	4.3	7.7	8.8	8.0	9.7	353	34.0
9	-25.6	-1.9	38	-5.0	-0.9	368	-14.0	-1.2	24.1	30.7	-5.6	-25.0	24.8	28.7	70	..
9	7.6	3.4	728	9.5	-1.3	4 369	-1.2	-0.5	1.2	1.2	5.0	2.0	1.9	1.8	545	..
8	-21.6	-6.4	4	100.0	..	47	-28.8	-11.6	206.8	527.5	-181.1	-700.0	176.0	159.8	40	..
7	4.5	8.4	834	9.0	9.4	..	..	..	0.8	0.9	4.7	4.1	..	2.0	190	..
7	19.0	-9.1	66	22.2	-13.8	492	8.9	-6.1	10.5	10.7	8.0	3.7	14.0	12.8	115	..
7	-13.9	-16.4	66	-14.3	-7.4	569	-11.4	-6.2	10.3	10.3	-10.5	-9.1	12.0	12.3	27	..
6	4.3	15.8	680	5.1	5.1	4 713	-7.1	4.9	0.9	0.9	4.6	4.2	1.3	1.2	269	..
6	..	19.7	97	70.2	13.1	436	55.7	14.0	6.2	..	5.2	5.3	13.8	..	36	..
6	48.7	12.2	73	14.1	9.2	512	24.6	0.5	7.7	5.9	11.6	12.5	11.0	9.2	77	..
5	-22.2	-16.6	22	-4.3	-27.6	258	-13.4	-23.7	23.1	28.4	-46.6	-69.6	19.7	21.9	34	..
5	25.0	-5.9	597	-3.7	-7.8	3 782	4.1	-5.6	0.8	0.6	10.1	-8.4	1.3	1.1	863	..
<b>19 369</b>	<b>2.8</b>	<b>2.9</b>	<b>753 032</b>	<b>5.3</b>	<b>0.6</b>	<b>3 227 850</b>	<b>-2.6</b>	<b>-4.4</b>	<b>2.6</b>	<b>2.6</b>	<b>8.6</b>	<b>6.9</b>	<b>6.0</b>	<b>4.6</b>	<b>677 402</b>	<b>50.0</b>
<i>81</i>	<i>80</i>	<i>73</i>	<i>81</i>	<i>81</i>	<i>77</i>	<i>81</i>	<i>79</i>	<i>77</i>	<i>81</i>	<i>80</i>	<i>81</i>	<i>79</i>	<i>81</i>	<i>78</i>	<i>76</i>	<i>60</i>
3 961	-2.6	56.6	25 418	4.6	57.6	96 439	..	46.8	15.6	16.7	11.6	8.0	41.1	..	98 605	175.0
2 118	1.0	6.9	56 797	4.7	3.2	207 200	3.7	2.5	3.7	3.9	4.2	3.7	10.2	10.5	12 715	23.0
1 961	12.9	0.4	40 715	8.5	3.9	130 886	-0.3	-2.3	4.8	4.6	11.3	7.9	15.0	13.2	21 570	31.0
1 557	-2.3	-20.5	12 265	-2.0	-21.5	55 718	-7.9	-17.5	12.7	12.7	1.5	-13.8	27.9	26.3	12 849	9.0
754	20.8	15.9	6 812	5.9	-0.4	35 451	-10.7	-2.3	11.1	9.7	6.2	6.0	21.3	15.7	5 351	37.0
674	-5.2	-1.4	15 689	2.1	-0.2	126 474	-0.6	-0.3	4.3	4.6	6.7	5.3	5.3	5.6	7 435	27.0
635	-4.8	-3.0	122 700	17.2	5.2	111 401	0.6	-3.0	0.5	0.6	14.9	12.3	5.7	6.0	132 130	43.0
584	3.5	-1.9	9 439	2.2	-2.7	55 540	-18.6	-7.4	6.2	6.1	2.4	3.1	10.5	8.3	2 685	10.0
564	18.0	-0.2	47 157	2.2	3.1	204 826	-7.6	-0.2	1.2	1.0	16.4	12.0	2.8	2.2	62 272	41.0
535	8.3	1.4	10 365	18.1	1.8	84 866	14.3	5.7	5.2	5.6	9.6	7.2	6.3	6.7	14 646	35.0
507	5.6	5.5	14 534	3.6	2.3	52 081	3.1	2.0	3.5	3.4	15.4	15.9	9.7	9.5	41 897	18.0
436	14.5	0.3	10 288	-2.7	0.1	55 476	-3.4	-3.9	4.2	3.6	3.9	2.3	7.9	6.6	6 057	38.0
425	11.5	0.6	46 928	4.5	7.1	156 152	-6.7	-1.3	0.9	0.8	7.1	10.0	2.7	2.3	..	..
402	41.1	2.2	11 109	34.6	7.7	70 069	45.9	12.0	3.6	3.5	5.4	2.7	5.7	5.9	700	126.0
336	-29.0	-16.4	13 662	-18.1	-16.5	69 594	-9.4	-16.4	2.5	2.8	-2.4	-6.2	4.8	6.2	4 393	752.0

## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector [closest corresponding sector to FTSE classification - provisional]
<b>France continued</b>				
16	Lagardere	54	Media & entertainment (54)	Publishing, printing & reproduction of recorded media (220)
17	Saint-Gobain	57	Construction & building (13)	Manufacture of other non-metallic mineral products (268)
18	Thomson	60	Electronic equipment (253)	Manufacture of electrical machinery & apparatus n e c (310)
19	Dassault Systemes	69	Software (977)	Computer & related activities (720)
20	Vivendi Universal	75	Media & entertainment (54)	Post & telecommunications (640)
21	Rhodia	86	Chemicals (11)	Manufacture of chemicals & chemical products (240)
22	Pierre Fabre	94	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
23	Danone	101	Food producers (43)	Manufacture of food products & beverages (150)
24	BioMerieux	104	Health (44)	Manufacture of chemicals & chemical products (240)
25	SNPE	108	Chemicals (11)	Manufacture of chemicals & chemical products (240)
26	Business Objects	110	Software (977)	Computer & related activities (720)
27	Infogrames Entertainment	111	Software (977)	Computer & related activities (720)
28	Essilor International	113	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
29	L'Air Liquide	117	Chemicals (11)	Manufacture of chemicals & chemical products (240)
30	Veolia Environnement	121	Utilities - other (77)	Collection, purification & distribution of water (410)
31	Gaz De France	128	Oil & gas (7)	Electricity, gas, steam & hot water supply (400)
32	Bouygues	130	Construction & building (13)	Construction (450)
33	Suez	136	Utilities - other (77)	Electricity, gas, steam & hot water supply (400)
34	UBIsoft Entertainment	143	Software (977)	Computer & related activities (720)
35	Lafarge	188	Construction & building (13)	Computer & related activities (720)
36	Bull	190	Computer hardware (932)	Manufacture of other non-metallic mineral products (268)
37	Wavecom	201	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
38	Nexans	203	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
39	Groupe SEB	214	Household goods & textiles (34)	Manufacture of machinery & equipment n e c (290)
40	Christian Dior	218	Household goods & textiles (34)	Manufacture of wearing apparel; dressing, dyeing of furnitures (180)
41	Burelle	221	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
42	Vilmorin Clause	243	Food producers (43)	Agriculture, hunting & related service activities (010)
43	Ingenico	247	Electronic equipment (253)	Manufacture of office machinery & computers (300)
44	Neopost	248	Electronic equipment (253)	Manufacture of machinery & equipment n e c (290)
45	Compagnie Generale de Geophysique	251	Oil & gas (7)	Extraction of crude petroleum/natural gas & incidental services (111)
46	Technip	253	Oil & gas (7)	Extraction of crude petroleum/natural gas & incidental services (111)
47	Sopra	263	Computer services (972)	Computer & related activities (720)
48	Eramet	284	Steel & other metals (18)	Wholesale & commission trade except motor vehicles (510)
49	Flamel Technologies	291	Biotechnology (482)	Research & development (730)
50	Societe BIC	298	Household goods & textiles (34)	Manufacture of furniture (361)
51	MGI Coutier	299	Automobiles & parts (31)	Manufacture of rubber & plastic products (250)
52	Guerbet	304	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
53	La Poste	310	Support services (58)	Post & telecommunications (640)
54	ACTIELEC Technologies	311	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
55	IMERYS	312	Construction & building (13)	Manufacture of other non-metallic mineral products (268)
56	Bollor Investissement	313	Transport (59)	Supporting & auxiliary transport activities; travel agencies (630)
57	Clarins	330	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
58	Oberthur Card Systems	360	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
59	Transgene	363	Biotechnology (482)	Research & development (730)
60	ESI	376	Software (977)	Computer & related activities (720)
61	Ilog	385	Software (977)	Computer & related activities (720)
62	Lectra	409	Software (977)	Computer & related activities (720)
63	Dynaction	410	Chemicals (11)	Manufacture of chemicals & chemical products (240)
64	Radiall	445	Telecommunications equipment (938)	Manufacture of electrical machinery & apparatus n e c (310)
65	Latecoere	446	Aerospace & defence (21)	Manufacture of other transport equipment (350)



- R&D Investment -			- Net Sales -			- Employees 2004 -			- R&D/Net Sales ratio -		- Operating Profit -		- R&D per employee -		- Market Capitalisation -	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
321	-2.7	1.2	13 389	7.5	0.2	47 287	9.9	1.3	2.4	2.7	5.1	3.7	6.8	7.7	8 362	34.0
304	-0.7	-1.7	32 025	8.2	1.8	174 247	2.6	0.6	1.0	1.0	7.0	6.8	1.7	1.8	17 154	38.0
277	-6.1	-9.0	7 994	-5.5	-8.7	49 079	-16.0	-7.4	3.5	3.5	-4.8	1.2	5.6	5.1	5 114	33.0
222	2.9	2.0	797	5.6	2.2	4 456	9.0	5.0	27.8	28.6	28.9	28.2	49.8	52.7	4 554	22.0
196	15.3	-6.1	21 428	-15.9	-28.0	39 181	-21.0	-53.2	0.9	0.7	14.1	1.0	5.0	3.4	27 676	42.0
171	-15.8	-4.6	5 281	-3.2	-10.1	20 577	-10.8	-8.6	3.2	3.7	-11.4	-16.7	8.3	8.8	1 092	76.0
145	7.1	1.7	1 426	6.8	7.0	9 179	4.5	5.0	10.2	10.2	4.0	3.9	15.8	15.4	..	..
131	0.8	1.3	13 700	4.3	-1.8	89 449	1.0	-3.8	1.0	1.0	7.5	12.0	1.5	1.5	22 394	38.0
127	-3.3	9.7	931	1.7	5.2	5 430	-0.9	-0.1	13.6	14.3	13.8	10.5	23.4	23.9	1 607	55.0
114	-0.9	..	793	1.1	..	5 094	-4.1	..	14.4	14.7	-8.3	-6.9	22.4	21.7	..	..
111	57.8	39.7	681	64.9	30.6	3 834	-2.3	19.9	16.3	17.0	9.2	8.2	28.9	17.9	2 315	64.0
111	19.6	2.9	701	-20.4	1.3	1 511	-18.1	-12.7	15.8	10.5	-1.4	-5.8	73.1	50.1	273	85.0
107	3.1	10.2	2 260	6.8	3.7	24 045	10.7	4.7	4.7	4.9	15.0	15.1	4.5	4.8	6 130	31.0
103	9.5	4.7	9 376	11.7	4.0	35 900	12.6	5.2	1.1	1.1	13.5	14.2	2.9	3.0	16 004	23.0
95	3.0	6.3	28 603	-4.9	2.7	207 561	-19.3	-1.2	0.3	0.3	-2.8	5.1	0.5	0.4	13 193	..
90	1.1	-10.8	18 129	8.9	8.6	38 016	-0.7	1.4	0.5	0.5	8.9	11.3	2.4	2.3	28 040	..
89	4.7	-22.6	23 402	7.2	5.3	128 777	0.7	0.6	0.4	0.4	5.9	5.3	0.7	0.7	12 299	50.0
85	7.6	-30.2	40 739	2.8	-1.3	160 712	-7.3	-5.1	0.2	0.2	7.9	6.0	0.5	0.5	25 182	74.0
80	9.5	0.8	508	13.1	25.0	2 352	18.2	8.6	15.8	16.3	1.0	5.6	34.1	36.8	774	183.0
54	-3.6	0.6	14 436	5.7	1.8	77 075	2.3	-2.4	0.4	0.4	12.9	12.1	0.7	0.7	13 686	27.0
54	-10.0	-24.0	1 139	-10.0	-23.5	7 531	-3.4	-16.1	4.7	4.7	2.1	3.7	7.2	7.7	648	174.0
47	-24.2	13.0	152	-44.9	-22.2	458	-33.8	2.8	31.0	22.5	-53.4	-11.2	102.8	89.8	161	305.0
47	0.0	-2.0	4 900	21.1	0.9	17 662	3.5	-0.6	1.0	1.2	2.2	0.3	2.7	2.8	835	51.0
42	3.9	13.3	2 339	-0.4	8.0	14 359	-2.1	3.5	1.8	1.7	7.4	8.3	2.9	2.8	1 495	-1.0
41	0.0	-13.8	13 201	5.9	1.7	58 679	3.3	2.5	0.3	0.3	15.6	13.4	0.7	0.7	12 021	48.0
41	-0.8	12.5	2 038	4.5	4.3	8 477	0.2	-6.5	2.0	2.1	2.8	3.5	4.8	4.9	204	..
35	18.0	6.5	492	13.1	5.1	3 029	8.7	3.2	7.1	6.8	9.5	9.7	11.5	10.6	507	..
34	-0.2	7.8	427	19.9	3.2	1 438	-18.5	-5.5	8.0	9.6	0.9	-7.0	23.8	19.4	314	-26.0
34	3.7	1.2	756	0.7	9.6	4 627	2.0	6.9	4.5	4.4	22.7	20.1	7.3	7.2	2 436	88.0
34	24.5	-1.7	693	13.2	-4.8	3 669	15.2	1.7	4.8	4.4	4.4	0.7	9.1	8.4	973	114.0
33	-0.3	22.0	5 141	9.1	13.2	19 000	0.0	1.8	0.6	0.7	2.4	2.3	1.7	1.8	4 516	77.0
31	6.5	6.4	629	19.8	7.6	7 500	23.8	7.7	5.0	5.6	6.2	5.3	4.2	4.9	551	59.0
27	22.7	..	1 990	-2.6	-4.5	13 612	7.4	0.9	1.4	1.1	-3.3	1.4	2.0	1.7	2 246	..
26	74.8	49.1	41	115.8	60.1	224	28.7	17.5	63.4	78.3	15.9	-15.8	116.1	85.5	266	-10.0
25	-17.9	-18.6	1 386	1.9	-3.3	8 650	-0.6	-3.2	1.8	2.2	11.5	12.8	2.9	3.5	2 497	48.0
25	6.7	4.3	461	-1.7	-1.8	4 395	1.7	2.1	5.3	4.9	5.2	4.5	5.6	5.3	91	37.0
24	0.0	6.3	248	10.2	5.9	1 140	1.7	2.6	9.7	10.7	12.4	10.2	21.1	21.4	251	66.0
23	76.9	..	18 677	3.7	..	309 286	-1.9	..	0.1	0.1	3.3	2.0	0.1	0.0	..	..
23	-24.5	-12.7	228	14.6	7.4	1 873	0.0	2.1	10.0	15.2	2.9	4.5	12.2	16.1	101	..
23	23.4	..	2 873	5.3	-0.3	14 088	2.1	-1.0	0.8	0.7	12.3	11.0	1.6	1.3	3 945	35.0
22	16.1	10.3	5 608	4.0	3.6	32 808	-1.8	3.6	0.4	0.4	1.1	2.6	0.7	0.6	2 160	..
21	1.8	14.8	939	5.6	3.3	5 459	4.0	2.3	2.2	2.3	13.0	10.7	3.8	3.8	1 823	31.0
18	4.6	-6.9	451	4.9	-2.0	2 943	2.0	-5.0	4.1	4.1	7.4	6.5	6.2	6.1	544	37.0
18	2.7	-2.7	3	0.0	44.2	168	1.2	..	608.0	592.0	-862.4	-733.3	108.6	107.0	105	66.0
17	34.7	20.9	58	18.4	10.5	492	..	13.3	29.5	25.9	-3.3	-6.1	34.8	..	96	72.0
17	20.8	15.5	76	11.8	9.4	632	5.0	2.6	22.1	20.4	1.5	2.9	26.5	23.1	222	62.0
15	4.9	-2.0	208	12.4	2.4	1 500	15.8	1.7	7.2	7.8	3.5	4.9	10.0	11.1	174	-21.0
15	0.0	3.8	259	0.8	-2.9	1 815	-4.2	-5.1	5.8	5.8	4.3	2.3	8.3	7.9	60	34.0
13	4.8	-3.6	163	12.4	-10.6	1 673	6.8	-7.1	8.0	8.6	1.8	-2.1	7.8	8.0	125	4.0
13	225.0	..	260	32.7	12.6	2 171	21.6	9.6	5.0	2.0	4.5	5.6	6.0	2.2	297	..

## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector [closest corresponding sector to FTSE classification - provisional]
<b>France continued</b>				
66	Bacou-Dalloz	457	Household goods & textiles (34)	Manufacture of wearing apparel; dressing. dyeing of furnitures (180)
67	Stallergenes	466	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
68	Gameloft	469	Software (977)	Computer & related activities (720)
69	Cerep	471	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
70	XRT	474	Software (977)	Computer & related activities (720)
71	Soitec	484	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
72	Linedata Services	506	Software (977)	Computer & related activities (720)
73	NicOx	508	Pharmaceuticals (486)	Research & development (730)
74	LISI	517	Aerospace & defence (21)	Manufacture of fabricated metal products (not machinery & equip) (280)
75	Compagnie de Fives-Lille	550	Diversified industrials (24)	Manufacture of machinery & equipment n e c (290)
76	JC Decaux	568	Media & entertainment (54)	Other business activities (740)
77	Global Graphics	609	Software (977)	Computer & related activities (720)
78	Provimi	610	Food producers (43)	Manufacture of food products & beverages (150)
79	Infovista	631	Software (977)	Computer & related activities (720)
80	GFI Informatique	655	Computer services (972)	Computer & related activities (720)
81	Virbac	680	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
<b>Germany</b>				
				<i>number of companies for calculation</i>
1	DaimlerChrysler	1	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
2	Siemens	2	Electrical equipment (252)	Manufacture of radio TV & communication equip & apparatus (320)
3	Volkswagen	3	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
4	Robert Bosch	7	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
5	BMW	8	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
6	Bayer	12	Chemicals (11)	Manufacture of chemicals & chemical products (240)
7	Boehringer Ingelheim	20	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
8	Infineon Technologies	21	Semiconductors (936)	Manufacture of electrical machinery & apparatus n e c (310)
9	BASF	22	Chemicals (11)	Manufacture of chemicals & chemical products (240)
10	SAP	24	Software (977)	Computer & related activities (720)
11	Schering	26	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
12	Deutsche Telekom	27	Telecommunication services (67)	Post & telecommunications (640)
13	Merck	32	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
14	Continental	37	Automobiles & parts (31)	Manufacture of rubber & plastic products (250)
15	ZF	38	Automobiles & parts (31)	Manufacture of machinery & equipment n e c (290)
16	ALTANA	41	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
17	MAN	47	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
18	Deutsche Post	58	Support services (58)	Post & telecommunications (640)
19	Henkel	61	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
20	Heidelberger Druckmaschinen	67	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
21	Carl Zeiss	70	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
22	Schwarz Pharma	74	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
23	Behr	76	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
24	ThyssenKrupp	79	Engineering - general (267)	Manufacture of basic metals (270)
25	Linde	80	Chemicals (11)	Manufacture of chemicals & chemical products (240)
26	Hella	85	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
27	Diehl Stiftung	87	Diversified industrials (24)	Manufacture of rubber & plastic products (250)
28	Rheinmetall	90	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
29	Wacker-Chemie	91	Chemicals (11)	Manufacture of chemicals & chemical products (240)
30	JM Voith	92	Diversified industrials (24)	Manufacture of machinery & equipment n e c (290)
31	Freudenberg	93	Diversified industrials (24)	Manufacture of machinery & equipment n e c (290)

- R&D Investment -			- Net Sales -			- Employees 2004 -			- R&D/Net Sales ratio -		- Operating Profit -		- R&D per employee -		- Market Capitalisation -	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
13	3.3	70.3	706	-11.3	14.4	6 050	-3.3	-3.3	1.8	1.5	1.6	7.5	2.1	2.0	569	75.0
12	43.3	33.4	95	10.5	14.7	509	6.9	5.9	12.9	9.9	16.6	15.1	24.0	17.9	341	..
12	208.7	393.8	23	130.0	97.2	722	305.6	131.8	52.3	39.0	11.3	70.0	16.7	21.9	356	..
12	1.0	1.5	51	50.0	22.1	465	36.0	24.2	23.4	34.7	0.3	-2.9	25.6	34.5	113	10.0
12	2.4	3.5	40	2.6	-3.9	394	7.1	-0.5	29.4	29.4	5.8	..	29.8	31.2	48	151.0
11	0.8	26.6	139	58.0	14.3	542	15.1	29.4	8.2	12.8	-0.7	-31.8	20.9	23.9	622	..
11	32.9	25.6	113	13.0	12.7	698	3.1	7.1	9.3	7.9	11.6	13.0	15.0	11.7	208	..
10	-31.4	-5.2	2	100.0	..	56	-6.7	7.6	522.0	1 522.0	-762.0	-2 000.0	186.4	253.7	140	121.0
10	-10.5	-8.9	541	6.9	-0.5	5 223	7.4	0.9	1.9	2.3	8.2	7.9	2.0	2.3	586	61.0
9	9.0	..	877	24.9	..	3 954	6.1	..	1.0	1.1	3.9	4.1	2.2	2.1	..	..
8	-7.2	-17.7	1 631	5.6	2.2	6 933	3.4	-1.9	0.5	0.5	12.3	10.4	1.1	1.2	4 376	26.0
7	5.1	-19.4	19	5.6	-37.8	98	1.0	-40.8	34.5	34.6	3.1	..	66.8	64.2	111	..
7	-56.7	-24.3	1 580	2.3	1.7	8 170	1.8	8.6	0.4	1.0	4.5	5.8	0.8	1.9	498	44.0
6	-2.9	8.2	29	11.5	1.2	190	0.5	-1.7	21.0	24.1	-22.6	-46.2	32.0	33.1	92	..
6	24.5	..	518	3.6	-4.6	6 305	1.9	-3.8	1.1	0.9	-3.0	1.8	0.9	0.7	235	..
5	..	..	355	-1.1	3.0	2 248	1.7	2.2	1.4	..	6.0	9.2	2.3	..	289	..
<b>37 859</b>	<b>0.7</b>	<b>-0.1</b>	<b>1 049 015</b>	<b>4.0</b>	<b>-0.9</b>	<b>4 352 496</b>	<b>-0.1</b>	<b>-0.8</b>	<b>3.6</b>	<b>3.7</b>	<b>5.8</b>	<b>3.2</b>	<b>8.7</b>	<b>8.5</b>	<b>619 699</b>	<b>43.7</b>
135	135	123	135	135	133	132	135	130	135	135	135	132	132	135	112	78
5 658	1.6	-1.6	142 059	4.1	-2.4	379 019	2.2	-0.1	4.0	4.1	2.4	1.2	14.9	15.0	46 204	38.0
5 063	-8.1	-9.3	75 167	1.3	-4.8	419 200	-0.0	-4.2	6.7	7.4	4.0	4.0	12.1	13.1	59 127	27.0
4 164	0.6	5.1	88 963	0.6	0.2	321 090	2.0	1.4	4.7	4.7	2.0	1.8	13.0	13.2	22 658	94.0
2 898	9.4	8.4	40 007	10.0	5.5	238 847	4.1	3.0	7.2	7.3	6.0	4.6	12.1	11.6	..	..
2 818	10.1	14.3	44 335	6.8	4.9	103 626	1.5	3.1	6.4	6.2	8.4	7.9	27.2	25.1	24 455	14.0
2 404	-0.4	-1.1	29 758	4.2	-0.6	113 825	-3.8	-0.1	8.1	8.5	5.4	-6.6	21.1	20.4	21 669	51.0
1 232	4.8	6.5	8 157	10.5	6.8	35 284	3.8	8.3	15.1	15.9	16.8	10.6	34.9	34.6	..	..
1 219	12.6	..	7 195	17.0	..	34 127	8.3	..	16.9	17.6	1.1	-4.8	35.7	34.4	5 808	-2.0
1 173	6.2	-2.0	37 537	12.5	4.9	81 958	-6.0	-4.4	3.1	3.3	11.8	7.2	14.3	12.7	33 240	49.0
1 020	2.4	4.3	7 514	7.0	0.8	31 224	7.3	4.4	13.6	14.2	26.6	24.3	32.7	34.2	45 426	22.0
933	-1.5	2.6	4 907	1.6	0.4	26 131	-1.6	1.4	19.0	19.6	14.6	14.0	35.7	35.7	10 296	27.0
900	0.0	0.0	57 880	3.7	6.2	247 559	-1.5	0.8	1.6	1.6	14.9	7.2	3.6	3.6	73 547	38.0
599	-0.9	1.8	5 859	-18.6	-8.0	28 877	-15.6	-5.6	10.2	8.4	10.9	7.3	20.7	17.7	3 712	73.0
530	6.4	4.9	12 597	9.2	3.9	73 748	10.9	3.3	4.2	4.3	8.8	7.3	7.2	7.5	9 569	90.0
521	-0.7	15.4	9 899	10.9	13.6	54 523	1.9	17.1	5.3	5.9	3.8	-0.1	9.5	9.8	..	..
445	8.1	16.1	2 963	8.3	8.7	10 691	6.1	5.9	15.0	15.1	20.6	20.8	41.6	40.9	6 405	14.0
400	-1.7	-1.7	14 947	-0.5	-2.8	62 790	-13.3	-7.2	2.7	2.7	4.0	2.3	6.4	5.6	5 869	47.0
290	85.9	27.5	43 168	7.9	9.0	381 493	1.7	5.7	0.7	0.4	6.8	5.4	0.8	0.4	23 063	185.0
272	5.8	-7.4	10 592	12.3	-6.7	49 947	3.4	-5.9	2.6	2.7	19.5	5.4	5.4	5.3	10 826	45.0
244	-33.3	-19.1	3 360	-8.2	-12.4	19 451	-17.2	-8.9	7.3	10.0	4.3	-9.6	12.5	15.6	2 690	37.0
209	10.0	12.7	2 135	5.2	1.3	13 543	-4.4	-0.5	9.8	9.4	5.7	1.9	15.4	13.4	..	..
198	37.2	22.7	947	-36.7	7.2	3 813	-1.0	3.6	20.9	9.6	2.2	18.4	51.8	37.4	2 206	94.0
195	6.0	8.0	3 050	1.5	10.7	16 986	5.6	7.2	6.4	6.1	4.0	3.4	11.5	11.4	..	..
191	4.4	2.0	39 342	8.9	1.2	187 678	-0.5	-1.0	0.5	0.5	4.6	2.7	1.0	1.0	8 119	20.0
188	5.0	3.8	9 421	4.8	1.3	45 536	-1.6	0.0	2.0	2.0	6.9	5.1	4.1	3.9	9 851	89.0
172	2.3	8.5	3 141	3.7	3.2	23 336	8.3	-0.4	5.5	5.5	3.1	..	7.4	7.8	..	..
162	-3.2	-3.1	1 595	2.8	2.8	10 666	-0.6	-0.5	10.2	10.8	3.8	3.5	15.2	15.6	..	..
152	-19.6	-8.3	3 413	-19.7	-9.5	19 045	-24.4	-13.5	4.5	4.5	5.7	2.9	8.0	7.5	2 400	133.0
152	-0.1	-0.1	2 543	3.0	-3.4	15 298	-5.4	-3.6	6.0	6.1	5.4	-2.4	9.9	9.4	..	..
149	10.4	2.6	3 262	4.9	-0.6	..	..	..	4.6	4.3	5.7	5.1	..	5.5	..	..
148	6.2	..	4 418	14.2	3.3	32 044	12.8	4.5	3.4	3.6	6.8	5.6	4.6	4.9	..	..

## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector [closest corresponding sector to FTSE classification - provisional]
<b>Germany continued</b>				
32	Fresenius	100	Health (44)	Manufacture of chemicals & chemical products (240)
33	RWE	103	Utilities - other (77)	Electricity, gas, steam & hot water supply (400)
34	Knorr-Bremse	106	Engineering - general (267)	Manufacture of other transport equipment (350)
35	Schott	107	Chemicals (11)	Manufacture of other non-metallic mineral products (268)
36	Dragerwerk	116	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
37	Beiersdorf	119	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
38	Trumpf	120	Diversified industrials (24)	Manufacture of machinery & equipment n e c (290)
39	B Braun Melsungen	125	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
40	Adidas-Salomon	135	Household goods & textiles (34)	Manufacture of wearing apparel; dressing, dyeing of furnitures (180)
41	Wincor Nixdorf	149	Computer services (972)	Manufacture of office machinery & computers (300)
42	Claas	151	Commercial vehicles & trucks (263)	Manufacture of machinery & equipment n e c (290)
43	EPCOS	156	Electronic equipment (253)	Manufacture of electrical machinery & apparatus n e c (310)
44	Deutz	158	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
45	Cognis Deutschland	164	Chemicals (11)	Manufacture of chemicals & chemical products (240)
46	Eberspaecher	165	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
47	Giesecke & Devrient	166	Support services (58)	Publishing, printing & reproduction of recorded media (220)
48	IWKA	173	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
49	MG Technologies	176	Engineering - general (267)	Manufacture of medical/precision/optical instruments & watches (330)
50	Koenig & Bauer	177	Engineering - contractors (264)	Manufacture of machinery & equipment n e c (290)
51	Salzgitter	180	Steel & other metals (18)	Manufacture of basic metals (270)
52	E.ON	185	Utilities - other (77)	Electricity, gas, steam & hot water supply (400)
53	HVB	192	Banks (81)	Financial intermediation except insurance & pension funding (650)
54	Software	198	Software (977)	Computer & related activities (720)
55	Deutsche Borse	200	Other financials (87)	Activities auxiliary to financial intermediation (670)
56	Leoni	208	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
57	HeidelbergCement	209	Construction & building (13)	Manufacture of other non-metallic mineral products (268)
58	Gildemeister	230	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
59	Jungheinrich	231	Commercial vehicles & trucks (263)	Manufacture of machinery & equipment n e c (290)
60	PUMA	237	Household goods & textiles (34)	Manufacture of wearing apparel; dressing, dyeing of furnitures (180)
61	RAG	246	Diversified industrials (24)	Mining of coal & lignite; extraction of peat (100)
62	Duerr	257	Engineering fabricators (266)	Manufacture of machinery & equipment n e c (290)
63	Jenoptik	261	Engineering - contractors (264)	Manufacture of medical/precision/optical instruments & watches (330)
64	Beru	264	Automobiles & parts (31)	Manufacture of electrical machinery & apparatus n e c (310)
65	Sud-Chemie	266	Chemicals (11)	Manufacture of chemicals & chemical products (240)
66	TUI	267	Leisure & hotels (53)	Supporting & auxiliary transport activities; travel agencies (630)
67	Sartorius	270	Biotechnology (482)	Manufacture of medical/precision/optical instruments & watches (330)
68	Kontron	273	Computer hardware (932)	Computer & related activities (720)
69	GPC Biotech	277	Biotechnology (482)	Research & development (730)
70	Sudzucker	279	Food producers (43)	Manufacture of food products & beverages (150)
71	Phoenix	281	Automobiles & parts (31)	Manufacture of rubber & plastic products (250)
72	KSB	300	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
73	Singulus Technologies	308	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
74	Stada Arzneimittel	309	Pharmaceuticals (486)	Wholesale & commission trade except motor vehicles (510)
75	ElringKlinger	315	Automobiles & parts (31)	Manufacture of machinery & equipment n e c (290)
76	ELMOS Semiconductor	316	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
77	Fuchs Petrolub	319	Chemicals (11)	Manufacture of chemicals & chemical products (240)
78	SGL Carbon	351	Electrical equipment (252)	Manufacture of fabricated metal products (not machinery & equip) (280)
79	WEB DE	355	Internet (974)	Computer & related activities (720)
80	Biotest	358	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
81	Beta Systems Software	362	Software (977)	Computer & related activities (720)

- R&D Investment -			- Net Sales -			- Employees 2004 -			- R&D/Net Sales ratio -		- Operating Profit -		- R&D per employee -		- Market Capitalisation -	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
133	9.9	2.6	7 271	2.9	-0.2	67 838	4.0	5.7	1.8	1.7	11.6	11.1	2.0	1.9	3 382	-50.0
128	-70.6	-41.8	40 996	-4.2	-11.9	106 138	-23.9	-13.2	0.3	1.0	12.3	6.5	1.2	3.1	30 918	55.0
124	3.3	5.4	2 423	9.8	13.7	10 954	0.9	5.0	5.1	5.4	9.1	7.9	11.3	11.1	..	..
120	6.2	-1.4	2 023	4.0	0.3	18 616	-5.0	-1.7	5.9	5.8	4.6	-1.8	6.4	5.8	..	..
104	7.3	12.7	1 520	7.6	6.5	9 781	-5.4	0.9	6.8	6.9	6.6	4.3	10.6	9.4	310	25.0
101	1.0	3.2	4 546	-2.7	0.0	16 492	-9.6	-2.4	2.2	2.1	11.1	10.4	6.1	5.5	7 989	13.0
98	10.4	28.6	1 221	2.3	15.1	5 847	2.1	5.2	8.0	7.4	8.3	8.4	16.7	15.5	..	..
94	-10.7	7.1	2 793	5.5	9.8	29 822	2.0	2.5	3.4	4.0	7.3	6.0	3.2	3.6	..	..
88	2.3	0.8	6 478	3.4	2.0	16 342	6.0	5.7	1.4	1.4	8.9	7.8	5.4	5.6	7 540	72.0
73	10.3	11.6	1 576	9.4	2.5	5 575	16.2	10.1	4.6	4.6	5.4	3.6	13.1	13.8	1 237	..
73	8.0	14.4	1 928	28.9	18.9	8 153	11.8	14.3	3.8	4.5	3.1	3.1	8.9	9.2	..	..
71	1.9	-9.0	1 362	7.1	-10.6	15 587	17.3	6.3	5.2	5.5	4.4	0.9	4.5	5.2	931	0.0
70	26.6	12.9	1 242	5.9	1.6	5 535	0.4	-3.1	5.6	4.7	1.2	3.8	12.6	10.0	558	111.0
66	1.5	-3.3	3 073	4.2	-0.6	8 059	-6.9	-3.9	2.1	2.2	3.4	-0.3	8.2	7.5	..	..
66	7.0	..	1 468	9.9	..	5 123	0.1	..	4.5	4.6	1.8	0.2	12.8	12.0	..	..
63	-15.1	-10.6	1 157	10.5	1.2	7 337	7.4	2.9	5.4	7.1	5.7	4.4	8.5	10.8	..	..
59	-0.7	1.5	2 169	-5.2	-1.7	13 311	2.4	1.1	2.7	2.6	3.7	3.4	4.5	4.6	501	15.0
59	-37.4	-18.6	4 059	-36.6	-22.8	26 327	-15.4	-9.9	1.4	1.5	4.3	-2.3	2.2	3.0	1 948	9.0
58	0.9	16.5	1 423	15.5	3.3	7 370	1.4	-0.2	4.1	4.7	1.4	-4.0	7.9	7.9	285	51.0
57	-0.9	5.9	5 942	22.7	9.0	17 625	-2.9	-0.1	1.0	1.2	6.8	0.6	3.2	3.2	1 871	234.0
55	-20.3	-52.4	44 745	5.2	-13.8	73 142	8.8	-23.8	0.1	0.2	13.2	8.8	0.8	1.0	54 599	49.0
53	-41.8	-27.7	9 219	28.3	1.8	58 438	-8.0	-5.6	0.6	1.3	-20.2	-37.1	0.9	1.4	16 895	94.0
49	-16.0	-9.4	411	-2.6	-11.3	2 512	-11.7	-9.7	11.9	13.8	20.4	-0.7	19.5	20.5	1 081	63.0
47	-14.0	-23.6	1 591	-0.2	27.9	3 080	1.0	41.6	3.0	3.4	31.1	30.4	15.3	18.0	8 190	107.0
44	21.0	..	1 247	15.5	4.3	26 376	33.2	14.9	3.5	3.4	5.0	5.2	1.7	1.8	643	69.0
44	2.3	-2.2	6 929	8.7	1.2	42 062	11.4	6.5	0.6	0.7	1.6	7.3	1.1	1.1	6 553	106.0
38	-8.1	-8.5	1 052	7.6	-2.8	5 117	1.4	0.1	3.6	4.2	4.0	3.5	7.5	8.2	268	10.0
38	15.1	10.1	1 531	4.1	-0.4	9 012	-1.9	-1.0	2.5	2.3	4.8	5.2	4.2	3.6	312	21.0
37	23.4	22.9	1 530	20.1	36.8	3 475	23.0	26.5	2.4	2.3	23.9	20.6	10.6	10.6	3 613	25.0
34	-23.1	..	15 796	22.8	1.1	93 657	17.6	1.6	0.2	0.3	-21.0	-22.9	0.4	0.6	..	..
33	-1.7	-3.8	2 136	-5.7	-1.0	13 079	0.9	1.4	1.5	1.5	1.6	0.6	2.5	2.6	217	-2.0
32	1.3	4.1	2 523	27.3	8.0	10 052	-0.1	14.6	1.3	1.6	1.1	-0.6	3.2	3.1	413	28.0
31	5.9	9.7	386	9.0	8.4	2 664	-1.1	10.0	8.1	8.3	13.3	15.0	11.7	11.0	700	42.0
31	6.2	0.5	862	13.0	3.1	5 060	2.3	6.2	3.6	3.8	5.7	5.6	6.1	5.9	526	73.0
31	47.4	..	18 046	-6.1	-7.0	62 674	-7.3	-3.4	0.2	0.1	4.6	2.1	0.5	0.3	4 199	62.0
30	8.1	5.6	468	5.9	1.4	3 711	-0.1	-0.1	6.3	6.2	6.5	3.2	8.0	7.4	410	..
28	8.1	17.1	262	14.4	11.5	1 803	17.5	24.9	10.9	11.5	6.7	-10.9	15.8	17.2	389	54.0
28	86.4	11.4	13	-38.1	2.7	171	-12.3	-0.6	212.4	70.5	-335.6	-128.6	161.5	75.9	318	24.0
28	6.2	6.6	4 827	5.5	0.4	17 494	-2.7	-9.5	0.6	0.6	11.0	9.7	1.6	1.4	3 252	28.0
27	-37.7	-18.4	1 023	-11.3	-3.4	8 820	-9.3	-5.1	2.7	3.8	5.1	2.8	3.1	4.5	380	54.0
25	2.1	-0.4	1 267	7.6	3.2	12 523	2.0	0.8	1.9	2.0	2.0	2.5	2.0	2.0	257	12.0
24	44.6	41.5	440	21.2	24.9	707	18.0	24.4	5.4	4.5	16.6	16.5	33.3	27.2	384	-15.0
23	12.2	-21.3	814	9.3	14.8	2 586	4.9	12.3	2.9	2.8	10.3	11.4	9.0	8.4	1 564	100.0
22	12.7	22.8	454	8.9	7.3	3 122	2.2	4.8	4.9	4.7	15.6	13.0	7.1	6.4	622	..
22	-8.0	9.1	143	18.2	10.2	928	6.2	14.1	15.4	19.8	20.0	17.4	23.7	27.4	255	25.0
21	-5.3	4.0	1 096	5.3	5.3	4 221	0.8	2.5	2.0	2.2	7.6	6.3	5.1	5.4	716	72.0
19	-8.1	-14.9	926	-11.5	-8.9	5 228	-26.1	-14.9	2.1	2.0	4.8	-0.6	3.7	3.0	680	54.0
19	36.3	16.5	43	30.3	36.3	456	38.6	17.7	43.5	41.6	-15.1	-9.1	41.0	41.7	371	50.0
19	0.9	1.0	218	-1.8	-4.6	1 025	-5.8	-5.6	8.5	8.3	8.4	2.7	18.1	16.9	114	118.0
18	60.7	34.0	101	80.4	30.9	864	134.8	37.3	18.2	20.4	3.9	8.9	21.2	31.0	50	-14.0

## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector [closest corresponding sector to FTSE classification - provisional]
<b>Germany continued</b>				
82	Aixtron	369	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
83	Funkwerk	372	Support services (58)	Manufacture of office machinery & computers (300)
84	Heraeus	374	Steel & other metals (18)	Manufacture of basic metals (270)
85	WET Automotive Systems	393	Automobiles & parts (31)	Manufacture of electrical machinery & apparatus n e c (310)
86	Gerling-Konzern Versicherungs	406	Insurance (83)	Insurance & pension funding except compulsory social security (660)
87	Medigene	415	Biotechnology (482)	Research & development (730)
88	Wanderer-Werke	417	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
89	Augusta Technologie	423	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
90	Muhlbauer	426	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
91	Steag Hamatech	431	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
92	Vossloh	432	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
93	Evotec OAI	436	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
94	K+S	450	Chemicals (11)	Manufacture of chemicals & chemical products (240)
95	ADVA	460	Telecommunications equipment (938)	Manufacture of medical/precision/optical instruments & watches (330)
96	Morphosys	461	Biotechnology (482)	Research & development (730)
97	Tarkett	464	Household goods & textiles (34)	Manufacture of other non-metallic mineral products (268)
98	Villeroy & Boch	497	Household goods & textiles (34)	Manufacture of other non-metallic mineral products (268)
99	PSI	498	Computer services (972)	Manufacture of office machinery & computers (300)
100	Rational	510	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
101	SUSS MicroTec	511	Semiconductors (936)	Manufacture of machinery & equipment n e c (290)
102	Pfeiffer Vacuum Technology	515	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
103	Isra Vision Systems	530	Engineering - general (267)	Computer & related activities (720)
104	VOGT Electronic	542	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
105	Thomas Cook	547	Leisure & hotels (53)	Supporting & auxiliary transport activities; travel agencies (630)
106	Karstadt Quelle	555	General retailers (52)	Retail trade except motor vehicles; repair of household goods (520)
107	WEDECO	556	Engineering - general (267)	Collection, purification & distribution of water (410)
108	P&I Personal & Informatik	558	Software (977)	Computer & related activities (720)
109	Franz Haniel & Cie	560	Pharmaceuticals (486)	Wholesale & commission trade except motor vehicles (510)
110	IDS Scheer	564	Software (977)	Computer & related activities (720)
111	Basler	566	Electrical equipment (252)	Manufacture of medical/precision/optical instruments & watches (330)
112	Mensch und Maschine Software	571	Computer services (972)	Computer & related activities (720)
113	Energie Baden	576	Electricity (72)	Electricity, gas, steam & hot water supply (400)
114	GfK	579	Support services (58)	Other business activities (740)
115	Walter	580	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
116	Epigenomics	595	Biotechnology (482)	Research & development (730)
117	PiroNet NDH	600	Internet (974)	Computer & related activities (720)
118	Techem	601	Support services (58)	Other business activities (740)
119	Leifheit	606	Household goods & textiles (34)	Manufacture of fabricated metal products (not machinery & equip) (280)
120	Wavelight Laser Technologie	617	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
121	Otto	626	General retailers (52)	Retail trade except motor vehicles; repair of household goods (520)
122	SolarWorld	630	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
123	Lufthansa	636	Transport (59)	Air transport (620)
124	SoftM Software und Beratung	637	Computer services (972)	Computer & related activities (720)
125	TELES AG Informationstechnologien	639	Internet (974)	Computer & related activities (720)
126	GFT Technologies	642	Computer services (972)	Other business activities (740)
127	Nordex	644	Engineering fabricators (266)	Manufacture of machinery & equipment n e c (290)
128	MWG-Biotech	645	Biotechnology (482)	Research & development (730)
129	Progress-Werk Oberkirch	648	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
130	LION Bioscience	660	Biotechnology (482)	Research & development (730)
131	Surteco	663	Household goods & textiles (34)	Manufacture of rubber & plastic products (250)



- R&D Investment -			- Net Sales -			- Employees 2004 -			- R&D/Net Sales ratio -		- Operating Profit -		- R&D per employee -		- Market Capitalisation -	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
18	23.8	10.2	140	53.8	-16.4	416	1.5	-4.4	12.6	15.6	5.8	-31.9	42.3	34.7	245	-3.0
18	43.4	49.2	249	39.1	54.9	1 223	34.7	28.2	7.0	6.8	9.1	9.5	14.3	13.4	271	9.0
17	-61.0	..	8 338	12.5	6.8	9 603	2.9	0.4	0.2	0.6	2.0	1.6	1.8	4.7	..	..
16	25.1	31.8	177	21.2	16.8	3 231	33.8	16.9	9.2	8.9	16.0	17.1	5.1	5.4	168	..
16	14.0	-19.3	4 172	-15.4	-26.2	7 756	-23.6	-14.4	0.4	0.3	7.6	-0.1	2.0	1.3	810	..
14	-28.8	-13.7	13	550.0	22.9	117	-5.6	-9.9	110.9	1 013.0	-110.3	-1 600.0	123.2	163.4	133	69.0
14	125.0	22.8	410	-7.9	8.8	3 306	-3.6	7.7	3.5	1.4	8.1	7.6	4.4	1.9	106	..
14	9.8	4.4	234	-0.8	-5.5	954	-8.6	-2.4	6.0	5.4	-2.8	-0.8	14.8	12.3	45	456.0
14	23.0	11.0	128	34.7	12.9	1 338	6.0	1.0	10.9	12.0	18.7	8.4	10.5	9.0	273	67.0
14	62.4	12.4	149	1.4	6.6	294	-24.4	-14.1	9.3	5.8	0.6	4.1	47.4	22.1	54	..
14	87.8	12.4	922	0.2	0.7	4 600	4.0	-5.0	1.5	0.8	10.8	10.9	3.0	1.7	649	..
14	-10.9	-15.7	73	-5.2	5.0	639	-1.1	3.0	18.9	20.1	-126.3	-19.5	21.6	23.9	174	88.0
13	-2.4	-2.0	2 582	12.9	5.8	11 068	4.3	2.6	0.5	0.6	6.4	4.7	1.2	1.2	2 230	93.0
12	0.8	19.0	102	13.3	4.3	450	12.8	3.0	12.2	13.7	7.2	4.4	27.6	30.9	232	47.0
12	37.7	7.8	22	46.7	11.2	117	23.2	3.7	56.3	60.0	0.6	-20.0	105.9	94.7	209	91.0
12	12.8	-4.2	1 437	6.5	1.3	6 883	-1.3	-0.4	0.9	0.8	6.2	6.4	1.8	1.6	718	68.0
11	-13.3	-8.1	960	1.2	-0.5	10 390	-3.9	-1.4	1.1	1.3	3.5	3.5	1.1	1.2	182	65.0
11	20.5	-1.0	115	-16.7	-11.3	1 106	-9.4	-7.7	9.4	6.5	-7.9	..	9.8	7.3	55	78.0
10	-8.5	12.8	222	18.7	10.0	742	9.3	4.0	4.7	6.1	24.1	22.5	14.0	16.7	1 014	100.0
10	-1.2	-14.7	116	20.8	-19.6	..	..	..	8.9	10.9	-8.2	-17.7	..	14.2	79	-1.0
10	14.8	8.3	156	8.3	-2.8	750	-3.5	-1.8	6.6	6.2	11.6	13.2	13.7	11.5	367	46.0
10	41.8	30.5	40	48.1	35.7	244	45.2	28.1	24.3	25.4	14.0	14.8	39.9	40.8	31	..
9	-7.1	-8.6	306	-42.8	-24.7	3 614	-31.1	-15.7	3.0	1.8	-0.2	-0.4	2.5	1.9	14	..
9	76.1	..	7 479	3.3	-1.7	24 628	-5.2	-4.6	0.1	0.1	-1.4	-4.0	0.4	0.2	..	..
8	-60.6	-25.2	13 447	-11.9	-5.8	74 340	-7.1	-6.0	0.1	0.1	-10.3	1.4	0.1	0.3	2 521	42.0
8	-3.3	45.8	126	-12.5	36.1	733	1.2	41.5	6.6	5.9	-7.0	6.9	11.3	11.8	220	..
8	-5.5	20.6	40	5.3	12.6	239	1.3	2.0	20.7	23.0	10.7	7.9	34.6	37.0	94	..
8	300.0	..	24 317	5.6	6.2	53 200	21.7	14.3	0.0	0.0	4.1	3.1	0.2	0.1	..	..
8	4.4	5.4	280	26.7	20.5	1 945	18.7	10.1	2.8	3.4	11.5	12.7	4.0	4.6	553	..
8	50.5	1.0	52	44.4	24.4	309	18.4	8.9	14.8	14.3	11.2	2.8	25.0	19.7	52	..
8	-6.4	1.2	135	3.1	-2.8	355	-12.3	6.0	5.6	6.2	-2.3	-5.3	21.4	20.1	69	184.0
8	-29.9	..	9 844	-7.2	7.8	..	..	..	0.1	0.1	11.3	-5.2	..	0.3	4 978	108.0
7	-12.9	-4.1	672	12.9	8.1	5 417	8.3	5.2	1.1	1.4	14.2	11.6	1.4	1.7	969	..
7	-28.0	-16.2	261	1.6	-3.9	1 865	-5.2	-1.9	2.8	4.0	15.4	7.4	3.9	5.2	388	..
7	-26.9	-4.9	8	-27.3	..	145	1.4	8.0	86.8	86.3	-135.1	-63.6	47.9	66.4	134	..
7	192.7	26.8	35	66.7	13.4	320	53.8	6.8	19.6	11.1	9.7	4.8	21.4	11.3	63	..
7	94.3	14.8	432	5.9	6.8	2 153	-9.2	2.1	1.6	0.9	19.8	10.5	3.2	1.5	913	..
7	-1.0	8.8	317	-5.4	-6.4	2 070	-11.2	-6.6	2.1	2.0	-4.1	3.6	3.2	2.9	113	..
6	50.6	38.1	62	29.2	37.2	215	39.6	30.8	10.2	8.8	8.8	10.4	29.5	27.3	135	..
6	4.6	..	14 424	0.8	0.1	54 428	-1.8	-0.5	0.0	0.0	3.1	3.0	0.1	0.1	..	..
6	22.0	6.9	200	104.1	34.6	570	13.1	29.9	3.1	5.1	16.5	5.1	10.7	9.9	1 131	..
6	-25.0	-40.7	16 965	6.3	0.5	92 743	-2.2	1.8	0.0	0.1	2.8	-3.8	0.1	0.1	5 106	..
6	-6.3	1.1	88	27.5	12.4	476	6.0	8.2	6.8	9.3	1.3	..	12.6	14.3	21	..
6	33.3	0.7	79	3.9	7.8	503	29.3	-11.9	7.6	5.9	5.4	17.1	11.9	11.5	172	..
6	25.8	29.4	126	-8.7	-5.2	952	-8.7	-1.0	4.6	3.3	-1.2	-10.1	6.1	4.4	51	..
6	16.7	-5.5	222	13.3	-13.8	726	-16.3	3.7	2.6	2.5	-12.9	-87.8	7.9	5.7	97	..
6	170.3	-8.0	33	-23.3	-14.1	325	-14.5	-7.1	17.4	4.9	-112.3	-25.6	17.6	5.6	11	..
6	-18.7	63.7	201	4.7	7.9	987	4.6	4.3	2.8	3.7	7.3	7.8	5.8	7.4	67	..
6	-56.2	-44.9	10	-50.0	-37.0	85	-52.0	-47.6	54.8	62.6	-144.2	-115.0	64.5	70.7	9	11.0
5	2.5	..	380	7.0	11.9	1 998	2.9	-2.6	1.4	1.5	11.7	10.4	2.7	2.7	282	..



## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector [closest corresponding sector to FTSE classification - provisional]
<b>Germany continued</b>				
132	Infor Business Solutions	671	Software (977)	Computer & related activities (720)
133	Elexis	673	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
134	Norddeutsche Affinerie	684	Steel & other metals (18)	Manufacture of basic metals (270)
135	Kaessbohrer Gelaendefahrzeug	687	Engineering - general (267)	Manufacture of motor vehicles trailers & semi-trailers (340)
<b>Greece</b> <i>number of companies for calculation</i>				
1	Intracom	271	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
2	ALTEC	662	Computer services (972)	Manufacture of office machinery & computers (300)
<b>Hungary</b> <i>number of companies for calculation</i>				
1	Gedeon Richter	212	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
2	Egis Pharmaceuticals	342	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
<b>Ireland</b> <i>number of companies for calculation</i>				
1	Elan	98	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
2	Kerry	109	Food producers (43)	Manufacture of food products & beverages (150)
3	IONA Technologies	455	Computer services (972)	Computer & related activities (720)
4	Trintech	604	Software (977)	Computer & related activities (720)
5	Greencore	624	Food producers (43)	Manufacture of food products & beverages (150)
6	Waterford Wedgwood	628	Household goods & textiles (34)	Manufacture of furniture (361)
7	Kingspan	688	Construction & building (13)	Manufacture of fabricated metal products (not machinery & equip) (280)
<b>Italy</b> <i>number of companies for calculation</i>				
1	Istituto Finanziario Industriale	16	Automobiles & parts (31)	Other business activities (740)
2	Finmeccanica	19	Aerospace & defence (21)	Manufacture of machinery & equipment n e c (290)
3	ENI	65	Oil & gas (7)	Manufacture of chemicals & chemical products (240)
4	Pirelli	73	Diversified industrials (24)	Manufacture of rubber & plastic products (250)
5	Telecom Italia	96	Telecommunication services (67)	Post & telecommunications (640)
6	Italtel	148	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
7	Chiesi Farmaceutici	168	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
8	FastWeb	184	Telecommunication services (67)	Post & telecommunications (640)
9	Sorin	189	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
10	IMMSI	229	Automobiles & parts (31)	Other business activities (740)
11	Recordati	234	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
12	Zambon	265	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
13	Compagnie Industriali Riunite	336	Diversified industrials (24)	Other business activities (740)
14	Enel	337	Electricity (72)	Electricity, gas, steam & hot water supply (400)
15	Same Deutz-Fahr	340	Commercial vehicles & trucks (263)	Manufacture of machinery & equipment n e c (290)
16	IMA Industria Macchine Automatiche	375	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
17	Gewiss	414	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
18	Brembo	420	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
19	SAES Getters	441	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
20	Datalogic	509	Support services (58)	Manufacture of office machinery & computers (300)
21	Edison	522	Utilities - other (77)	Electricity, gas, steam & hot water supply (400)
22	Danieli	523	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
23	Carraro	536	Automobiles & parts (31)	Manufacture of machinery & equipment n e c (290)

- R&D Investment -			- Net Sales -			- Employees 2004 -			- R&D/Net Sales ratio -		- Operating Profit -		- R&D per employee -		- Market Capitalisation -	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
5	-57.8	-27.7	57	-13.6	-8.7	457	-23.7	-14.8	9.1	18.7	-16.3	-22.7	11.4	20.6	76	..
5	-1.9	-11.9	125	17.9	-12.4	719	3.2	-21.0	4.2	5.0	6.6	2.8	7.2	7.6	126	..
5	-16.7	-3.1	2 481	36.6	7.3	3 079	-6.5	-1.2	0.2	0.3	2.3	0.8	1.6	1.8	610	..
5	-2.0	9.6	154	18.5	36.2	427	-0.7	1.2	3.2	3.9	11.1	6.9	11.7	11.9	98	..
<b>35</b>	<b>-39.9</b>	<b>-22.6</b>	<b>909</b>	<b>1.3</b>	<b>-10.5</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>3.8</b>	<b>6.4</b>	<b>6.4</b>	<b>4.1</b>	<b>..</b>	<b>..</b>	<b>640</b>	<b>..</b>
2	2	2	2	2	2	..	..	..	2	2	2	2	..	..	2	..
29	-46.1	-26.4	620	-3.3	-13.6	..	..	..	4.7	8.4	9.4	8.0	..	..	604	52.0
5	58.1	53.3	289	12.9	-1.8	942	-2.1	-11.9	1.9	1.3	0.0	-5.5	5.8	3.6	36	..
<b>63</b>	<b>7.5</b>	<b>15.6</b>	<b>960</b>	<b>4.6</b>	<b>10.3</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>6.6</b>	<b>6.4</b>	<b>18.8</b>	<b>17.0</b>	<b>..</b>	<b>..</b>	<b>2 645</b>	<b>65.7</b>
2	2	2	2	2	2	..	..	..	2	2	2	2	..	..	2	2
43	12.3	17.2	606	2.5	12.2	..	..	..	7.1	6.5	25.1	22.2	..	..	2 148	59.0
20	-1.7	12.2	354	8.3	7.4	..	..	..	5.6	6.1	8.1	7.6	..	4.3	497	105.0
<b>284</b>	<b>-12.3</b>	<b>-12.0</b>	<b>7 797</b>	<b>3.3</b>	<b>-1.6</b>	<b>46 509</b>	<b>2.0</b>	<b>-0.8</b>	<b>3.6</b>	<b>4.3</b>	<b>1.4</b>	<b>-5.0</b>	<b>6.1</b>	<b>7.1</b>	<b>9 277</b>	<b>..</b>
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	..
136	-27.3	-22.8	341	-39.2	-35.7	1 832	-31.8	-26.0	39.9	33.4	-84.4	-139.4	74.3	69.6	2 526	-57.0
111	25.5	23.7	4 129	11.8	11.2	21 671	14.9	13.0	2.7	2.4	5.7	7.0	5.1	4.7	3 901	38.0
13	-37.0	-24.7	50	-9.1	-27.8	346	-2.0	-27.5	25.3	36.5	0.3	-58.2	36.6	56.9	84	18.0
7	10.8	-23.6	41	28.1	-6.4	315	-6.3	-14.9	16.5	19.0	2.7	-9.4	21.4	18.1	42	..
6	-15.7	-7.9	1 446	-1.8	-7.0	10 512	-6.5	-8.4	0.4	0.5	5.8	5.6	0.6	0.7	677	..
6	-34.4	1.1	832	-12.5	-8.4	8 482	-5.0	-4.3	0.7	1.0	-2.2	2.8	0.7	1.0	252	..
5	0.2	8.5	958	22.2	4.9	3 351	5.4	0.3	0.5	0.6	9.9	9.1	1.5	1.6	1 795	..
<b>4 401</b>	<b>7.1</b>	<b>3.5</b>	<b>208 319</b>	<b>6.9</b>	<b>-0.5</b>	<b>540 065</b>	<b>-5.2</b>	<b>-8.8</b>	<b>2.1</b>	<b>2.1</b>	<b>11.3</b>	<b>9.2</b>	<b>8.2</b>	<b>7.2</b>	<b>206 269</b>	<b>41.3</b>
25	24	19	25	24	21	25	24	21	25	24	25	24	25	24	21	13
1 827	3.6	-0.4	51 878	-3.1	-6.4	179 790	-6.6	-7.6	3.5	3.3	-2.3	-3.6	10.2	9.2	976	66.0
1 454	18.5	18.9	7 529	0.4	4.5	46 401	3.2	6.5	19.3	16.4	-0.8	5.6	31.3	27.3	6 266	44.0
257	8.0	8.2	58 382	13.4	6.1	71 497	-6.6	0.3	0.4	0.5	20.4	17.5	3.6	3.1	96 868	61.0
198	-2.9	-5.8	7 114	6.6	-1.8	33 704	-7.8	-5.9	2.8	3.1	5.6	2.8	5.9	5.6	4 420	76.0
139	0.0	..	31 237	1.3	-0.8	88 892	-7.2	-8.0	0.4	0.5	21.0	18.6	1.6	1.5	37 213	17.0
75	-7.7	-14.5	542	-8.4	-16.3	2 484	-6.8	-14.9	13.8	13.6	-1.6	0.3	30.0	30.3	..	..
62	-4.7	..	474	14.2	..	2 517	6.7	..	13.1	15.8	9.8	5.8	24.8	27.7	..	..
55	43.6	19.1	720	36.1	66.9	2 108	43.4	19.7	7.7	7.3	-16.8	-69.2	26.1	26.1	2 741	..
54	-11.3	6.2	719	-14.8	-9.1	4 776	-13.1	-4.8	7.5	7.2	-3.5	-10.1	11.3	11.1	868	1 834.0
39	2.1	..	1 137	748.5	..	6 599	40.5	..	3.4	28.3	4.3	-63.4	5.9	8.1	484	..
37	13.9	6.4	488	0.0	4.1	1 796	-16.8	-2.2	7.6	6.7	17.5	9.2	20.8	15.2	1 268	73.0
31	-3.4	..	433	-5.7	..	2 352	-2.9	..	7.2	7.0	6.3	9.6	13.2	13.2	..	..
20	11.1	25.2	3 061	7.8	14.0	10 324	-0.5	2.2	0.7	0.6	12.8	8.2	1.9	1.7	1 937	85.0
20	-52.4	-41.5	34 329	18.6	8.2	62 218	-7.4	-5.0	0.1	0.1	13.1	13.7	0.3	0.6	42 674	20.0
20	..	..	905	..	..	2 542	..	..	2.2	..	3.6	..	7.8	..	..	..
17	-5.9	-3.1	363	4.9	2.0	2 480	3.3	3.6	4.7	5.3	8.8	11.3	6.9	7.6	391	..
15	4.9	5.8	312	4.0	-2.4	1 686	-6.6	-70.2	4.7	4.6	19.0	12.7	8.7	7.7	600	..
14	24.5	8.4	678	6.9	8.5	3 951	1.4	6.9	2.1	1.8	8.1	8.5	3.6	2.9	429	22.0
13	5.0	3.0	142	12.7	-3.9	946	-11.1	-6.1	9.5	10.2	18.8	-4.0	14.2	12.0	257	218.0
10	8.9	5.2	146	12.3	9.9	875	12.9	7.8	7.1	7.4	11.5	4.6	11.9	12.3	291	..
10	-23.1	-52.3	5 696	5.0	-28.6	3 878	-14.1	-49.1	0.2	0.2	9.9	8.3	2.6	2.9	7 675	49.0
10	-16.7	-33.0	1 008	2.1	9.6	3 470	23.7	4.7	1.0	1.2	7.1	2.6	2.9	4.3	371	73.0
10	15.1	-1.6	514	31.8	10.0	2 142	2.1	-4.7	1.9	2.1	5.0	4.6	4.5	3.9	183	..

## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector [closest corresponding sector to FTSE classification - provisional]
<b>Italy continued</b>				
24	Mariella Burani Fashion	574	Household goods & textiles (34)	Manufacture of wearing apparel; dressing. dyeing of furnitures (180)
25	Prima Industrie	596	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
<b>Luxembourg</b> <i>number of companies for calculation</i>				
1	Ipsen	97	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
2	Arcelor	99	Steel & other metals (18)	Manufacture of basic metals (270)
3	Gemplus International	153	Electronic equipment (253)	Manufacture of office machinery & computers (300)
4	Tenaris	350	Oil & gas (7)	Manufacture of basic metals (270)
<b>Poland</b> <i>number of companies for calculation</i>				
1	Telekomunikacja Polska	387	Telecommunication services (67)	Post & telecommunications (640)
2	Netia	659	Telecommunication services (67)	Post & telecommunications (640)
<b>Portugal</b> <i>number of companies for calculation</i>				
1	Portugal Telecom	501	Telecommunication services (67)	Post & telecommunications (640)
<b>Slovenia</b> <i>number of companies for calculation</i>				
1	Krka	242	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
2	Gorenje	685	Household goods & textiles (34)	Manufacture of machinery & equipment n e c (290)
<b>Spain</b> <i>number of companies for calculation</i>				
1	Telefonica	40	Telecommunication services (67)	Post & telecommunications (640)
2	Amadeus Global Travel	89	Leisure & hotels (53)	Supporting & auxiliary transport activities; travel agencies (630)
3	Industria de Turbo Propulsores	141	Aerospace & defence (21)	Manufacture of other transport equipment (350)
4	Repsol YPF	179	Oil & gas (7)	Extraction of crude petroleum/natural gas & incidental services (111)
5	Gamesa	196	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
6	Zeltia	239	Pharmaceuticals (486)	Research & development (730)
7	Auna	250	Telecommunication services (67)	Post & telecommunications (640)
8	Abengoa	326	Diversified industrials (24)	Construction (450)
9	FAES Farma	345	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
10	Union Electrica Fenosa	444	Electricity (72)	Electricity. gas. steam & hot water supply (400)
11	Grupo Empresarial ENCE	603	Forestry & paper (15)	Manufacture of pulp paper & paper products (211)
12	CAF	608	Commercial vehicles & trucks (263)	Manufacture of other transport equipment (350)
13	Acerinox	625	Steel & other metals (18)	Manufacture of basic metals (270)
<b>Sweden</b> <i>number of companies for calculation</i>				
1	Ericsson	11	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
2	Volvo	25	Commercial vehicles & trucks (263)	Manufacture of motor vehicles trailers & semi-trailers (340)
3	TeliaSonera	56	Telecommunication services (67)	Post & telecommunications (640)
4	Autoliv	62	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
5	Scania	66	Commercial vehicles & trucks (263)	Manufacture of motor vehicles trailers & semi-trailers (340)
6	Electrolux	68	Household goods & textiles (34)	Manufacture of machinery & equipment n e c (290)
7	Sandvik	81	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
8	Atlas Copco	95	Engineering - contractors (264)	Manufacture of machinery & equipment n e c (290)

- R&D Investment -			- Net Sales -			- Employees 2004 -			- R&D/Net Sales ratio -		- Operating Profit -		- R&D per employee -		- Market Capitalisation -	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
8	56.7	..	412	17.7	24.2	2 172	26.6	27.3	1.8	1.4	7.2	3.1	3.5	2.8	308	..
7	16.4	4.1	100	5.3	-3.7	465	4.5	3.0	6.9	6.2	4.9	-2.1	14.8	13.3	49	..
<b>363</b>	<b>3.8</b>	<b>..</b>	<b>34 821</b>	<b>17.1</b>	<b>5.0</b>	<b>121 521</b>	<b>-0.8</b>	<b>1.9</b>	<b>1.0</b>	<b>1.2</b>	<b>13.0</b>	<b>3.5</b>	<b>3.0</b>	<b>2.9</b>	<b>14 427</b>	<b>33.2</b>
4	4	..	4	4	3	4	4	3	4	4	4	4	4	4	3	1
136	4.1	..	737	2.6	4.1	3 769	4.3	3.1	18.5	18.2	21.2	17.7	36.2	36.2	..	..
135	-4.9	..	30 176	16.4	..	95 829	-3.7	..	0.4	0.5	12.0	3.2	1.4	1.4	11 580	..
72	0.3	-14.4	865	15.5	-5.4	5 476	8.7	-6.6	8.3	9.6	2.4	-18.3	13.2	14.3	1 195	0.3
19	331.0	..	3 043	30.1	9.2	16 447	14.3	5.2	0.6	0.2	24.3	9.8	1.2	0.3	1 652	..
<b>22</b>	<b>1.1</b>	<b>42.6</b>	<b>4 780</b>	<b>2.5</b>	<b>2.9</b>	<b>..</b>	<b>-17.9</b>	<b>..</b>	<b>0.5</b>	<b>0.5</b>	<b>18.2</b>	<b>13.9</b>	<b>..</b>	<b>0.5</b>	<b>8 272</b>	<b>..</b>
2	2	2	2	2	2	..	2	..	2	2	2	2	..	2	2	..
17	15.3	52.9	4 560	1.5	2.3	36 589	-17.9	-15.3	0.4	0.3	18.6	18.1	0.5	0.3	6 971	..
6	-26.2	22.7	220	29.4	18.6	..	..	..	2.5	4.4	10.4	-95.9	..	5.8	1 301	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	-25.9	..	6 023	4.3	1.7	29 483	18.5	12.2	0.2	0.2	16.5	12.3	0.4	0.6	9 332	..
<b>40</b>	<b>30.3</b>	<b>..</b>	<b>1 376</b>	<b>12.5</b>	<b>11.1</b>	<b>14 181</b>	<b>4.5</b>	<b>19.2</b>	<b>2.9</b>	<b>2.5</b>	<b>7.4</b>	<b>6.9</b>	<b>2.8</b>	<b>2.3</b>	<b>1 429</b>	<b>..</b>
2	2	..	2	2	2	2	2	2	2	2	2	2	2	2	2	..
35	14.3	14.0	473	17.1	12.3	4 678	5.7	9.9	7.4	7.6	15.4	15.1	7.5	6.9	1 109	17.0
5	7 042.9	..	903	10.3	10.5	9 503	3.9	25.0	0.6	0.0	3.2	2.8	0.5	0.0	320	..
<b>946</b>	<b>-6.4</b>	<b>-5.0</b>	<b>92 031</b>	<b>10.5</b>	<b>1.1</b>	<b>252 189</b>	<b>4.4</b>	<b>-1.0</b>	<b>1.0</b>	<b>1.2</b>	<b>12.5</b>	<b>10.8</b>	<b>3.8</b>	<b>4.1</b>	<b>120 003</b>	<b>33.2</b>
13	11	10	13	12	12	13	11	10	13	11	13	11	13	11	11	7
461	4.8	-2.1	30 322	6.8	-0.2	156 819	4.9	-0.9	1.5	1.6	18.0	13.7	2.9	2.9	67 911	30.0
153	5.7	5.7	2 057	6.6	4.8	5 760	12.3	13.7	7.4	7.5	16.3	15.6	26.6	28.3	4 354	56.0
82	-24.3	33.6	379	-6.4	0.7	2 244	1.9	1.5	21.6	26.7	9.9	6.9	36.4	49.0	..	..
57	-57.5	-23.2	40 585	12.5	-2.4	32 376	5.7	-4.8	0.1	0.4	9.2	10.0	1.8	4.4	29 484	38.0
50	22.4	0.9	1 736	10.4	33.0	7 222	17.2	14.9	2.9	2.6	16.0	15.0	6.9	6.6	2 851	13.0
37	-28.3	4.6	79	6.8	9.0	532	-9.8	5.5	46.5	69.2	-7.3	-32.4	69.0	86.8	1 195	27.0
34	58.7	..	4 217	11.2	21.8	4 582	-8.2	..	0.8	0.6	7.2	2.8	7.3	4.2	..	..
21	3.9	-16.3	1 687	3.2	6.9	9 318	5.6	-0.8	1.2	1.2	5.8	5.4	2.2	2.3	1 040	81.0
20	..	..	163	..	..	747	..	..	12.0	..	12.3	..	26.1	..	902	..
13	-28.1	-53.5	5 717	3.8	1.7	20 798	-2.2	-6.9	0.2	0.3	12.7	9.9	0.6	0.9	7 468	40.0
7	112.9	30.6	470	-2.7	-0.4	1 437	0.8	4.3	1.4	0.7	2.8	5.0	4.7	2.2	588	..
7	..	..	578	..	..	3 846	..	..	1.1	..	3.1	..	1.7	..	298	..
6	244.4	53.9	4 041	38.7	30.4	6 508	1.8	18.4	0.2	0.1	12.7	6.3	1.0	0.3	3 912	..
<b>6 099</b>	<b>-7.4</b>	<b>-9.4</b>	<b>142 641</b>	<b>8.1</b>	<b>1.2</b>	<b>708 447</b>	<b>1.7</b>	<b>-0.6</b>	<b>4.3</b>	<b>5.0</b>	<b>11.0</b>	<b>6.1</b>	<b>8.6</b>	<b>9.5</b>	<b>153 199</b>	<b>30.0</b>
60	59	52	60	58	58	59	60	57	59	57	59	56	59	59	53	40
2 436	-24.9	-22.2	14 611	12.1	-17.1	51 742	-9.5	-18.5	16.7	24.9	21.8	-9.2	47.1	56.7	43 334	37.0
991	14.0	6.4	23 294	14.8	3.6	78 196	6.9	2.8	4.3	4.3	6.7	1.2	12.7	11.9	13 812	20.0
308	9.4	28.8	9 071	-0.6	12.7	25 381	-3.1	0.5	3.4	3.1	22.2	16.7	12.1	10.8	16 934	12.0
271	20.6	22.4	4 520	15.9	15.5	34 500	7.5	6.8	6.0	5.8	8.5	8.3	7.9	7.0	3 053	5.0
255	7.0	5.6	6 382	13.2	2.8	29 064	5.1	2.5	4.0	4.2	10.9	9.8	8.8	8.6	6 306	29.0
227	23.2	4.6	13 357	-2.8	-3.9	72 382	-6.2	-6.0	1.7	1.3	3.9	5.7	3.1	2.4	5 295	33.0
185	-0.3	8.2	6 046	11.9	3.7	37 673	1.4	2.7	3.1	3.4	13.1	10.2	4.9	5.0	7 986	20.0
141	9.4	4.8	5 387	9.1	-1.6	26 828	4.4	0.8	2.6	2.6	13.6	11.8	5.3	5.0	7 985	48.0

## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector [closest corresponding sector to FTSE classification - provisional]
<b>Sweden continued</b>				
9	SAAB	129	Aerospace & defence (21)	Manufacture of other transport equipment (350)
10	SKF	134	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
11	Svenska Cellulosa	150	Forestry & paper (15)	Manufacture of pulp paper & paper products (211)
12	Trelleborg	161	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
13	Gambro	162	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
14	Vattenfall	175	Electricity (72)	Electricity. gas. steam & hot water supply (400)
15	Assa Abloy	182	Support services (58)	Manufacture of fabricated metal products (not machinery & equip) (280)
16	Intenia International	193	Computer services (972)	Wholesale & commission trade except motor vehicles (510)
17	Alfa Laval	207	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
18	Getinge	210	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
19	Haldex	240	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
20	IBS	244	Software (977)	Computer & related activities (720)
21	Micronic Laser Systems	256	Semiconductors (936)	Manufacture of medical/precision/optical instruments & watches (330)
22	Biovitrum	260	Biotechnology (482)	Research & development (730)
23	Industrial and Financial Systems	274	Software (977)	Computer & related activities (720)
24	Active Biotech	288	Biotechnology (482)	Research & development (730)
25	LK	290	Mining (4)	Mining of metal ores (130)
26	Elekta	297	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
27	Nolato	307	Chemicals (11)	Manufacture of rubber & plastic products (250)
28	Seco Tools	327	Engineering - general (267)	Manufacture of fabricated metal products (not machinery & equip) (280)
29	Q-Med	331	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
30	Telelogic	344	Software (977)	Computer & related activities (720)
31	Biacore International	352	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
32	Hexagon	353	Engineering - general (267)	Manufacture of radio TV & communication equip & apparatus (320)
33	Boliden	354	Mining (4)	Mining of metal ores (130)
34	Cardo	367	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
35	Anoto	383	Computer hardware (932)	Manufacture of office machinery & computers (300)
36	Axis	425	Computer hardware (932)	Manufacture of radio TV & communication equip & apparatus (320)
37	Bioinvent	429	Biotechnology (482)	Research & development (730)
38	Hoganas	433	Mining (4)	Manufacture of basic metals (270)
39	OMX	443	Other financials (87)	Financial intermediation except insurance & pension funding (650)
40	Swedish Match	458	Tobacco (49)	Manufacture of tobacco products (160)
41	Teleca	473	Computer services (972)	Computer & related activities (720)
42	Gunnebo	492	Support services (58)	Other business activities (740)
43	Skanditek	494	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
44	Eniro	504	Media & entertainment (54)	Publishing. printing & reproduction of recorded media (220)
45	Teligent	512	Software (977)	Manufacture of office machinery & computers (300)
46	Biotage	529	Biotechnology (482)	Research & development (730)
47	Sydsvenska Kemi	532	Chemicals (11)	Manufacture of chemicals & chemical products (240)
48	Observer	533	Support services (58)	Other business activities (740)
49	Karo Bio	539	Biotechnology (482)	Research & development (730)
50	Biolipox	573	Pharmaceuticals (486)	Research & development (730)
51	Orc Software	593	Software (977)	Computer & related activities (720)
52	NIBE Industrier	594	Household goods & textiles (34)	Manufacture of machinery & equipment n e c (290)
53	Net Insight	598	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
54	Sodra	599	Forestry & paper (15)	Manufacture of pulp paper & paper products (211)
55	AudioDev	641	Computer hardware (932)	Manufacture of medical/precision/optical instruments & watches (330)
56	Sveaskog	651	Forestry & paper (15)	Forestry logging & related service activities (020)
57	Karolin Machine Tool	665	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
58	Posten	672	Support services (58)	Post & telecommunications (640)

- R&D Investment -			- Net Sales -			- Employees 2004 -			- R&D/Net Sales ratio -		- Operating Profit -		- R&D per employee -		- Market Capitalisation -	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
89	-0.1	4.0	1 976	3.5	4.4	12 115	-7.7	-4.1	4.5	4.7	8.9	7.1	7.4	6.8	1 319	0.0
88	6.1	-3.0	4 963	8.3	1.1	38 502	2.3	0.8	1.8	1.8	9.4	6.9	2.3	2.2	4 312	36.0
73	4.1	-7.5	9 960	5.4	3.0	49 919	19.9	5.9	0.7	0.7	6.3	8.8	1.5	1.7	6 026	-6.0
68	27.0	7.6	2 537	27.6	6.9	21 675	36.7	10.2	2.7	2.7	4.0	6.8	3.1	3.4	1 119	14.0
68	-4.2	13.2	2 947	1.9	-0.1	21 391	0.6	3.1	2.3	2.5	-1.8	5.9	3.2	3.3	3 722	41.0
59	10.7	-4.9	12 551	1.3	18.0	33 017	-6.5	11.5	0.5	0.4	17.3	13.7	1.8	1.5	8 800	93.0
55	11.9	10.9	2 826	6.0	4.3	29 160	1.6	6.4	2.0	1.9	10.9	4.5	1.9	1.7	3 601	19.0
52	1.2	0.9	330	1.9	-9.0	2 639	-15.0	-7.3	15.6	15.7	-9.3	-8.3	19.5	16.4	288	122.0
45	9.7	5.8	1 659	7.7	-1.8	9 400	2.2	-1.0	2.7	2.6	8.1	8.1	4.8	4.4	1 440	9.0
44	53.8	22.2	1 206	18.9	10.2	6 713	10.8	7.7	3.6	2.8	13.8	13.7	6.5	4.7	1 928	21.0
37	11.8	3.3	748	12.0	2.8	4 317	7.4	2.1	4.9	4.9	4.6	2.8	8.5	8.2	299	27.0
35	8.3	3.7	262	-1.5	-3.3	1 915	-2.4	-5.7	13.2	12.0	1.6	1.1	18.1	16.3	162	129.0
33	-1.3	11.1	93	97.9	6.5	359	15.1	8.1	35.0	70.2	15.2	-44.7	90.7	105.7	324	59.0
32	-10.8	0.5	71	-61.2	3.0	579	3.8	15.0	45.0	19.6	-12.5	20.2	55.1	64.1	..	..
28	-4.8	7.6	241	-7.0	-11.6	2 661	-6.5	-8.2	11.8	11.5	-9.6	-0.8	10.7	10.5	180	150.0
27	-15.7	-3.8	8	..	-10.1	151	-15.6	-16.4	331.1	..	-291.2	..	175.4	175.5	182	47.0
26	102.6	26.5	995	20.3	22.7	3 482	1.4	3.2	2.6	1.6	21.8	12.7	7.5	3.7	..	..
25	19.6	21.2	321	4.2	10.3	1 136	12.4	12.1	7.8	6.8	10.9	12.0	22.0	20.7	1 054	106.0
24	-13.4	-14.4	266	-10.1	0.6	2 700	14.7	6.8	8.9	9.2	8.1	2.0	8.7	11.6	137	21.0
21	-8.3	14.3	480	10.6	0.4	3 886	-1.3	-1.0	4.3	5.2	18.7	17.3	5.4	5.8	71	-87.0
20	19.6	15.1	91	35.8	29.4	495	18.1	30.6	22.2	25.2	-3.8	-3.0	40.8	40.4	85	-13.0
20	-16.8	-12.2	115	10.6	-11.5	674	-1.2	-18.9	17.0	22.6	15.8	1.0	29.0	34.5	473	70.0
19	40.4	18.3	55	-3.5	-2.9	342	1.8	8.3	34.9	24.0	-1.1	5.3	56.1	40.7	1 427	1 316.0
19	22.8	38.3	914	16.3	10.0	5 935	9.9	5.5	2.1	2.0	7.2	5.7	3.2	2.9	853	97.0
19	90.0	16.1	1 985	87.8	20.5	4 479	15.0	6.1	0.9	0.9	9.4	4.0	4.2	2.5	1 054	196.0
18	20.1	..	851	0.0	-10.7	5 947	-4.1	-10.1	2.1	1.7	4.1	5.9	3.0	2.4	555	0.0
17	-12.6	-12.5	16	-23.8	-2.0	132	-27.5	-23.9	105.4	91.8	-75.6	-181.0	127.7	105.9	175	24.0
14	2.3	-5.6	77	11.6	0.0	343	-3.7	-7.9	18.3	19.9	7.1	..	41.0	38.7	241	160.0
14	-3.8	40.7	7	0.0	5.3	101	-15.1	1.7	199.4	207.3	-166.8	-157.1	138.2	121.9	41	..
14	-8.8	2.8	461	11.1	8.7	..	..	..	3.0	3.7	14.7	14.7	..	9.2	648	13.0
13	-45.7	-32.7	322	8.4	0.7	1 517	-9.8	-1.4	4.1	8.2	18.8	-12.8	8.8	14.5	1 111	..
13	13.0	4.2	1 440	-0.2	-1.6	15 039	-0.5	1.6	0.9	0.8	25.9	17.1	0.8	0.7	3 189	26.0
12	104.0	..	302	11.0	3.3	2 810	12.6	2.6	3.9	2.1	0.3	-4.4	4.2	2.3	214	..
11	0.0	..	811	5.2	3.1	8 188	-1.0	-0.4	1.4	1.4	3.6	5.7	1.4	1.3	323	..
11	1.3	-6.2	68	19.3	-19.0	335	-2.1	-20.4	16.1	18.9	4.6	-3.5	32.6	31.5	149	17.0
11	-5.0	16.6	544	0.2	2.9	4 752	3.4	9.6	1.9	2.0	18.5	13.4	2.2	2.4	1 319	39.0
10	66.7	1.1	40	42.9	5.6	290	18.4	0.1	25.8	22.1	-6.1	-21.4	35.6	25.3	57	..
10	-3.5	-8.9	41	115.8	50.6	246	48.2	25.3	23.8	53.2	-27.8	-152.6	39.6	60.8	74	47.0
10	-1.1	29.5	723	13.7	24.6	2 091	-4.3	-8.3	1.3	1.5	7.4	5.8	4.6	4.5	..	..
10	10.6	..	179	4.7	..	2 487	2.6	..	5.4	5.1	2.0	3.5	3.9	3.6	224	..
9	3.3	52.6	4	-55.6	-35.6	85	-27.4	-11.3	233.8	100.6	-293.2	-266.7	110.0	77.4	37	70.0
8	25.1	..	0	..	..	33	94.1	..	..	..	..	..	229.7	356.5	..	..
7	-16.9	11.9	27	3.8	5.5	157	14.6	16.6	25.9	32.3	12.4	30.8	44.5	61.3	83	..
7	27.3	..	350	29.2	23.5	3 755	30.4	19.8	2.0	2.0	12.1	9.6	1.8	1.9	417	..
7	40.3	-27.2	4	0.0	26.0	65	-5.8	-23.8	172.3	122.8	-208.9	-225.0	106.0	71.2	86	..
7	0.0	5.3	1 511	3.6	9.1	3 601	-2.6	5.0	0.5	0.5	6.5	11.7	1.9	1.9	..	..
6	15.6	14.8	30	0.0	7.7	123	17.1	5.8	19.5	16.8	13.3	16.7	47.5	48.1	50	..
6	50.3	..	923	-1.0	167.9	1 791	-19.0	112.4	0.6	0.4	14.1	18.6	3.2	1.7	..	..
5	14.1	-2.4	160	37.9	2.4	747	6.6	4.2	3.3	4.0	5.3	-0.9	7.2	6.7	81	..
5	-81.9	-40.2	2 828	4.2	2.0	35 731	-5.7	-5.0	0.2	1.1	3.1	-1.1	0.1	0.8	..	..



## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector [closest corresponding sector to FTSE classification - provisional]
<b>Sweden continued</b>				
59	Stralfors	693	Media & entertainment (54)	Computer & related activities (720)
60	Intrum Justitia	700	Other financials (87)	Activities auxiliary to financial intermediation (670)
<b>The Netherlands</b> <span style="float: right;"><i>number of companies for calculation</i></span>				
1	Philips Electronics	10	Electronic equipment (253)	Manufacture of electrical machinery & apparatus n e c (310)
2	EADS	13	Aerospace & defence (21)	Manufacture of other transport equipment (350)
3	AKZO Nobel	28	Chemicals (11)	Manufacture of chemicals & chemical products (240)
4	ASML	52	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
5	DSM	59	Chemicals (11)	Manufacture of chemicals & chemical products (240)
6	Oce	72	Computer hardware (932)	Manufacture of office machinery & computers (300)
7	ASM International	137	Semiconductors (936)	Manufacture of machinery & equipment n e c (290)
8	Stork	154	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
9	Draka	186	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
10	Axalto	199	Electronic equipment (253)	Manufacture of office machinery & computers (300)
11	CSM	222	Food producers (43)	Manufacture of food products & beverages (150)
12	Euronext	233	Other financials (87)	Activities auxiliary to financial intermediation (670)
13	Numico	255	Food producers (43)	Manufacture of food products & beverages (150)
14	Delft Instruments	285	Engineering - general (267)	Manufacture of medical/precision/optical instruments & watches (330)
15	Campina	289	Food producers (43)	Manufacture of food products & beverages (150)
16	Qiagen	295	Biotechnology (482)	Research & development (730)
17	Nutreco	296	Food producers (43)	Manufacture of food products & beverages (150)
18	KPN	303	Telecommunication services (67)	Post & telecommunications (640)
19	Unit 4 Agresso	306	Software (977)	Computer & related activities (720)
20	Hunter Douglas	379	Household goods & textiles (34)	Manufacture of fabricated metal products (not machinery & equip) (280)
21	Crucell	399	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
22	James Hardie Industries	400	Construction & building (13)	Manufacture of other non-metallic mineral products (268)
23	Gamma	442	Household goods & textiles (34)	Manufacture of textiles (170)
24	Exact	463	Software (977)	Computer & related activities (720)
25	BE Semiconductor Industries	468	Semiconductors (936)	Manufacture of machinery & equipment n e c (290)
26	Royal Cosun	477	Food producers (43)	Manufacture of food products & beverages (150)
27	Head	483	Household goods & textiles (34)	Manufacture of furniture (361)
28	Zentiva	489	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
29	Eureko	493	Life assurance (84)	Insurance & pension funding except compulsory social security (660)
30	Nedap	584	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
31	Pharming	658	Biotechnology (482)	Research & development (730)
32	IHC Caland (now SBM Offshore)	675	Oil & gas (7)	Extraction of crude petroleum/natural gas & incidental services (111)
33	HITT	692	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
<b>UK</b> <span style="float: right;"><i>number of companies for calculation</i></span>				
1	GlaxoSmithKline	4	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
2	AstraZeneca	9	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
3	BAE Systems	17	Aerospace & defence (21)	Manufacture of other transport equipment (350)
4	Unilever	23	Food producers (43)	Manufacture of chemicals & chemical products (240)
5	Shell (now Royal Dutch Shell)	45	Oil & gas (7)	Extraction of crude petroleum/natural gas & incidental services (111)
6	Rolls-Royce	48	Aerospace & defence (21)	Manufacture of machinery & equipment n e c (290)
7	BT	50	Telecommunication services (67)	Post & telecommunications (640)
8	BP	53	Oil & gas (7)	Manufacture of coke, refined petroleum products & nuclear fuel (230)
9	Vodafone	55	Telecommunication services (67)	Post & telecommunications (640)



- R&D Investment -			- Net Sales -			- Employees 2004 -			- R&D/Net Sales ratio -		- Operating Profit -		- R&D per employee -		- Market Capitalisation -	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
5	..	..	339	2.4	-2.3	1 728	-0.7	-2.3	1.4	..	2.7	..	2.8	..	127	..
5	-23.5	35.1	315	-0.6	7.0	2 945	2.6	7.1	1.5	2.0	11.5	-3.8	1.6	2.2	437	..
<b>7 153</b>	<b>0.8</b>	<b>-2.6</b>	<b>132 150</b>	<b>3.6</b>	<b>-1.4</b>	<b>539 354</b>	<b>-3.8</b>	<b>-5.6</b>	<b>5.4</b>	<b>5.6</b>	<b>8.4</b>	<b>5.4</b>	<b>13.2</b>	<b>12.6</b>	<b>150 832</b>	<b>35.5</b>
33	33	25	33	33	31	32	32	28	33	32	33	30	32	32	29	20
2 534	-3.2	-8.5	30 319	4.4	-2.1	141 966	-3.7	-11.7	8.4	9.0	7.7	3.4	17.9	17.8	28 322	21.0
2 295	4.7	3.9	31 761	5.4	1.0	110 662	1.4	2.4	7.2	7.3	7.0	1.9	20.7	20.1	22 087	35.0
826	-7.4	-0.8	12 688	-2.8	-3.5	63 600	-4.2	-2.1	6.5	6.8	6.3	8.0	13.0	13.4	12 124	75.0
331	15.4	-6.8	2 465	59.8	10.2	5 038	-5.4	-13.1	13.4	18.6	15.4	-13.9	65.7	53.9	6 761	33.0
286	6.7	-1.4	7 752	28.1	-0.9	24 479	19.3	4.2	3.7	4.4	4.2	1.8	11.7	13.1	6 255	68.0
207	-0.8	1.2	2 652	-4.2	-6.4	21 760	-2.6	-0.9	7.8	7.5	4.2	4.5	9.5	9.3	1 068	11.0
85	7.4	2.1	754	29.6	10.4	8 160	16.6	7.2	11.3	13.6	11.7	2.4	10.4	11.3	599	-2.0
71	-4.1	41.6	1 824	-6.3	-6.0	12 789	-11.7	-9.5	3.9	3.8	5.2	4.5	5.6	5.1	1 316	153.0
54	24.2	-2.0	1 743	22.7	-3.1	8 502	11.4	0.2	3.1	3.1	-0.3	3.0	6.4	5.7	367	7.0
48	-1.6	..	707	-7.9	..	4 823	12.2	..	6.8	6.4	9.4	6.5	10.0	11.4	1 074	..
40	0.0	..	3 475	-1.2	-1.4	13 614	-0.7	-0.4	1.2	1.1	6.4	6.9	2.9	2.9	2 070	51.0
38	75.2	..	887	-9.0	9.1	2 511	-7.9	8.9	4.2	2.2	25.9	20.8	15.0	7.9	3 307	42.0
33	3.1	..	1 722	-45.4	-26.5	10 901	-58.4	-28.3	1.9	1.0	18.5	-18.5	3.0	1.2	6 186	..
27	60.0	28.1	279	17.7	14.1	1 199	5.5	10.3	9.6	7.1	8.7	8.0	22.4	14.8	..	..
26	-1.5	2.3	3 559	-2.6	-3.1	7 099	2.3	-0.1	0.7	0.7	0.4	0.9	3.7	3.8	..	..
25	15.5	10.6	280	8.1	13.0	1 322	-14.9	..	9.0	8.4	21.8	18.9	19.0	14.0	1 362	29.0
25	4.2	6.6	3 858	5.0	0.2	12 615	-4.3	0.6	0.7	0.7	3.1	-2.6	2.0	1.8	1 269	67.0
24	4.3	-19.5	11 731	-1.2	-0.0	28 911	-7.5	-14.2	0.2	0.2	20.4	26.6	0.8	0.7	17 143	28.0
24	8.9	3.2	276	26.0	9.9	1 677	18.9	6.4	8.6	9.9	7.2	8.7	14.1	15.4	327	34.0
17	0.0	..	1 720	3.9	-0.2	16 066	1.0	2.9	1.0	1.0	10.5	10.9	1.1	1.1	1 772	26.0
16	-20.3	-0.4	18	260.0	31.0	210	15.4	9.7	88.8	401.2	-150.0	-580.0	76.1	110.2	680	236.0
16	-4.5	15.3	891	23.4	25.9	3 122	1.6	..	1.8	2.3	16.1	17.9	5.1	5.4	2 400	..
13	-16.4	..	861	-4.8	-1.7	9 293	-0.2	1.1	1.6	1.8	5.4	7.7	1.4	1.7	274	..
12	-22.9	-11.9	212	2.9	1.0	2 153	6.3	4.9	5.8	7.7	20.2	20.4	5.7	7.9	569	24.0
12	-8.8	-7.9	126	46.5	-5.6	781	12.5	-1.6	9.6	15.4	-7.7	-23.3	15.5	19.1	131	3.0
12	26.1	9.6	1 317	-0.3	10.4	3 993	-7.7	5.9	0.9	0.7	8.8	4.5	2.9	2.1	..	..
11	13.9	17.7	351	10.7	6.8	..	..	..	3.2	3.2	1.9	..	..	..	93	6.0
11	0.3	..	276	10.8	..	2 885	49.7	..	4.1	4.5	23.6	24.1	3.9	5.8	1 045	..
11	400.0	-0.3	6 534	13.1	-4.1	14 405	-5.4	-7.1	0.2	0.0	10.0	8.7	0.8	0.1	..	..
7	-21.7	..	124	0.0	2.0	602	-1.3	-3.2	5.8	7.4	14.6	13.7	12.0	15.1	189	..
6	4.7	25.0	1	..	-51.9	39	8.3	-37.4	553.0	..	-2 076.3	..	141.8	146.7	284	..
5	-16.7	-14.4	970	-28.7	0.2	4 023	-5.0	1.9	0.5	0.5	9.3	3.5	1.3	1.5	1 950	..
5	31.4	6.0	17	-19.1	-22.8	154	-8.9	10.9	28.8	17.8	-0.3	..	31.8	22.1	29 808	..
<b>17 090</b>	<b>0.5</b>	<b>0.8</b>	<b>890 377</b>	<b>12.9</b>	<b>8.5</b>	<b>2 760 338</b>	<b>1.4</b>	<b>-0.5</b>	<b>1.9</b>	<b>2.2</b>	<b>10.1</b>	<b>8.0</b>	<b>6.1</b>	<b>6.3</b>	<b>1 223 175</b>	<b>26.4</b>
211	207	201	211	206	204	210	209	206	201	201	208	200	210	207	161	150
4 010	1.7	2.3	28 757	-5.1	-0.2	99 837	-3.2	-2.6	13.9	13.0	30.3	30.2	40.2	38.2	108 038	16.0
2 798	10.2	11.1	15 763	13.7	9.1	64 200	6.3	6.9	17.8	18.3	22.3	21.8	43.6	42.0	59 035	2.0
1 568	1.0	3.7	12 847	8.4	0.2	69 400	0.7	-1.5	12.2	13.1	-0.6	5.1	22.6	22.5	15 191	56.0
1 040	-2.3	-4.1	40 169	-5.9	-8.0	227 000	-5.4	-6.6	2.6	2.5	8.6	12.0	4.6	4.4	54 212	15.0
407	-5.3	12.6	195 104	31.5	25.2	114 000	-4.2	8.2	0.2	0.3	12.3	10.1	3.6	3.6	183 576	65.0
398	0.4	-7.6	8 389	5.2	-2.1	35 200	-2.5	-6.7	4.7	5.0	5.8	4.5	11.3	11.0	8 591	55.0
363	-23.1	-10.8	26 305	0.6	-3.2	99 600	-3.4	-7.2	1.4	1.8	16.7	15.2	3.6	4.6	26 253	15.0
323	25.8	4.5	208 141	21.6	17.9	104 200	-3.7	-1.5	0.2	0.2	8.3	7.0	3.1	2.4	192 751	21.0
309	28.1	25.8	48 213	1.7	14.3	57 378	-4.5	-5.1	0.6	0.5	-12.7	-13.3	5.4	4.0	133 326	19.0

## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector [closest corresponding sector to FTSE classification - provisional]
<b>UK continued</b>				
10	Marconi	63	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
11	Amersham (now GE Healthcare)	64	Health (44)	Manufacture of chemicals & chemical products (240)
12	ICI	71	Chemicals (11)	Manufacture of chemicals & chemical products (240)
13	Smiths	77	Aerospace & defence (21)	Manufacture of other transport equipment (350)
14	Reuters	82	Media & entertainment (54)	Publishing, printing & reproduction of recorded media (220)
15	Invensys	83	Electronic equipment (253)	Manufacture of electrical machinery & apparatus n e c (310)
16	Shire Pharmaceuticals	88	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
17	Misys	102	Software (977)	Computer & related activities (720)
18	GKN	105	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
19	Sage	114	Software (977)	Computer & related activities (720)
20	Meril	115	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
21	Spirent	122	Telecommunications equipment (938)	Manufacture of electrical machinery & apparatus n e c (310)
22	BAT	123	Tobacco (49)	Manufacture of tobacco products (160)
23	GUS	124	General retailers (52)	Retail trade except motor vehicles; repair of household goods (520)
24	Smith & Nephew	126	Health (44)	Manufacture of chemicals & chemical products (240)
25	Amdocs	127	Software (977)	Computer & related activities (720)
26	Corus	132	Steel & other metals (18)	Manufacture of basic metals (270)
27	Cadbury Schweppes	133	Food producers (43)	Manufacture of food products & beverages (150)
28	Reckitt Benckiser	138	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
29	British Nuclear Fuels (now British Nuclear Group Sellafield)	139	Electricity (72)	Electricity, gas, steam & hot water supply (400)
30	Avecia	142	Chemicals (11)	Manufacture of chemicals & chemical products (240)
31	Johnson Matthey	146	Chemicals (11)	Manufacture of chemicals & chemical products (240)
32	Tomkins	152	Engineering - general (267)	Manufacture of fabricated metal products (not machinery & equip) (280)
33	ARM	155	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
34	Cobham	160	Aerospace & defence (21)	Manufacture of other transport equipment (350)
35	Cambridge Antibody	167	Biotechnology (482)	Research & development (730)
36	BOC	174	Chemicals (11)	Manufacture of chemicals & chemical products (240)
37	LogicaCMG	178	Computer services (972)	Manufacture of office machinery & computers (300)
38	Eidos	183	Software (977)	Computer & related activities (720)
39	Symbian	187	Software (977)	Computer & related activities (720)
40	Spectris	197	Electronic equipment (253)	Manufacture of electrical machinery & apparatus n e c (310)
41	TTP Communications	215	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
42	Acambis	220	Biotechnology (482)	Research & development (730)
43	SkyePharma	223	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
44	Filtronix	224	Telecommunications equipment (938)	Manufacture of electrical machinery & apparatus n e c (310)
45	Meggitt	226	Aerospace & defence (21)	Manufacture of other transport equipment (350)
46	Aegis	227	Media & entertainment (54)	Other business activities (740)
47	IMI	232	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
48	Novar	235	Construction & building (13)	Manufacture of electrical machinery & apparatus n e c (310)
49	Pilkington	238	Construction & building (13)	Manufacture of other non-metallic mineral products (268)
50	Cookson	245	Engineering - general (267)	Manufacture of furniture (361)
51	Phoenix Venture	249	Automobiles & parts (31)	Sale/maintenance/repair of motor vehicles (504)
52	lastminute.com	252	General retailers (52)	Supporting & auxiliary transport activities; travel agencies (630)
53	Anglo American	254	Mining (4)	Other mining & quarrying (145)
54	JCB Service	258	Commercial vehicles & trucks (263)	Manufacture of machinery & equipment n e c (290)
55	Boots	259	General retailers (52)	Retail trade except motor vehicles; repair of household goods (520)
56	Tioxide	268	Chemicals (11)	Manufacture of chemicals & chemical products (240)
57	Pace Micro Technology	269	Household goods & textiles (34)	Manufacture of radio TV & communication equip & apparatus (320)
58	Dialog Semiconductor	272	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
59	Imagination Technologies	282	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
60	Vernalis	283	Biotechnology (482)	Research & development (730)

- R&D Investment -			- Net Sales -			- Employees 2004 -			- R&D/Net Sales ratio -		- Operating Profit -		- R&D per employee -		- Market Capitalisation -	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
263	-5.6	-33.3	1 889	-14.2	-32.3	..	..	..	13.9	12.6	-7.4	-16.4	..	18.6	852	-52.0
257	-1.2	6.9	2 218	2.1	7.0	10 312	2.6	5.6	11.6	12.0	13.1	17.7	24.9	25.9	..	..
208	-5.8	-1.3	7 911	-4.2	-4.5	33 820	-6.6	-5.3	2.6	2.7	7.9	2.4	6.1	6.1	4 948	30.0
193	5.5	7.7	3 861	-10.6	-18.0	26 729	-14.9	-21.9	5.0	4.2	10.7	12.4	7.2	5.8	7 111	23.0
181	-25.1	-24.2	4 075	-9.8	-9.4	15 980	-6.7	-5.0	4.4	5.3	7.3	2.5	11.3	14.1	7 287	11.0
175	-24.8	-22.4	4 129	-24.9	-25.2	36 365	-16.6	-24.3	4.2	4.2	-1.6	-6.0	4.8	5.3	1 105	-14.0
159	-12.3	4.2	1 066	-0.8	9.1	1 892	-0.7	8.7	14.9	16.9	8.7	-40.1	84.0	95.2	4 455	36.0
128	2.6	2.4	1 255	-1.3	-5.0	6 507	1.0	-0.8	10.2	9.8	4.3	3.4	19.7	19.4	1 654	20.0
126	9.9	-3.2	4 921	4.5	0.5	36 603	3.2	-2.9	2.6	2.4	-0.3	5.2	3.4	3.2	3 043	28.0
105	28.3	14.1	971	22.8	12.4	7 635	31.5	13.8	10.8	10.4	26.9	27.9	13.8	14.1	4 281	37.0
104	6.0	3.2	1 375	8.3	5.1	6 246	-1.9	0.8	7.6	7.7	13.1	12.9	16.7	15.4	..	..
95	2.0	-11.1	671	1.8	-16.0	4 521	0.5	-16.7	14.2	14.1	7.2	5.0	21.0	20.7	736	-1.0
95	-8.2	4.3	15 204	1.8	-1.8	60 953	0.1	0.7	0.6	0.7	18.0	17.5	1.6	1.7	32 964	29.0
95	3.1	-2.0	10 999	3.2	6.4	73 088	-4.2	1.3	0.9	0.9	9.6	9.1	1.3	1.2	13 112	6.0
94	-0.6	9.0	1 764	5.9	4.9	7 866	5.6	-0.3	5.3	5.7	14.1	17.4	11.9	12.7	6 964	-5.0
93	6.0	6.1	1 305	19.6	4.9	10 600	3.9	3.0	7.1	8.0	16.8	14.2	8.8	8.6	4 448	29.0
89	1.6	1.6	13 181	17.3	6.6	48 600	-3.4	-4.4	0.7	0.8	6.5	-2.6	1.8	1.7	3 030	6.0
89	18.9	29.5	9 517	4.6	6.9	58 442	4.7	14.9	0.9	0.8	12.4	11.4	1.5	1.3	15 771	20.0
85	5.3	6.3	5 468	4.3	4.0	19 900	-2.5	-3.9	1.6	1.5	19.6	18.3	4.3	3.9	17 706	12.0
83	-11.9	2.4	3 280	4.7	2.7	23 149	0.8	1.3	2.5	3.0	-12.3	-43.5	3.6	4.1	..	..
82	-1.9	1.5	685	-15.7	-15.0	3 101	-9.9	-14.2	11.9	10.2	-16.4	-2.6	26.3	24.1	..	..
76	-1.1	6.5	6 552	3.2	-1.3	7 532	1.3	2.5	1.2	1.2	3.5	4.2	10.1	10.3	3 472	23.0
73	-12.5	-1.8	4 210	-5.4	-4.0	36 720	-6.6	-3.3	1.7	1.9	8.3	7.1	2.0	2.1	3 068	11.0
71	4.1	8.8	216	19.3	1.4	774	6.0	4.5	32.8	37.6	23.0	14.4	91.5	93.1	2 356	55.0
69	20.5	20.0	1 388	18.0	10.8	9 863	9.7	8.0	5.0	4.9	13.7	15.4	7.0	6.3	2 178	1.0
62	-1.9	27.3	22	83.3	30.1	283	-4.4	8.1	283.3	529.5	-265.0	-541.7	220.2	214.7	511	78.0
59	4.3	-11.5	5 488	4.5	1.0	44 260	-2.6	-2.1	1.1	1.1	13.9	11.3	1.3	1.2	7 479	13.0
58	-28.5	-20.7	2 359	-2.2	-6.0	19 651	-7.0	-8.0	2.5	3.4	4.1	-1.2	3.0	3.8	1 908	9.0
55	20.3	-2.6	189	-11.7	-2.4	696	29.9	8.0	29.3	21.5	-2.5	8.9	79.5	85.9	..	..
54	15.9	11.6	64	52.4	47.4	734	12.4	9.6	84.7	111.3	-65.7	-133.3	73.8	71.6	..	..
49	2.3	4.9	868	8.2	4.2	5 896	3.5	7.5	5.7	6.0	8.6	8.4	8.4	8.5	1 001	39.0
42	31.3	12.2	88	25.7	15.6	560	13.8	21.0	47.4	45.3	-1.7	-7.1	74.4	64.5	114	-36.0
41	45.2	17.8	121	-49.4	110.4	289	-6.8	24.4	33.7	11.8	25.8	21.8	141.2	90.7	397	-22.0
40	11.6	34.2	88	17.3	10.6	438	-8.0	2.1	44.9	47.2	-33.3	-74.7	90.2	74.4	520	6.0
39	-1.5	-4.4	335	-1.8	-7.3	3 369	16.5	-3.3	11.8	11.7	1.2	2.9	11.7	13.8	281	52.0
39	38.4	2.6	677	19.2	3.3	4 424	27.1	0.7	5.8	5.0	14.2	15.8	8.8	8.1	1 896	107.0
39	7.0	6.0	1 055	15.2	12.2	10 149	20.3	14.3	3.7	4.0	9.6	8.2	3.8	4.3	1 894	44.0
38	-5.0	3.8	2 276	2.4	-0.6	17 063	1.6	-3.7	1.7	1.8	6.8	8.1	2.2	2.4	2 239	24.0
37	-12.4	-1.0	2 089	3.4	-0.1	13 405	-0.5	-3.1	1.8	2.1	2.9	-1.7	2.8	3.1	..	..
37	-10.3	-6.7	3 382	-1.9	-1.0	24 100	-2.4	-3.5	1.1	1.2	9.2	7.9	1.5	1.7	2 342	35.0
34	-24.8	-15.7	2 335	0.8	-6.4	16 263	-1.3	-6.6	1.5	2.0	2.8	0.4	2.1	2.8	914	-3.0
34	-73.6	7.4	2 361	-3.9	20.2	6 523	-1.2	5.0	1.4	5.2	-5.1	-5.0	5.2	19.4	..	..
33	7.6	17.8	621	133.5	188.0	2 220	81.4	49.9	5.4	11.7	-16.9	-25.6	15.0	25.3	..	..
33	15.4	14.5	18 341	33.8	19.0	209 000	8.3	0.8	0.2	0.2	17.7	13.5	0.2	0.1	39 633	28.0
32	31.4	2.0	1 274	10.5	1.8	4 233	2.1	0.8	2.5	2.1	1.5	2.1	7.5	5.9	..	..
32	6.1	-6.2	7 725	2.7	0.9	69 631	1.1	-4.0	0.4	0.4	9.2	10.3	0.5	0.4	6 239	-15.0
31	4.3	38.2	2 921	19.8	6.7	6 020	-7.7	2.9	1.1	1.2	1.1	-2.7	5.1	4.5	..	..
30	-21.2	-14.2	339	44.3	-22.9	598	-21.5	-24.9	8.9	16.3	1.7	-29.8	50.4	50.2	243	27.0
29	-5.0	1.4	116	24.7	9.6	281	2.9	-0.5	25.1	32.9	-5.7	-31.2	103.5	112.1	110	-6.0
27	19.5	20.7	43	-2.3	31.3	303	11.0	13.7	63.2	51.7	-25.0	-13.6	89.7	83.3	168	2.0
27	-38.6	-3.3	21	16.7	119.0	131	-37.9	3.8	129.2	245.4	-202.8	-388.9	207.1	209.4	191	24.0

## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector [closest corresponding sector to FTSE classification - provisional]
<b>UK continued</b>				
61	Tate & Lyle	286	Food producers (43)	Manufacture of food products & beverages (150)
62	BBC	287	Media & entertainment (54)	Recreational cultural & sporting activities (920)
63	ISOFT	293	Software (977)	Computer & related activities (720)
64	Henlys	294	Commercial vehicles & trucks (263)	Manufacture of motor vehicles trailers & semi-trailers (340)
65	Dunlop Standard Aerospace	301	Aerospace & defence (21)	Manufacture of other transport equipment (350)
66	Renishaw	302	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
67	De La Rue	305	Support services (58)	Publishing, printing & reproduction of recorded media (220)
68	Ultra Electronics	317	Aerospace & defence (21)	Manufacture of medical/precision/optical instruments & watches (330)
69	BTG	322	Support services (58)	Research & development (730)
70	Galen (now Warner Chilcott)	323	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
71	Systems Union	324	Software (977)	Computer & related activities (720)
72	Dyson Technology (now Dyson James)	325	Household goods & textiles (34)	Manufacture of machinery & equipment n e c (290)
73	RM	328	Software (977)	Computer & related activities (720)
74	AMS (now BAE Systems Integrated System)	329	Aerospace & defence (21)	Public administration & defence (750)
75	Enodis	333	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
76	Xenova	334	Biotechnology (482)	Research & development (730)
77	CSR	335	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
78	British Energy	341	Electricity (72)	Electricity, gas, steam & hot water supply (400)
79	GW Pharmaceuticals	343	Pharmaceuticals (486)	Health & social work (850)
80	Urenco	357	Support services (58)	Manufacture of coke, refined petroleum products & nuclear fuel (230)
81	Oxford Instruments	359	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
82	Rexam	361	Support services (58)	Manufacture of fabricated metal products (not machinery & equip) (280)
83	ML Laboratories (now Innovata)	364	Biotechnology (482)	Research & development (730)
84	London Bridge Software	368	Software (977)	Computer & related activities (720)
85	Ardana Bioscience (now Ardana)	370	Pharmaceuticals (486)	Research & development (730)
86	Psion	371	Computer hardware (932)	Manufacture of office machinery & computers (300)
87	Rio Tinto	382	Mining (4)	Mining of metal ores (130)
88	BBA	384	Transport (59)	Supporting & auxiliary transport activities; travel agencies (630)
89	Torex Retail	386	Computer services (972)	Computer & related activities (720)
90	Halma	388	Engineering - general (267)	Manufacture of medical/precision/optical instruments & watches (330)
91	Morgan Crucible	389	Engineering - general (267)	Manufacture of other non-metallic mineral products (268)
92	NSB	394	Software (977)	Computer & related activities (720)
93	Intec Telecom Systems	395	Software (977)	Computer & related activities (720)
94	Astex Technology (now Astex Therapeutics)	396	Pharmaceuticals (486)	Research & development (730)
95	AVEVA	401	Software (977)	Computer & related activities (720)
96	Wagon	404	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
97	Diageo	405	Beverages (41)	Manufacture of food products & beverages (150)
98	TT electronics	407	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
99	Yule Catto	411	Chemicals (11)	Manufacture of chemicals & chemical products (240)
100	Aviagen	412	Food producers (43)	Agriculture, hunting & related service activities (010)
101	AEA Technology	416	Support services (58)	Other business activities (740)
102	Anite	418	Software (977)	Computer & related activities (720)
103	Axis-Shield	422	Biotechnology (482)	Manufacture of medical/precision/optical instruments & watches (330)
104	Randox Laboratories	424	Biotechnology (482)	Manufacture of medical/precision/optical instruments & watches (330)
105	BHP Billiton	428	Mining (4)	Other mining & quarrying (145)
106	ProStrakan	430	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
107	SCI Entertainment	434	Software (977)	Computer & related activities (720)
108	Microscience	438	Pharmaceuticals (486)	Research & development (730)
109	Autonomy	439	Software (977)	Computer & related activities (720)
110	Domino Printing Sciences	440	Electronic equipment (253)	Manufacture of office machinery & computers (300)

– R&D Investment –			— Net Sales —			— Employees 2004 —			– R&D/Net Sales ratio –		– Operating Profit –		– R&D per employee –		– Market Capitalisation –	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
27	11.8	3.8	4 239	4.4	-6.0	6 687	0.6	-7.7	0.6	0.6	6.9	8.8	4.0	3.6	3 196	43.0
27	-10.0	7.4	5 417	3.5	4.3	27 264	-1.3	2.2	0.5	0.6	-5.5	-10.4	1.0	1.1	..	..
26	44.1	51.4	370	75.4	63.3	2 546	90.3	80.9	7.0	8.5	18.5	13.7	10.1	13.4	1 388	18.0
26	12.5	30.2	443	-34.3	-22.7	2 864	-3.4	-17.2	5.8	3.4	-7.8	1.5	9.0	7.7	..	..
24	20.2	53.1	645	1.1	5.9	3 962	-0.1	0.6	3.8	3.2	12.8	14.6	6.2	5.1	..	..
24	10.5	7.2	218	21.1	13.8	1 865	11.1	5.6	11.1	12.2	18.7	13.9	13.0	13.0	852	52.0
24	-21.1	-11.8	909	-5.7	-0.4	6 516	-4.8	-0.6	2.6	3.1	5.9	3.3	3.6	4.4	953	13.0
22	22.2	15.6	452	12.4	10.2	2 678	6.9	4.1	4.8	4.5	11.5	11.4	8.2	7.1	805	38.0
21	-21.8	3.3	54	-21.7	7.1	146	-9.9	-11.3	39.1	39.1	-99.5	-56.5	144.5	166.6	384	74.0
21	7.4	23.0	318	11.6	37.6	1 045	-33.9	-4.5	6.6	6.9	28.5	21.4	20.2	12.4	..	..
21	36.3	7.3	147	32.4	9.8	1 252	47.3	17.1	14.3	13.9	4.7	6.3	16.8	18.2	202	55.0
21	25.3	13.9	391	17.8	7.0	1 420	-15.1	-6.4	5.3	5.0	14.1	7.8	14.7	10.0	..	..
21	24.0	7.7	372	22.4	2.8	1 875	21.4	2.6	5.5	5.5	2.2	2.3	11.0	10.7	219	44.0
21	54.3	27.9	671	-3.3	4.4	4 093	-6.3	-4.7	3.1	1.9	5.2	6.8	5.0	3.0	..	..
20	8.3	1.2	927	-3.4	-15.3	6 048	-0.4	-15.1	2.2	1.9	6.4	5.1	3.3	3.1	722	40.0
20	-5.3	-2.4	6	-45.5	26.0	93	-11.4	-11.5	336.2	193.5	-324.8	-218.2	216.9	202.8	25	-55.0
20	64.5	23.7	186	272.0	122.0	248	33.3	12.8	10.8	24.4	23.3	-4.0	80.9	65.6	873	51.0
20	-6.7	-6.3	2 141	-20.4	-10.6	5 165	-34.6	-0.9	0.9	0.8	23.9	-178.2	3.8	2.7	3 704	1 800.0
20	9.9	28.0	0	-100.0	..	128	8.5	38.7	..	255.9	..	-214.3	153.8	151.8	113	-39.0
19	-9.6	6.1	707	2.8	8.9	1 899	3.5	2.7	2.6	3.0	35.4	28.2	9.8	11.2	..	..
19	4.8	-0.3	257	0.0	-5.2	1 581	2.9	-3.7	7.2	6.9	0.2	2.7	11.7	11.5	148	14.0
18	-18.8	-22.6	4 352	-1.0	-3.1	22 300	2.3	-1.0	0.4	0.5	9.0	6.9	0.8	1.0	4 060	17.0
18	18.2	5.6	11	22.2	-5.4	115	-25.8	-21.6	165.7	171.3	-152.4	-133.3	158.5	99.5	179	226.0
18	-6.9	7.5	82	-6.8	0.8	737	-6.9	12.3	21.7	21.7	0.6	-83.0	24.1	24.1	..	..
18	..	..	0	-100.0	..	20	33.3	71.0	..	..	-17 352.4	-1 700.0	878.5	..	89	..
18	-1.7	-14.1	191	4.9	-9.3	1 002	4.9	-9.1	9.2	9.8	-14.1	-17.0	17.5	18.7	376	5.0
17	0.0	-16.1	8 346	22.9	11.6	33 040	13.8	3.2	0.2	0.3	25.6	24.0	0.5	0.6	44 607	40.0
17	26.6	-1.9	1 942	3.4	0.2	12 620	-0.4	-2.5	0.9	0.7	6.8	6.3	1.3	1.1	2 120	18.0
17	..	..	105	..	..	1 000	..	..	16.0	..	13.2	..	16.8	..	415	..
17	4.7	12.8	423	2.4	3.8	3 002	2.6	1.6	3.9	3.8	15.0	15.7	5.5	5.4	766	-2.0
17	-25.5	-14.9	1 124	-6.3	-8.1	12 787	-8.8	-7.4	1.5	1.8	-1.5	-3.8	1.3	1.6	848	58.0
16	-21.6	-16.2	64	-29.7	-21.6	742	-22.5	-17.0	25.5	22.8	-19.6	-44.0	22.0	21.7	151	20.0
16	14.1	25.1	97	34.7	20.1	687	29.9	14.6	16.7	19.8	-1.9	-4.2	23.6	26.9	267	48.0
16	31.2	48.8	4	0.0	58.7	103	12.0	27.2	401.8	306.3	-365.2	-300.0	156.0	133.2	..	..
16	63.6	24.8	81	50.0	21.6	474	45.4	11.7	19.6	17.9	10.0	16.7	33.4	29.7	256	56.0
16	-22.9	10.2	688	9.9	-0.3	5 322	-5.6	-7.6	2.3	3.3	2.8	2.9	2.9	3.6	162	-3.0
16	-26.7	-46.3	12 559	-5.8	-11.5	23 720	-39.1	-30.8	0.1	0.2	25.4	23.8	0.7	0.5	32 545	11.0
15	25.6	4.0	844	11.9	-3.1	8 715	7.7	-3.6	1.8	1.6	4.9	1.1	1.8	1.5	335	-6.0
15	-6.3	-1.1	776	1.8	7.4	3 314	-5.8	-2.0	1.9	2.1	5.2	10.8	4.5	4.5	494	-14.0
15	-29.5	-17.6	199	-11.2	-0.3	1 515	1.4	-2.1	7.4	9.4	23.1	17.0	9.8	14.0	..	..
14	6.3	-17.6	334	-5.9	-10.6	2 648	-12.8	-14.5	4.3	3.8	-5.2	2.3	5.4	4.5	153	..
14	-13.9	17.9	268	-3.3	-2.1	1 700	-11.3	-8.1	5.4	6.0	0.3	-16.6	8.4	8.7	326	33.0
14	-22.2	14.6	74	4.2	7.2	440	-3.3	2.3	19.1	25.6	-4.3	-19.7	32.2	40.0	226	86.0
14	2.0	30.0	44	15.8	16.3	510	32.1	13.7	32.0	36.3	-11.6	5.3	27.6	35.8	..	..
14	-52.5	..	16 838	46.6	8.8	35 070	0.8	-15.9	0.1	0.3	23.3	20.5	0.4	0.8	29 929	71.0
14	92.8	14.3	30	150.0	115.4	158	79.5	31.8	46.5	60.3	-84.8	-108.3	88.4	82.3	..	..
14	19.6	21.9	44	10.0	144.8	139	135.6	52.8	31.4	28.9	14.6	12.5	99.4	195.9	394	..
14	-6.3	32.4	0	..	-100.0	70	-2.8	16.7	..	..	-26 250.8	..	193.7	201.0	..	..
14	16.7	18.3	50	6.4	-1.3	219	3.8	2.4	27.1	24.7	0.1	2.1	61.9	55.0	524	102.0
14	12.4	3.3	252	8.6	5.0	1 807	11.4	5.4	5.4	5.2	13.7	12.5	7.5	7.4	396	21.0

## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector [closest corresponding sector to FTSE classification - provisional]
<b>UK continued</b>				
111	Oxford Biomedica	447	Pharmaceuticals (486)	Research & development (730)
112	Ark Therapeutics	448	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
113	Channel Four Television	449	Media & entertainment (54)	Recreational cultural & sporting activities (920)
114	Lucite International	451	Chemicals (11)	Manufacture of chemicals & chemical products (240)
115	National Grid Transco	452	Utilities - other (77)	Electricity, gas, steam & hot water supply (400)
116	Arakis	453	Biotechnology (482)	Research & development (730)
117	Genus	456	Support services (58)	Agriculture, hunting & related service activities (010)
118	CODASciSys	459	Software (977)	Computer & related activities (720)
119	Vectura	462	Pharmaceuticals (486)	Research & development (730)
120	SSL International	467	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
121	Empire Interactive	472	Software (977)	Computer & related activities (720)
122	FKI	475	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
123	Wolfson Microelectronics	476	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
124	Voca	478	Banks (81)	Financial intermediation except insurance & pension funding (650)
125	ARC International	479	Semiconductors (936)	Manufacture of office machinery & computers (300)
126	Pharmagene	480	Biotechnology (482)	Research & development (730)
127	Raymarine	481	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
128	Balfour Beatty	485	Construction & building (13)	Construction (450)
129	Wittington Investments	487	Food producers (43)	Manufacture of food products & beverages (150)
130	O2	488	Telecommunication services (67)	Post & telecommunications (640)
131	DICOM	490	Software (977)	Wholesale & commission trade except motor vehicles (510)
132	Vitec	491	Engineering - general (267)	Manufacture of radio TV & communication equip & apparatus (320)
133	Laird	496	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
134	Northgate Information Solutions	499	Computer services (972)	Computer & related activities (720)
135	Arup	500	Engineering - general (267)	Other business activities (740)
136	First Technology	502	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
137	Staffware (now TIBCO BPM)	503	Software (977)	Computer & related activities (720)
138	Royalblue	507	Software (977)	Computer & related activities (720)
139	Croda International	513	Chemicals (11)	Manufacture of chemicals & chemical products (240)
140	Gyrus	514	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
141	Plasmon	516	Computer hardware (932)	Manufacture of office machinery & computers (300)
142	Sygen International	518	Food producers (43)	Agriculture, hunting & related service activities (010)
143	Photo-Me	524	Media & entertainment (54)	Manufacture of medical/precision/optical instruments & watches (330)
144	PPL Therapeutics	525	Biotechnology (482)	Research & development (730)
145	BG	526	Oil & gas (7)	Extraction of crude petroleum/natural gas & incidental services (111)
146	Zetex	527	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
147	Avon Rubber	528	Automobiles & parts (31)	Manufacture of rubber & plastic products (250)
148	Roxboro	531	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
149	Charter	534	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
150	MBDA	540	Aerospace & defence (21)	Manufacture of furniture (361)
151	JCB Compact Products	543	Commercial vehicles & trucks (263)	Manufacture of machinery & equipment n e c (290)
152	Phytopharm	544	Biotechnology (482)	Research & development (730)
153	Baltimore Technologies (now Baltimore)	545	Other financials (87)	Computer & related activities (720)
154	Alizyme	548	Biotechnology (482)	Research & development (730)
155	Baxi	549	General retailers (52)	Manufacture of fabricated metal products (not machinery & equip) (280)
156	Radstone Technology	551	Computer hardware (932)	Manufacture of office machinery & computers (300)
157	Chemring	552	Aerospace & defence (21)	Manufacture of machinery & equipment n e c (290)
158	Marlborough Stirling	554	Software (977)	Computer & related activities (720)
159	Delcam	559	Software (977)	Manufacture of medical/precision/optical instruments & watches (330)
160	Servier	561	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)



- R&D Investment -			- Net Sales -			- Employees 2004 -			- R&D/Net Sales ratio -		- Operating Profit -		- R&D per employee -		- Market Capitalisation -	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
13	-14.7	2.3	1	0.0	0.0	62	-13.9	-5.3	1 298.0	1 522.0	-2 423.7	-1 900.0	209.4	211.4	192	127.0
13	70.4	26.3	0	..	..	86	68.6	43.7	..	..	-10 420.2	..	150.2	148.6	178	4.0
13	21.3	5.3	1 188	9.3	4.8	884	6.0	-5.1	1.1	1.0	7.3	5.9	14.5	12.7	..	..
13	0.0	0.0	999	1.9	7.0	2 091	5.5	1.7	1.3	1.3	9.5	9.9	6.1	6.4	..	..
13	-10.1	-17.5	12 036	-5.7	4.1	24 406	-4.9	-0.9	0.1	0.1	21.6	23.1	0.5	0.6	19 580	3.0
13	..	..	0	..	..	36	..	..	..	..	..	..	353.1	..	..	..
13	11.4	0.5	259	6.1	4.0	1 325	-2.0	-3.9	4.9	4.7	4.9	4.5	9.5	8.4	181	71.0
12	-1.2	..	96	0.0	1.4	845	-4.8	0.6	13.0	13.1	5.3	5.2	14.7	14.2	144	..
12	23.8	100.9	4	-20.0	0.0	101	3.1	22.5	308.3	199.2	-311.7	-200.0	122.1	101.6	119	35.0
12	-24.5	-9.5	648	-23.9	-8.2	5 095	-20.8	-12.7	1.9	1.9	1.0	5.6	2.4	2.5	784	-1.0
12	-12.7	19.2	42	-2.3	37.9	121	-23.4	2.6	28.3	31.7	1.6	2.3	98.3	86.3	8	0.0
12	-25.9	4.8	1 823	-4.1	-7.1	13 311	-5.7	-7.3	0.6	0.8	5.1	2.6	0.9	1.1	852	-14.0
12	69.7	63.1	88	57.1	76.5	189	47.7	45.0	13.3	12.3	14.0	16.1	62.0	53.9	275	-9.0
12	-66.8	31.5	110	3.8	13.1	393	-1.5	-1.2	10.5	32.9	1.6	5.7	29.5	87.4	..	..
12	-34.0	-14.8	17	13.3	2.0	147	-26.1	-17.9	68.2	117.1	-79.7	-260.0	78.8	88.3	75	47.0
12	4.1	21.1	6	-14.3	14.5	76	-3.8	-0.9	193.0	158.9	-195.9	-157.1	152.4	140.8	17	-52.0
12	-5.1	25.3	150	13.6	13.7	566	35.1	14.1	7.7	9.2	3.4	7.6	20.3	28.9	247	..
11	-20.0	-14.9	4 942	10.7	8.6	28 125	1.1	2.5	0.2	0.3	3.6	3.7	0.4	0.5	2 311	25.0
11	33.3	4.5	7 394	5.1	5.5	36 365	0.5	1.5	0.2	0.1	7.8	8.2	0.3	0.2	..	..
11	-20.0	0.0	9 440	17.4	16.1	13 911	12.7	-2.7	0.1	0.2	4.8	2.9	0.8	1.1	18 377	68.0
11	9.0	14.6	221	0.0	3.7	846	2.4	10.1	5.1	4.7	6.3	5.4	13.3	12.5	295	30.0
11	-10.2	1.3	262	-3.7	-0.9	1 550	-4.6	1.3	4.3	4.6	7.0	5.9	7.2	7.7	216	14.0
11	28.3	31.4	661	9.1	-7.0	5 238	26.4	-5.3	1.6	1.4	8.8	5.8	2.1	2.1	740	34.0
11	10.8	0.6	193	60.8	8.5	1 888	84.9	21.4	5.6	8.1	-6.4	-0.8	5.7	9.5	595	52.0
11	-18.2	..	578	3.8	8.6	6 399	1.2	8.5	1.8	2.3	2.4	2.0	1.7	2.1	..	..
11	-6.3	22.3	168	-6.7	-6.4	1 805	4.8	0.0	6.3	6.3	12.7	8.9	5.9	6.6	333	4.0
11	5.7	5.8	60	9.1	4.2	348	2.7	2.4	17.6	18.1	6.5	5.5	30.3	29.4	..	..
11	8.6	6.6	84	5.0	-3.7	485	1.5	-7.6	12.5	12.1	13.6	13.8	21.6	20.2	315	54.0
10	7.3	6.2	416	-3.0	-1.9	1 585	-6.3	-7.6	2.5	2.2	16.0	14.2	6.5	5.7	744	33.0
10	12.3	0.5	123	11.8	20.1	617	-3.7	3.1	8.3	8.3	6.4	3.6	16.6	14.3	643	168.0
10	-14.0	-14.0	63	-11.3	-10.2	430	4.4	-4.6	16.3	16.8	-18.3	-7.0	23.8	28.9	138	-18.0
10	-6.5	9.4	183	-2.1	-8.6	1 261	8.1	0.9	5.6	5.8	4.9	5.9	8.1	9.3	178	37.0
10	-7.5	17.1	333	7.1	8.1	1 671	-8.1	-0.7	3.0	3.5	14.6	10.3	6.0	5.9	633	8.0
10	-27.7	-9.2	0	..	..	126	-37.9	-6.9	..	..	-39 024.6	..	78.8	67.6	..	..
10	-12.5	-18.6	5 766	13.8	15.2	4 836	5.2	3.9	0.2	0.2	36.5	33.7	2.1	2.5	25 621	50.0
10	-20.1	-6.0	102	-20.9	-7.8	755	-29.9	-15.2	9.7	9.6	6.3	-10.9	13.1	11.5	137	-37.0
10	26.5	9.7	338	-3.7	-4.9	4 334	-1.0	-5.4	2.9	2.2	4.3	4.3	2.3	1.8	85	-6.0
10	-14.8	-11.5	168	-13.0	-12.1	1 456	-15.4	-9.4	5.8	5.9	7.7	5.2	6.7	6.6	167	23.0
10	-52.1	-18.8	1 229	-0.2	-3.3	9 038	-6.9	-6.2	0.8	1.6	4.0	3.2	1.1	2.1	725	119.0
9	-3.3	16.7	921	117.7	27.4	3 197	8.3	5.5	1.0	2.3	-0.2	-12.8	2.9	3.2	..	..
9	28.6	18.2	159	2.6	2.4	524	3.6	-1.1	5.7	4.6	-1.4	7.7	17.3	14.0	..	..
9	-12.1	16.3	2	-33.3	0.0	40	17.6	8.9	448.5	340.3	-652.1	-266.7	224.3	300.3	58	-36.0
9	-43.2	-24.5	26	-48.0	-37.2	223	-56.0	-34.2	34.3	31.4	-98.2	-166.0	40.1	31.0	..	..
9	-45.0	-6.8	2	0.0	..	16	6.7	2.2	443.0	805.0	-352.0	-800.0	553.8	1 073.3	233	-27.0
9	-15.1	-3.2	636	-36.1	-12.5	5 513	-2.2	-4.8	1.4	1.0	11.0	10.4	1.6	1.8	..	..
9	35.1	20.7	70	12.9	6.5	430	-2.5	2.9	12.3	10.3	16.4	16.1	20.1	14.5	126	6.0
9	27.2	6.2	177	4.1	9.5	1 633	-0.5	2.0	4.8	3.9	13.7	11.8	5.2	4.1	226	33.0
8	29.7	6.5	133	-14.2	10.3	1 532	-8.4	13.3	6.3	4.2	-14.0	0.6	5.5	3.9	..	..
8	12.1	12.9	30	3.4	4.9	343	11.0	11.3	27.3	25.2	5.8	6.9	23.8	23.6	25	29.0
8	1.7	6.1	10	11.1	0.0	66	-9.6	-7.4	79.9	87.3	5.4	..	121.1	107.7	..	..



## II.1.2. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by Member States

No.	Company	Rank	FTSE Sector (Code)	NACE Sector [closest corresponding sector to FTSE classification - provisional]
<b>UK continued</b>				
161	Weir	565	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
162	Huntleigh Technology	567	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
163	E2V (now e2v Technologies)	569	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
164	Robotic Technology Systems	570	Support services (58)	Computer & related activities (720)
165	Napp Pharmaceutical	572	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
166	Biocompatibles International	575	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
167	BPB	577	Construction & building (13)	Manufacture of other non-metallic mineral products (268)
168	Chloride	581	Electronic equipment (253)	Manufacture of electrical machinery & apparatus n e c (310)
169	NXT	582	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
170	Torotrak	583	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
171	Spirax-Sarco Engineering	586	Engineering - contractors (264)	Manufacture of machinery & equipment n e c (290)
172	SurfControl	587	Software (977)	Computer & related activities (720)
173	Macro 4	588	Software (977)	Computer & related activities (720)
174	Northumbrian Water	590	Utilities - other (77)	Collection. purification & distribution of water (410)
175	Games Workshop	591	Household goods & textiles (34)	Manufacture of furniture (361)
176	Newport Networks	607	Telecommunications equipment (938)	Computer & related activities (720)
177	Body Shop International	611	General retailers (52)	Retail trade except motor vehicles; repair of household goods (520)
178	Protherics	614	Biotechnology (482)	Research & development (730)
179	Lorantis	615	Biotechnology (482)	Research & development (730)
180	Clearswift Systems	620	Software (977)	Computer & related activities (720)
181	Ricardo	622	Support services (58)	Other business activities (740)
182	AIT (now Portrait Software)	627	Computer services (972)	Computer & related activities (720)
183	Senior	632	Engineering - general (267)	Manufacture of motor vehicles trailers & semi-trailers (340)
184	Microgen	638	Computer services (972)	Computer & related activities (720)
185	Serco	640	Support services (58)	Other business activities (740)
186	Group 4 Securicor	643	Support services (58)	Other business activities (740)
187	MTL Instruments	646	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
188	Devro	647	Food producers (43)	Manufacture of food products & beverages (150)
189	PZ Cussons	649	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
190	LDV	650	Commercial vehicles & trucks (263)	Manufacture of motor vehicles trailers & semi-trailers (340)
191	Luxfer	654	Engineering - general (267)	Manufacture of fabricated metal products (not machinery & equip) (280)
192	Dyson	656	Chemicals (11)	Manufacture of chemicals & chemical products (240)
193	Innovation	661	Software (977)	Computer & related activities (720)
194	Aga Foodservice	664	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
195	Thomas Swan	667	Chemicals (11)	Manufacture of chemicals & chemical products (240)
196	Severn Trent	669	Utilities - other (77)	Collection. purification & distribution of water (410)
197	Xaar	670	Electronic equipment (253)	Manufacture of electrical machinery & apparatus n e c (310)
198	MessageLabs	674	Software (977)	Computer & related activities (720)
199	Superscape	676	Software (977)	Computer & related activities (720)
200	Linn Products	677	Household goods & textiles (34)	Manufacture of furniture (361)
201	Norbrook Laboratories	678	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
202	Umbro	681	Household goods & textiles (34)	Manufacture of wearing apparel; dressing. dyeing of furnitures (180)
203	CML Microsystems	682	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
204	Bespak	683	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
205	CeNeS Pharmaceuticals	689	Biotechnology (482)	Research & development (730)
206	Proteome Sciences	690	Pharmaceuticals (486)	Research & development (730)
207	Victrex	691	Chemicals (11)	Manufacture of chemicals & chemical products (240)
208	OFCOM	695	Media & entertainment (54)	Activities of membership organisations n e c (910)
209	British Vita	696	Chemicals (11)	Manufacture of chemicals & chemical products (240)
210	Alphameric	697	Software (977)	Manufacture of office machinery & computers (300)

- R&D Investment -			- Net Sales -			- Employees 2004 -			- R&D/Net Sales ratio -		- Operating Profit -		- R&D per employee -		- Market Capitalisation -	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
8	11.3	5.4	1 044	7.0	0.5	7 777	1.8	-2.7	0.7	0.7	7.2	8.1	1.0	0.9	1 055	27.0
8	2.5	0.0	281	6.4	5.3	2 530	8.6	13.1	2.7	2.8	13.9	12.9	3.0	3.2	268	10.0
8	25.4	..	138	3.8	..	1 292	-3.5	..	5.5	4.6	10.1	9.8	5.9	4.6	170	..
8	13.2	90.0	69	-19.8	-28.1	308	-47.4	-30.6	11.0	7.8	-9.9	-47.7	24.7	11.5	42	-19.0
8	-61.4	-25.5	147	1.4	8.5	662	-5.8	0.5	5.2	13.6	11.6	10.3	11.5	28.0	..	..
8	17.0	-17.1	4	33.3	-65.5	72	7.5	-60.6	188.0	214.3	-293.6	-366.7	104.4	96.0	133	15.0
8	-1.8	7.3	3 272	6.7	11.7	12 689	-1.7	1.0	0.2	0.2	13.5	10.8	0.6	0.6	5 167	87.0
7	1.0	1.8	233	7.9	3.5	1 406	-0.6	-1.9	3.1	3.3	3.0	3.7	5.2	5.1	283	77.0
7	-19.6	-2.0	9	-18.2	8.7	147	-14.5	-0.7	80.1	81.5	-161.5	-136.4	49.1	52.2	90	31.0
7	-11.4	-7.3	1	..	..	96	-5.9	-13.0	720.0	..	-1 191.5	..	75.0	79.7	95	-6.0
7	3.5	3.2	460	3.6	3.7	4 104	1.2	0.4	1.6	1.6	15.7	14.6	1.7	1.7	821	40.0
7	28.5	19.4	64	18.5	30.2	464	8.4	20.8	11.1	10.3	14.0	11.1	15.3	12.9	198	-17.0
7	-13.9	1.1	44	-4.3	-13.1	262	-17.4	-7.8	16.2	18.0	4.3	-15.2	27.1	26.1	89	70.0
7	1.6	-2.0	817	9.1	5.7	3 792	3.0	3.3	0.9	0.9	35.0	31.9	1.9	1.9	1 684	74.0
7	-24.8	3.7	193	-9.8	8.1	3 161	-0.5	8.4	3.7	4.4	10.2	13.1	2.2	3.0	182	-40.0
7	51.1	..	0	-100.0	..	65	12.1	..	..	440.0	-2 365.3	-600.0	102.3	75.9	78	..
7	-13.2	0.7	592	10.0	3.4	6 836	15.9	2.7	1.1	1.4	8.9	8.0	1.0	1.3	705	52.0
6	23.6	72.4	27	-10.0	34.9	212	-3.2	13.8	23.7	17.3	-12.5	6.7	30.2	23.7	182	28.0
6	17.2	19.0	0	..	..	49	2.1	17.8	..	..	..	..	130.6	113.8	..	..
6	-2.3	65.8	33	3.1	122.4	213	-12.3	90.1	19.1	20.1	-53.7	-71.9	29.5	26.5	..	..
6	-13.6	-5.7	207	7.3	1.5	1 738	10.1	7.8	3.0	3.7	-1.3	11.4	3.6	4.6	188	..
6	-31.2	-8.8	28	12.0	-16.4	159	-53.6	-19.3	22.0	35.8	11.8	-228.0	38.7	26.1	18	-55.0
6	13.0	10.3	460	-8.2	-11.1	5 014	-2.6	-5.9	1.3	1.1	3.6	3.2	1.2	1.0	223	27.0
6	76.9	48.7	60	62.2	26.0	499	72.7	25.1	10.0	9.1	0.4	-10.8	12.0	11.7	113	60.0
6	..	..	1 951	4.3	14.8	28 073	6.1	8.6	0.3	..	4.3	3.6	0.2	..	1 658	..
6	1 278.6	-43.9	4 483	23.5	40.9	306 313	32.9	45.7	0.1	0.0	-0.9	2.6	0.0	0.0	2 766	40.0
6	9.4	-13.1	90	5.9	0.0	764	6.3	-4.3	6.4	6.2	7.6	5.9	7.5	7.3	99	67.0
6	-0.7	-15.4	210	1.9	-10.6	2 152	4.7	-11.2	2.7	2.8	14.4	14.6	2.7	2.8	283	10.0
6	7.4	7.5	690	4.9	6.3	11 627	-0.3	2.4	0.8	0.8	9.9	11.1	0.5	0.5	781	8.0
6	152.0	-5.1	199	-14.2	-13.8	932	-12.7	-10.5	2.9	1.0	-8.8	5.2	6.1	2.1	..	..
6	-2.4	1.7	321	2.9	-1.9	2 034	-1.1	-2.9	1.8	1.9	5.2	0.3	2.8	2.8	..	..
6	7.5	32.1	83	-1.2	-6.0	903	5.6	-9.2	6.7	6.2	-0.6	1.2	6.2	6.1	184	40.0
6	-40.5	-15.9	82	-1.2	0.0	983	-2.1	15.3	6.7	11.1	-14.8	-42.2	5.6	9.2	185	24.0
5	15.2	3.8	614	10.8	5.5	5 139	8.3	2.1	0.9	0.8	6.6	6.0	1.1	1.0	547	41.0
5	-11.1	59.9	40	11.1	4.6	267	8.5	5.3	13.3	16.6	-0.5	-2.8	19.9	24.3	..	..
5	15.7	1.9	2 940	3.3	5.1	16 374	3.7	4.4	0.2	0.2	18.6	19.6	0.3	0.3	4 701	21.0
5	-20.1	-4.8	50	22.0	13.7	235	-10.0	1.5	10.4	15.9	16.4	-4.9	22.2	25.0	242	217.0
5	69.5	45.2	81	35.0	50.0	557	46.2	28.6	6.4	5.1	-8.2	-6.7	9.3	8.0	..	..
5	18.9	36.2	6	200.0	26.0	67	24.1	-12.5	85.8	216.5	-143.8	-500.0	76.9	80.2	69	14.0
5	33.2	52.1	50	0.0	9.6	370	6.9	10.9	10.3	7.7	1.0	..	13.9	11.2	..	..
5	3.6	17.7	97	9.0	12.0	734	-0.3	9.2	5.3	5.6	6.7	3.4	7.0	6.7	..	..
5	31.0	..	198	10.0	12.5	198	2.6	-4.7	2.6	2.2	12.8	7.2	25.6	20.1	281	..
5	26.9	22.6	33	43.5	12.8	222	1.4	2.7	15.3	17.3	-0.8	-4.3	22.7	18.2	78	-8.0
5	-44.0	-0.8	117	-6.4	1.8	667	-19.3	-5.4	4.3	7.2	10.4	2.4	7.5	10.8	205	12.0
5	18.3	-25.7	0	-100.0	-100.0	14	7.7	-53.5	..	207.5	-10 610.5	-450.0	350.7	319.2	47	83.0
5	-2.2	68.8	0	..	..	42	-2.3	37.9	..	..	-7 958.3	..	116.9	116.7	161	50.0
5	33.5	19.7	122	20.8	6.2	257	7.1	10.0	4.0	3.6	32.7	31.7	19.1	15.3	578	53.0
5	-0.4	42.4	205	345.7	101.7	768	300.0	66.6	2.4	10.5	18.8	-143.5	6.3	25.2	..	..
5	-5.7	-1.0	1 355	2.0	1.8	7 839	-5.1	-5.1	0.4	0.4	4.8	5.9	0.6	0.6	..	..
5	-17.8	-7.1	99	11.2	7.4	776	3.7	3.6	4.8	6.5	-5.7	-3.4	6.1	7.8	157	31.0

## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

Explanations of the terms in the header are to be found in Volume II, page nr. 195, Glossary of Definitions

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
				<b>123</b>	<b>8.6</b>	<b>7.1</b>	<b>46 966</b>	<b>37.0</b>	<b>13.6</b>
<b>Mining (4)</b>		<i>number of companies for calculation</i>		<b>6</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>6</b>
1	Anglo American	254	UK	33	15.4	14.5	18 341	33.8	19.0
2	LK	290	Sweden	26	102.6	26.5	995	20.3	22.7
3	Boliden	354	Sweden	19	90.0	16.1	1 985	87.8	20.5
4	Rio Tinto	382	UK	17	0.0	-16.1	8 346	22.9	11.6
5	BHP Billiton	428	UK	14	-52.5	..	16 838	46.6	8.8
6	Hoganas	433	Sweden	14	-8.8	2.8	461	11.1	8.7
				<b>1 915</b>	<b>-2.0</b>	<b>0.4</b>	<b>680 199</b>	<b>21.1</b>	<b>13.3</b>
<b>Oil &amp; gas (7)</b>		<i>number of companies for calculation</i>		<b>13</b>	<b>13</b>	<b>12</b>	<b>13</b>	<b>13</b>	<b>13</b>
1	Total	31	France	635	-4.8	-3.0	122 700	17.2	5.2
2	Shell (now Royal Dutch Shell)	45	UK	407	-5.3	12.6	195 104	31.5	25.2
3	BP	53	UK	323	25.8	4.5	208 141	21.6	17.9
4	ENI	65	Italy	257	8.0	8.2	58 382	13.4	6.1
5	Gaz De France	128	France	90	1.1	-10.8	18 129	8.9	8.6
6	Repsol YPF	179	Spain	57	-57.5	-23.2	40 585	12.5	-2.4
7	Compagnie Generale de Geophysique	251	France	34	24.5	-1.7	693	13.2	-4.8
8	Technip	253	France	33	-0.3	22.0	5 141	9.1	13.2
9	Fortum	292	Finland	26	-25.7	-21.1	11 665	2.4	3.9
10	Tenaris	350	Luxembourg	19	331.0	..	3 043	30.1	9.2
11	OMV	356	Austria	19	-17.7	-3.1	9 880	29.3	8.5
12	BG	526	UK	10	-12.5	-18.6	5 766	13.8	15.2
13	IHC Caland (now SBM Offshore)	675	The Netherlands	5	-16.7	-14.4	970	-28.7	0.2
				<b>6 877</b>	<b>-0.2</b>	<b>-0.7</b>	<b>175 991</b>	<b>6.6</b>	<b>0.5</b>
<b>Chemicals (11)</b>		<i>number of companies for calculation</i>		<b>38</b>	<b>38</b>	<b>37</b>	<b>38</b>	<b>38</b>	<b>37</b>
1	Bayer	12	Germany	2 404	-0.4	-1.1	29 758	4.2	-0.6
2	BASF	22	Germany	1 173	6.2	-2.0	37 537	12.5	4.9
3	AKZO Nobel	28	The Netherlands	826	-7.4	-0.8	12 688	-2.8	-3.5
4	Solvay	43	Belgium	427	1.7	6.1	7 877	4.2	-3.4
5	DSM	59	The Netherlands	286	6.7	-1.4	7 752	28.1	-0.9
6	ICI	71	UK	208	-5.8	-1.3	7 911	-4.2	-4.5
7	Linde	80	Germany	188	5.0	3.8	9 421	4.8	1.3
8	Rhodia	86	France	171	-15.8	-4.6	5 281	-3.2	-10.1
9	Wacker-Chemie	91	Germany	152	-0.1	-0.1	2 543	3.0	-3.4
10	Schott	107	Germany	120	6.2	-1.4	2 023	4.0	0.3
11	SNPE	108	France	114	-0.9	..	793	1.1	..
12	L'Air Liquide	117	France	103	9.5	4.7	9 376	11.7	4.0
13	Avecia	142	UK	82	-1.9	1.5	685	-15.7	-15.0
14	Johnson Matthey	146	UK	76	-1.1	6.5	6 552	3.2	-1.3
15	Cognis Deutschland	164	Germany	66	1.5	-3.3	3 073	4.2	-0.6
16	BOC	174	UK	59	4.3	-11.5	5 488	4.5	1.0
17	Kemira	206	Finland	46	-4.6	5.3	2 533	-7.5	1.1
18	Borealis	216	Denmark	41	-4.7	-0.8	4 628	26.0	7.7
19	Sud-Chemie	266	Germany	31	6.2	0.5	862	13.0	3.1
20	Tioxide	268	UK	31	4.3	38.2	2 921	19.8	6.7
21	Tessenderlo	275	Belgium	28	2.9	4.1	2 078	5.4	3.2
22	Ahlstrom	278	Finland	28	-16.1	-22.1	1 568	0.8	-5.5
23	Nolato	307	Sweden	24	-13.4	-14.4	266	-10.1	0.6
24	Fuchs Petrolub	319	Germany	21	-5.3	4.0	1 096	5.3	5.3

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
<b>285 071</b>	<b>7.9</b>	<b>-1.7</b>	<b>0.3</b>	<b>0.3</b>	<b>20.8</b>	<b>17.6</b>	<b>0.4</b>	<b>0.4</b>	<b>115 871</b>	<b>42.5</b>	<b>15.1</b>	<b>18.0</b>
<i>5</i>	<i>6</i>	<i>5</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>5</i>	<i>6</i>	<i>5</i>	<i>5</i>	<i>6</i>	<i>6</i>
209 000	8.3	0.8	0.2	0.2	17.7	13.5	0.2	0.1	39 633	28.0	14.4	17.7
3 482	1.4	3.2	2.6	1.6	21.8	12.7	7.5	3.7	..	..	10.8	8.9
4 479	15.0	6.1	0.9	0.9	9.4	4.0	4.2	2.5	1 054	196.0	8.6	6.4
33 040	13.8	3.2	0.2	0.3	25.6	24.0	0.5	0.6	44 607	40.0	23.7	17.6
35 070	0.8	-15.9	0.1	0.3	23.3	20.5	0.4	0.8	29 929	71.0	13.0	20.4
..	..	..	3.0	3.7	14.7	14.7	..	9.2	648	13.0	6.3	13.0
<b>538 556</b>	<b>-1.8</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>	<b>12.2</b>	<b>10.4</b>	<b>3.6</b>	<b>3.6</b>	<b>723 471</b>	<b>45.0</b>	<b>4.8</b>	<b>5.9</b>
<i>13</i>	<i>13</i>	<i>13</i>	<i>13</i>	<i>13</i>	<i>13</i>	<i>13</i>	<i>13</i>	<i>13</i>	<i>13</i>	<i>10</i>	<i>12</i>	<i>12</i>
111 401	0.6	-3.0	0.5	0.6	14.9	12.3	5.7	6.0	132 130	43.0	..	..
114 000	-4.2	8.2	0.2	0.3	12.3	10.1	3.6	3.6	183 576	65.0	4.7	6.0
104 200	-3.7	-1.5	0.2	0.2	8.3	7.0	3.1	2.4	192 751	21.0	4.6	5.7
71 497	-6.6	0.3	0.4	0.5	20.4	17.5	3.6	3.1	96 868	61.0	11.6	15.2
38 016	-0.7	1.4	0.5	0.5	8.9	11.3	2.4	2.3	28 040	..	8.9	10.1
32 376	5.7	-4.8	0.1	0.4	9.2	10.0	1.8	4.4	29 484	38.0	5.9	6.2
3 669	15.2	1.7	4.8	4.4	4.4	0.7	9.1	8.4	973	114.0	6.2	5.9
19 000	0.0	1.8	0.6	0.7	2.4	2.3	1.7	1.8	4 516	77.0	2.3	2.6
12 859	-3.6	-4.6	0.2	0.3	16.1	11.8	2.0	2.6	13 685	58.0	5.7	7.1
16 447	14.3	5.2	0.6	0.2	24.3	9.8	1.2	0.3	1 652	..	3.9	4.3
6 232	2.3	3.0	0.2	0.3	9.0	8.4	3.0	3.7	12 225	176.0	5.7	8.7
4 836	5.2	3.9	0.2	0.2	36.5	33.7	2.1	2.5	25 621	50.0	26.0	16.9
4 023	-5.0	1.9	0.5	0.5	9.3	3.5	1.3	1.5	1 950	..	18.2	28.7
<b>651 222</b>	<b>-1.7</b>	<b>-1.1</b>	<b>3.9</b>	<b>4.2</b>	<b>7.2</b>	<b>3.0</b>	<b>10.6</b>	<b>10.4</b>	<b>132 607</b>	<b>45.7</b>	<b>5.2</b>	<b>5.8</b>
<i>38</i>	<i>38</i>	<i>37</i>	<i>38</i>	<i>38</i>	<i>38</i>	<i>38</i>	<i>38</i>	<i>38</i>	<i>25</i>	<i>25</i>	<i>38</i>	<i>38</i>
113 825	-3.8	-0.1	8.1	8.5	5.4	-6.6	21.1	20.4	21 669	51.0	4.0	5.1
81 958	-6.0	-4.4	3.1	3.3	11.8	7.2	14.3	12.7	33 240	49.0	5.1	6.9
63 600	-4.2	-2.1	6.5	6.8	6.3	8.0	13.0	13.4	12 124	75.0	4.3	4.5
29 300	-2.8	6.4	5.4	5.6	9.8	7.9	14.6	13.9	7 612	46.0	5.8	6.4
24 479	19.3	4.2	3.7	4.4	4.2	1.8	11.7	13.1	6 255	68.0	4.2	6.7
33 820	-6.6	-5.3	2.6	2.7	7.9	2.4	6.1	6.1	4 948	30.0	2.9	2.6
45 536	-1.6	0.0	2.0	2.0	6.9	5.1	4.1	3.9	9 851	89.0	9.1	8.2
20 577	-10.8	-8.6	3.2	3.7	-11.4	-16.7	8.3	8.8	1 092	76.0	3.9	4.0
15 298	-5.4	-3.6	6.0	6.1	5.4	-2.4	9.9	9.4	..	..	13.7	12.5
18 616	-5.0	-1.7	5.9	5.8	4.6	-1.8	6.4	5.8	..	..	8.8	10.1
5 094	-4.1	..	14.4	14.7	-8.3	-6.9	22.4	21.7	..	..	6.9	8.3
35 900	12.6	5.2	1.1	1.1	13.5	14.2	2.9	3.0	16 004	23.0	9.2	8.0
3 101	-9.9	-14.2	11.9	10.2	-16.4	-2.6	26.3	24.1	..	..	10.2	8.0
7 532	1.3	2.5	1.2	1.2	3.5	4.2	10.1	10.3	3 472	23.0	2.1	2.5
8 059	-6.9	-3.9	2.1	2.2	3.4	-0.3	8.2	7.5	..	..	3.8	3.5
44 260	-2.6	-2.1	1.1	1.1	13.9	11.3	1.3	1.2	7 479	13.0	6.6	7.6
9 714	-7.8	-1.6	1.8	1.7	5.1	4.7	4.7	4.5	1 435	22.0	5.9	5.2
4 939	-1.9	-2.0	0.9	1.2	7.1	1.9	8.3	8.5	..	..	4.1	3.3
5 060	2.3	6.2	3.6	3.8	5.7	5.6	6.1	5.9	526	73.0	5.5	5.5
6 020	-7.7	2.9	1.1	1.2	1.1	-2.7	5.1	4.5	..	..	3.0	5.8
8 330	2.1	3.2	1.4	1.4	3.6	4.8	3.4	3.4	807	15.0	8.5	6.0
6 121	-6.4	-5.7	1.8	2.1	2.8	2.8	4.5	5.0	..	..	7.3	5.7
2 700	14.7	6.8	8.9	9.2	8.1	2.0	8.7	11.6	137	21.0	4.9	3.7
4 221	0.8	2.5	2.0	2.2	7.6	6.3	5.1	5.4	716	72.0	1.9	1.7

## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Chemicals (11) continued</b>									
25	Auriga Industries	320	Denmark	21	-7.6	-6.8	714	18.8	7.5
26	Dynea International	332	Finland	20	1.0	9.0	1 065	8.8	0.5
27	Recticel	338	Belgium	20	9.2	16.6	1 276	3.1	3.4
28	Lenzing	377	Austria	17	11.4	7.6	871	40.0	11.8
29	Dynaction	410	France	15	0.0	3.8	259	0.8	-2.9
30	Yule Catto	411	UK	15	-6.3	-1.1	776	1.8	7.4
31	K+S	450	Germany	13	-2.4	-2.0	2 582	12.9	5.8
32	Lucite International	451	UK	13	0.0	0.0	999	1.9	7.0
33	Croda International	513	UK	10	7.3	6.2	416	-3.0	-1.9
34	Sydsvenska Kemi	532	Sweden	10	-1.1	29.5	723	13.7	24.6
35	Dyson	656	UK	6	7.5	32.1	83	-1.2	-6.0
36	Thomas Swan	667	UK	5	-11.1	59.9	40	11.1	4.6
37	Victrex	691	UK	5	33.5	19.7	122	20.8	6.2
38	British Vita	696	UK	5	-5.7	-1.0	1 355	2.0	1.8
				<b>718</b>	<b>-1.0</b>	<b>-6.4</b>	<b>103 239</b>	<b>7.0</b>	<b>2.1</b>
<b>Construction &amp; building (13)</b>		<i>number of companies for calculation</i>		<b>18</b>	<b>18</b>	<b>14</b>	<b>18</b>	<b>18</b>	<b>18</b>
1	Saint-Gobain	57	France	304	-0.7	-1.7	32 025	8.2	1.8
2	Bouygues	130	France	89	4.7	-22.6	23 402	7.2	5.3
3	Lafarge	188	France	54	-3.6	0.6	14 436	5.7	1.8
4	HeidelbergCement	209	Germany	44	2.3	-2.2	6 929	8.7	1.2
5	Novar	235	UK	37	-12.4	-1.0	2 089	3.4	-0.1
6	Pilkington	238	UK	37	-10.3	-6.7	3 382	-1.9	-1.0
7	IMERYS	312	France	23	23.4	..	2 873	5.3	-0.3
8	Rockwool International	318	Denmark	22	1.4	3.2	1 229	11.2	4.9
9	RHI	346	Austria	20	21.9	..	1 297	5.2	-11.4
10	Aliaxis	392	Belgium	16	2.0	-10.9	1 680	4.2	-23.0
11	James Hardie Industries	400	The Netherlands	16	-4.5	15.3	891	23.4	25.9
12	Sanitec	435	Finland	14	-13.8	-11.5	899	-5.5	-3.3
13	Balfour Beatty	485	UK	11	-20.0	-14.9	4 942	10.7	8.6
14	BPB	577	UK	8	-1.8	7.3	3 272	6.7	11.7
15	Constantia-ISO	585	Austria	7	-7.5	..	594	-8.8	-0.8
16	Deceuninck	633	Belgium	6	-4.6	-15.9	582	23.8	18.4
17	Wienerberger	634	Austria	6	-8.2	..	1 759	-3.7	4.7
18	Kingspan	688	Ireland	5	0.2	8.5	958	22.2	4.9
				<b>258</b>	<b>0.6</b>	<b>-2.0</b>	<b>43 634</b>	<b>2.0</b>	<b>0.5</b>
<b>Forestry &amp; paper (15)</b>		<i>number of companies for calculation</i>		<b>7</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>7</b>
1	Stora Enso	140	Finland	82	-7.5	-3.8	12 396	1.8	-2.8
2	Svenska Cellulosa	150	Sweden	73	4.1	-7.5	9 960	5.4	3.0
3	UPM-Kymmene	202	Finland	47	-2.1	1.5	9 820	-1.3	-0.3
4	Metsaliitto	236	Finland	37	2.8	7.2	8 554	2.8	-0.8
5	Sodra	599	Sweden	7	0.0	5.3	1 511	3.6	9.1
6	Grupo Empresarial ENCE	603	Spain	7	112.9	30.6	470	-2.7	-0.4
7	Sveaskog	651	Sweden	6	50.3	..	923	-1.0	167.9
				<b>559</b>	<b>4.6</b>	<b>4.9</b>	<b>91 682</b>	<b>20.8</b>	<b>11.0</b>
<b>Steel &amp; other metals (18)</b>		<i>number of companies for calculation</i>		<b>12</b>	<b>12</b>	<b>8</b>	<b>12</b>	<b>12</b>	<b>11</b>
1	Arcelor	99	Luxembourg	135	-4.9	..	30 176	16.4	..
2	Umicore	131	Belgium	89	111.9	..	7 115	52.1	26.5
3	Corus	132	UK	89	1.6	1.6	13 181	17.3	6.6

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
3 000	0.1	0.6	3.0	3.8	12.8	6.0	7.1	7.7	43	-70.0	2.1	3.7
3 135	-0.6	-1.8	1.9	2.0	3.4	1.5	6.4	6.3	..	..	2.1	3.1
11 034	38.5	4.9	1.6	1.5	2.6	0.7	1.8	2.3	215	32.0	6.3	7.4
4 763	62.5	13.7	2.0	2.5	12.3	11.7	3.6	5.2	692	28.0	6.9	18.8
1 815	-4.2	-5.1	5.8	5.8	4.3	2.3	8.3	7.9	60	34.0	4.2	5.8
3 314	-5.8	-2.0	1.9	2.1	5.2	10.8	4.5	4.5	494	-14.0	2.8	4.5
11 068	4.3	2.6	0.5	0.6	6.4	4.7	1.2	1.2	2 230	93.0	4.5	5.2
2 091	5.5	1.7	1.3	1.3	9.5	9.9	6.1	6.4	..	..	5.9	4.8
1 585	-6.3	-7.6	2.5	2.2	16.0	14.2	6.5	5.7	744	33.0	5.1	4.2
2 091	-4.3	-8.3	1.3	1.5	7.4	5.8	4.6	4.5	..	..	2.9	5.3
903	5.6	-9.2	6.7	6.2	-0.6	1.2	6.2	6.1	184	40.0	14.5	31.0
267	8.5	5.3	13.3	16.6	-0.5	-2.8	19.9	24.3	..	..	5.0	5.6
257	7.1	10.0	4.0	3.6	32.7	31.7	19.1	15.3	578	53.0	11.5	8.9
7 839	-5.1	-5.1	0.4	0.4	4.8	5.9	0.6	0.6	..	..	3.4	4.1
<b>573 339</b>	<b>2.2</b>	<b>-0.9</b>	<b>0.7</b>	<b>0.8</b>	<b>7.6</b>	<b>7.3</b>	<b>1.3</b>	<b>1.3</b>	<b>72 083</b>	<b>43.7</b>	<b>5.4</b>	<b>4.8</b>
<i>18</i>	<i>18</i>	<i>17</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>14</i>	<i>9</i>	<i>16</i>	<i>17</i>
174 247	2.6	0.6	1.0	1.0	7.0	6.8	1.7	1.8	17 154	38.0	4.8	4.6
128 777	0.7	0.6	0.4	0.4	5.9	5.3	0.7	0.7	12 299	50.0	4.7	4.4
77 075	2.3	-2.4	0.4	0.4	12.9	12.1	0.7	0.7	13 686	27.0	7.3	5.8
42 062	11.4	6.5	0.6	0.7	1.6	7.3	1.1	1.1	6 553	106.0	6.6	6.5
13 405	-0.5	-3.1	1.8	2.1	2.9	-1.7	2.8	3.1	..	..	2.7	2.9
24 100	-2.4	-3.5	1.1	1.2	9.2	7.9	1.5	1.7	2 342	35.0	4.8	6.1
14 088	2.1	-1.0	0.8	0.7	12.3	11.0	1.6	1.3	3 945	35.0	7.6	4.4
7 385	1.3	-0.2	1.8	1.9	7.3	6.4	2.9	2.9	504	-29.0	8.5	6.6
7 807	-0.4	-11.0	1.5	1.3	10.4	10.0	2.5	2.0	602	..	5.5	4.5
11 610	-3.6	-27.7	1.0	1.0	9.5	8.6	1.4	1.3	..	..	4.3	3.5
3 122	1.6	..	1.8	2.3	16.1	17.9	5.1	5.4	2 400	..	..	7.6
6 950	-11.8	-7.8	1.5	1.7	-3.6	-5.3	2.0	2.0	..	..	..	..
28 125	1.1	2.5	0.2	0.3	3.6	3.7	0.4	0.5	2 311	25.0	3.3	1.5
12 689	-1.7	1.0	0.2	0.2	13.5	10.8	0.6	0.6	5 167	87.0	6.7	4.8
4 062	-9.4	-4.1	1.2	1.2	1.3	3.1	1.8	1.7	..	..	5.9	5.5
3 043	11.1	22.4	1.0	1.4	3.9	11.5	2.0	2.3	567	..	9.5	10.4
11 441	28.0	9.6	0.3	0.4	14.3	10.5	0.5	0.7	2 758	..	12.7	8.5
3 351	5.4	0.3	0.5	0.6	9.9	9.1	1.5	1.6	1 795	..	6.0	5.4
<b>164 857</b>	<b>3.7</b>	<b>2.1</b>	<b>0.6</b>	<b>0.6</b>	<b>4.8</b>	<b>5.5</b>	<b>1.6</b>	<b>1.6</b>	<b>24 071</b>	<b>5.0</b>	<b>8.1</b>	<b>7.3</b>
<i>7</i>	<i>7</i>	<i>7</i>	<i>7</i>	<i>7</i>	<i>7</i>	<i>7</i>	<i>7</i>	<i>7</i>	<i>4</i>	<i>3</i>	<i>7</i>	<i>7</i>
43 779	-1.1	-0.4	0.7	0.7	4.9	3.7	1.9	2.0	9 069	6.0	7.8	10.1
49 919	19.9	5.9	0.7	0.7	6.3	8.8	1.5	1.7	6 026	-6.0	7.8	8.4
34 815	-2.6	0.3	0.5	0.5	6.0	5.9	1.4	1.3	8 388	13.0	5.8	6.0
29 515	-1.8	-0.3	0.4	0.4	0.1	1.4	1.3	1.2	..	..	12.1	4.9
3 601	-2.6	5.0	0.5	0.5	6.5	11.7	1.9	1.9	..	..	5.3	0.3
1 437	0.8	4.3	1.4	0.7	2.8	5.0	4.7	2.2	588	..	16.4	14.1
1 791	-19.0	112.4	0.6	0.4	14.1	18.6	3.2	1.7	..	..	3.1	3.5
<b>273 999</b>	<b>-0.4</b>	<b>1.5</b>	<b>0.6</b>	<b>0.7</b>	<b>8.2</b>	<b>2.1</b>	<b>2.0</b>	<b>1.9</b>	<b>33 678</b>	<b>59.3</b>	<b>4.1</b>	<b>4.8</b>
<i>12</i>	<i>12</i>	<i>11</i>	<i>12</i>	<i>12</i>	<i>12</i>	<i>12</i>	<i>12</i>	<i>12</i>	<i>11</i>	<i>7</i>	<i>12</i>	<i>12</i>
95 829	-3.7	..	0.4	0.5	12.0	3.2	1.4	1.4	11 580	..	4.5	5.0
11 521	19.5	12.6	1.3	0.9	3.9	2.2	7.7	4.4	1 866	55.0	2.2	3.0
48 600	-3.4	-4.4	0.7	0.8	6.5	-2.6	1.8	1.7	3 030	6.0	4.0	2.1

## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Steel &amp; other metals (18) continued</b>									
4	Voest-Alpine	171	Austria	60	16.3	18.6	5 779	24.4	19.9
5	Salzgitter	180	Germany	57	-0.9	5.9	5 942	22.7	9.0
6	Outokumpu	217	Finland	41	-14.6	0.0	7 136	20.5	10.3
7	Eramet	284	France	27	22.7	..	1 990	-2.6	-4.5
8	Heraeus	374	Germany	17	-61.0	..	8 338	12.5	6.8
9	Rautaruukki	378	Finland	17	0.0	-3.6	3 569	20.9	7.1
10	Bohler-Uddeholm	397	Austria	16	4.2	0.0	1 934	28.9	8.6
11	Acerinox	625	Spain	6	244.4	53.9	4 041	38.7	30.4
12	Norddeutsche Affinerie	684	Germany	5	-16.7	-3.1	2 481	36.6	7.3
				<b>7 524</b>	<b>8.3</b>	<b>6.9</b>	<b>89 920</b>	<b>4.4</b>	<b>-0.0</b>
<b>Aerospace &amp; defence (21)</b>		<i>number of companies for calculation</i>		<b>19</b>	<b>19</b>	<b>18</b>	<b>19</b>	<b>19</b>	<b>19</b>
1	EADS	13	The Netherlands	2 295	4.7	3.9	31 761	5.4	1.0
2	BAE Systems	17	UK	1 568	1.0	3.7	12 847	8.4	0.2
3	Finmeccanica	19	Italy	1 454	18.5	18.9	7 529	0.4	4.5
4	Snecma	29	France	754	20.8	15.9	6 812	5.9	-0.4
5	Thales	42	France	436	14.5	0.3	10 288	-2.7	0.1
6	Rolls-Royce	48	UK	398	0.4	-7.6	8 389	5.2	-2.1
7	Smiths	77	UK	193	5.5	7.7	3 861	-10.6	-18.0
8	SAAB	129	Sweden	89	-0.1	4.0	1 976	3.5	4.4
9	Industria de Turbo Propulsores	141	Spain	82	-24.3	33.6	379	-6.4	0.7
10	Cobham	160	UK	69	20.5	20.0	1 388	18.0	10.8
11	Patria	225	Finland	39	46.5	73.1	346	33.6	16.5
12	Meggitt	226	UK	39	38.4	2.6	677	19.2	3.3
13	Dunlop Standard Aerospace	301	UK	24	20.2	53.1	645	1.1	5.9
14	Ultra Electronics	317	UK	22	22.2	15.6	452	12.4	10.2
15	AMS ( <i>now BAE Systems Integrated System</i> )	329	UK	21	54.3	27.9	671	-3.3	4.4
16	Latecoere	446	France	13	225.0	..	260	32.7	12.6
17	LISI	517	France	10	-10.5	-8.9	541	6.9	-0.5
18	MBDA	540	UK	9	-3.3	16.7	921	117.7	27.4
19	Chemring	552	UK	9	27.2	6.2	177	4.1	9.5
				<b>845</b>	<b>1.2</b>	<b>0.4</b>	<b>39 485</b>	<b>13.3</b>	<b>2.2</b>
<b>Diversified industrials (24)</b>		<i>number of companies for calculation</i>		<b>10</b>	<b>10</b>	<b>7</b>	<b>10</b>	<b>10</b>	<b>9</b>
1	Pirelli	73	Italy	198	-2.9	-5.8	7 114	6.6	-1.8
2	Diehl Stiftung	87	Germany	162	-3.2	-3.1	1 595	2.8	2.8
3	JM Voith	92	Germany	149	10.4	2.6	3 262	4.9	-0.6
4	Freudenberg	93	Germany	148	6.2	..	4 418	14.2	3.3
5	Trumpf	120	Germany	98	10.4	28.6	1 221	2.3	15.1
6	RAG	246	Germany	34	-23.1	..	15 796	22.8	1.1
7	Abengoa	326	Spain	21	3.9	-16.3	1 687	3.2	6.9
8	Compagnie Industriali Riunite	336	Italy	20	11.1	25.2	3 061	7.8	14.0
9	Compagnie de Fives-Lille	550	France	9	9.0	..	877	24.9	..
10	Schoww	657	Denmark	6	-41.0	55.3	454	9.7	15.6
				<b>9 941</b>	<b>-6.0</b>	<b>-8.7</b>	<b>166 209</b>	<b>1.1</b>	<b>-5.6</b>
<b>Electronics &amp; Electrical Equipment (25)</b>		<i>number of companies for calculation</i>		<b>50</b>	<b>49</b>	<b>44</b>	<b>50</b>	<b>50</b>	<b>48</b>
1	Siemens	2	Germany	5 063	-8.1	-9.3	75 167	1.3	-4.8
2	Philips Electronics	10	The Netherlands	2 534	-3.2	-8.5	30 319	4.4	-2.1
3	Schneider	36	France	535	8.3	1.4	10 365	18.1	1.8



Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
23 877	1.2	12.4	1.0	1.1	8.9	5.3	2.5	2.2	2 540	84.0	8.4	9.2
17 625	-2.9	-0.1	1.0	1.2	6.8	0.6	3.2	3.2	1 871	234.0	3.7	3.8
19 761	2.1	1.3	0.6	0.8	7.6	1.0	2.1	2.5	2 235	7.0	4.7	11.3
13 612	7.4	0.9	1.4	1.1	-3.3	1.4	2.0	1.7	2 246	..	9.4	5.9
9 603	2.9	0.4	0.2	0.6	2.0	1.6	1.8	4.7	..	..	0.8	0.9
12 273	-4.0	-3.5	0.5	0.6	13.1	4.3	1.4	1.3	2 215	145.0	2.9	3.3
11 711	15.3	7.0	0.8	1.0	9.7	7.5	1.4	1.5	1 573	143.0	3.8	5.2
6 508	1.8	18.4	0.2	0.1	12.7	6.3	1.0	0.3	3 912	..	4.6	9.7
3 079	-6.5	-1.2	0.2	0.3	2.3	0.8	1.6	1.8	610	..	1.1	1.3
<b>432 910</b>	<b>-1.5</b>	<b>-2.4</b>	<b>8.4</b>	<b>8.1</b>	<b>5.1</b>	<b>4.4</b>	<b>17.4</b>	<b>15.8</b>	<b>77 961</b>	<b>39.6</b>	<b>5.9</b>	<b>5.4</b>
<i>19</i>	<i>19</i>	<i>19</i>	<i>19</i>	<i>19</i>	<i>19</i>	<i>19</i>	<i>19</i>	<i>19</i>	<i>14</i>	<i>13</i>	<i>18</i>	<i>18</i>
110 662	1.4	2.4	7.2	7.3	7.0	1.9	20.7	20.1	22 087	35.0	10.4	9.1
69 400	0.7	-1.5	12.2	13.1	-0.6	5.1	22.6	22.5	15 191	56.0	3.6	2.9
46 401	3.2	6.5	19.3	16.4	-0.8	5.6	31.3	27.3	6 266	44.0	4.7	3.0
35 451	-10.7	-2.3	11.1	9.7	6.2	6.0	21.3	15.7	5 351	37.0	3.2	3.5
55 476	-3.4	-3.9	4.2	3.6	3.9	2.3	7.9	6.6	6 057	38.0	3.2	3.6
35 200	-2.5	-6.7	4.7	5.0	5.8	4.5	11.3	11.0	8 591	55.0	3.2	3.3
26 729	-14.9	-21.9	5.0	4.2	10.7	12.4	7.2	5.8	7 111	23.0	2.9	3.1
12 115	-7.7	-4.1	4.5	4.7	8.9	7.1	7.4	6.8	1 319	0.0	2.0	3.3
2 244	1.9	1.5	21.6	26.7	9.9	6.9	36.4	49.0	..	..	..	..
9 863	9.7	8.0	5.0	4.9	13.7	15.4	7.0	6.3	2 178	1.0	5.9	4.8
1 988	-2.2	-4.1	11.4	10.4	8.7	6.2	19.8	13.2	..	..	4.9	13.1
4 424	27.1	0.7	5.8	5.0	14.2	15.8	8.8	8.1	1 896	107.0	3.0	2.1
3 962	-0.1	0.6	3.8	3.2	12.8	14.6	6.2	5.1	..	..	2.5	7.5
2 678	6.9	4.1	4.8	4.5	11.5	11.4	8.2	7.1	805	38.0	1.5	2.5
4 093	-6.3	-4.7	3.1	1.9	5.2	6.8	5.0	3.0	..	..	3.0	3.6
2 171	21.6	9.6	5.0	2.0	4.5	5.6	6.0	2.2	297	..	4.6	1.5
5 223	7.4	0.9	1.9	2.3	8.2	7.9	2.0	2.3	586	61.0	5.0	4.7
3 197	8.3	5.5	1.0	2.3	-0.2	-12.8	2.9	3.2	..	..	4.3	12.3
1 633	-0.5	2.0	4.8	3.9	13.7	11.8	5.2	4.1	226	33.0	3.4	4.7
<b>202 204</b>	<b>8.5</b>	<b>0.6</b>	<b>2.1</b>	<b>2.4</b>	<b>-4.4</b>	<b>-5.4</b>	<b>3.4</b>	<b>4.0</b>	<b>..</b>	<b>..</b>	<b>5.7</b>	<b>5.3</b>
<i>9</i>	<i>10</i>	<i>8</i>	<i>10</i>	<i>10</i>	<i>10</i>	<i>10</i>	<i>9</i>	<i>10</i>	<i>..</i>	<i>..</i>	<i>10</i>	<i>10</i>
33 704	-7.8	-5.9	2.8	3.1	5.6	2.8	5.9	5.6	4 420	76.0	4.0	4.1
10 666	-0.6	-0.5	10.2	10.8	3.8	3.5	15.2	15.6	..	..	3.8	4.3
..	..	..	4.6	4.3	5.7	5.1	..	5.5	..	..	3.2	3.5
32 044	12.8	4.5	3.4	3.6	6.8	5.6	4.6	4.9	..	..	7.2	6.2
5 847	2.1	5.2	8.0	7.4	8.3	8.4	16.7	15.5	..	..	6.6	5.4
93 657	17.6	1.6	0.2	0.3	-21.0	-22.9	0.4	0.6	..	..	7.2	6.7
9 318	5.6	-0.8	1.2	1.2	5.8	5.4	2.2	2.3	1 040	81.0	2.5	2.4
10 324	-0.5	2.2	0.7	0.6	12.8	8.2	1.9	1.7	1 937	85.0	5.2	4.7
3 954	6.1	..	1.0	1.1	3.9	4.1	2.2	2.1	..	..	0.9	1.6
2 690	10.2	15.6	1.2	2.3	5.2	1.5	2.1	3.9	327	64.0	10.1	8.0
<b>957 810</b>	<b>-0.7</b>	<b>-8.1</b>	<b>6.0</b>	<b>6.4</b>	<b>4.1</b>	<b>2.5</b>	<b>10.3</b>	<b>10.9</b>	<b>164 329</b>	<b>31.8</b>	<b>3.6</b>	<b>3.9</b>
<i>49</i>	<i>50</i>	<i>47</i>	<i>50</i>	<i>49</i>	<i>50</i>	<i>49</i>	<i>49</i>	<i>49</i>	<i>50</i>	<i>36</i>	<i>47</i>	<i>45</i>
419 200	-0.0	-4.2	6.7	7.4	4.0	4.0	12.1	13.1	59 127	27.0	4.0	4.6
141 966	-3.7	-11.7	8.4	9.0	7.7	3.4	17.9	17.8	28 322	21.0	4.2	3.4
84 866	14.3	5.7	5.2	5.6	9.6	7.2	6.3	6.7	14 646	35.0	2.7	2.9

## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Electronics &amp; Electrical Equipment (25) continued</b>									
4	ALSTOM	51	France	336	-29.0	-16.4	13 662	-18.1	-16.5
5	Thomson	60	France	277	-6.1	-9.0	7 994	-5.5	-8.7
6	Invensys	83	UK	175	-24.8	-22.4	4 129	-24.9	-25.2
7	Gemplus International	153	Luxembourg	72	0.3	-14.4	865	15.5	-5.4
8	EPCOS	156	Germany	71	1.9	-9.0	1 362	7.1	-10.6
9	Barco	159	Belgium	69	-1.0	-13.3	672	6.8	-5.3
10	Bang & Olufsen	169	Denmark	61	28.2	9.6	486	-9.0	-1.7
11	Draka	186	The Netherlands	54	24.2	-2.0	1 743	22.7	-3.1
12	Spectris	197	UK	49	2.3	4.9	868	8.2	4.2
13	Axalto	199	The Netherlands	48	-1.6	..	707	-7.9	..
14	Nexans	203	France	47	0.0	-2.0	4 900	21.1	0.9
15	Leoni	208	Germany	44	21.0	..	1 247	15.5	4.3
16	NKT	219	Denmark	41	49.9	12.3	1 038	32.6	6.3
17	Vestas Wind Systems	228	Denmark	39	39.6	..	2 561	54.9	26.0
18	Ingenico	247	France	34	-0.2	7.8	427	19.9	3.2
19	Neopost	248	France	34	3.7	1.2	756	0.7	9.6
20	Renishaw	302	UK	24	10.5	7.2	218	21.1	13.8
21	ACTIELEC Technologies	311	France	23	-24.5	-12.7	228	14.6	7.4
22	Vaisala	314	Finland	22	5.7	5.6	181	-4.2	-0.5
23	Thrane & Thrane	349	Denmark	19	85.2	22.2	123	43.0	21.8
24	SGL Carbon	351	Germany	19	-8.1	-14.9	926	-11.5	-8.9
25	Oxford Instruments	359	UK	19	4.8	-0.3	257	0.0	-5.2
26	Oberthur Card Systems	360	France	18	4.6	-6.9	451	4.9	-2.0
27	TT electronics	407	UK	15	25.6	4.0	844	11.9	-3.1
28	Gewiss	414	Italy	15	4.9	5.8	312	4.0	-2.4
29	Domino Printing Sciences	440	UK	14	12.4	3.3	252	8.6	5.0
30	SAES Getters	441	Italy	13	5.0	3.0	142	12.7	-3.9
31	Raymarine	481	UK	12	-5.1	25.3	150	13.6	13.7
32	Skanditek	494	Sweden	11	1.3	-6.2	68	19.3	-19.0
33	Laird	496	UK	11	28.3	31.4	661	9.1	-7.0
34	First Technology	502	UK	11	-6.3	22.3	168	-6.7	-6.4
35	Vacon	521	Finland	10	12.3	3.9	129	15.2	12.3
36	Roxboro	531	UK	10	-14.8	-11.5	168	-13.0	-12.1
37	VOGT Electronic	542	Germany	9	-7.1	-8.6	306	-42.8	-24.7
38	Basler	566	Germany	8	50.5	1.0	52	44.4	24.4
39	E2V (now e2v Technologies)	569	UK	8	25.4	..	138	3.8	..
40	Chloride	581	UK	7	1.0	1.8	233	7.9	3.5
41	NXT	582	UK	7	-19.6	-2.0	9	-18.2	8.7
42	Nedap	584	The Netherlands	7	-21.7	..	124	0.0	2.0
43	Punch International	612	Belgium	7	..	1.3	215	22.2	25.4
44	ATB-Austria Antriebstechnik	623	Austria	6	23.8	..	181	19.9	28.2
45	EVS Broadcast Equipment	629	Belgium	6	3.4	6.4	50	28.2	12.6
46	MTL Instruments	646	UK	6	9.4	-13.1	90	5.9	0.0
47	Efore	652	Finland	6	48.7	12.2	73	14.1	9.2
48	Xaar	670	UK	5	-20.1	-4.8	50	22.0	13.7
49	Elexis	673	Germany	5	-1.9	-11.9	125	17.9	-12.4
50	HITT	692	The Netherlands	5	31.4	6.0	17	-19.1	-22.8
				<b>4 520</b>	<b>0.8</b>	<b>1.2</b>	<b>187 919</b>	<b>4.4</b>	<b>-0.1</b>
<b>Engineering &amp; Machinery (26)</b>		<i>number of companies for calculation</i>		<b>81</b>	<b>79</b>	<b>77</b>	<b>81</b>	<b>79</b>	<b>79</b>
1	Volvo	25	Sweden	991	14.0	6.4	23 294	14.8	3.6

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
69 594	-9.4	-16.4	2.5	2.8	-2.4	-6.2	4.8	6.2	4 393	752.0	1.3	1.6
49 079	-16.0	-7.4	3.5	3.5	-4.8	1.2	5.6	5.1	5 114	33.0	4.4	6.0
36 365	-16.6	-24.3	4.2	4.2	-1.6	-6.0	4.8	5.3	1 105	-14.0	2.0	3.2
5 476	8.7	-6.6	8.3	9.6	2.4	-18.3	13.2	14.3	1 195	33.0	2.7	2.0
15 587	17.3	6.3	5.2	5.5	4.4	0.9	4.5	5.2	931	0.0	8.1	7.5
4 389	9.1	-3.9	10.3	11.1	8.7	9.2	15.7	17.3	764	-3.0	3.4	3.0
2 717	-3.1	-0.8	12.6	9.0	9.3	7.5	22.6	17.1	622	18.0	3.9	3.4
8 502	11.4	0.2	3.1	3.1	-0.3	3.0	6.4	5.7	367	7.0	1.3	1.9
5 896	3.5	7.5	5.7	6.0	8.6	8.4	8.4	8.5	1 001	39.0	2.7	3.0
4 823	12.2	..	6.8	6.4	9.4	6.5	10.0	11.4	1 074	..	3.8	2.5
17 662	3.5	-0.6	1.0	1.2	2.2	0.3	2.7	2.8	835	51.0	1.9	1.7
26 376	33.2	14.9	3.5	3.4	5.0	5.2	1.7	1.8	643	69.0	5.9	8.4
5 972	21.1	1.6	3.9	3.5	0.9	1.5	6.9	5.5	729	78.0	2.8	2.8
..	..	..	1.5	1.7	-0.4	4.6	..	4.3	2 662	62.0	3.5	5.1
1 438	-18.5	-5.5	8.0	9.6	0.9	-7.0	23.8	19.4	314	-26.0	1.4	2.5
4 627	2.0	6.9	4.5	4.4	22.7	20.1	7.3	7.2	2 436	88.0	6.5	7.1
1 865	11.1	5.6	11.1	12.2	18.7	13.9	13.0	13.0	852	52.0	10.6	12.2
1 873	0.0	2.1	10.0	15.2	2.9	4.5	12.2	16.1	101	..	2.2	1.5
1 092	-4.3	-0.7	12.3	11.2	13.2	13.2	20.4	18.5	309	31.0	2.2	6.9
651	60.3	31.9	15.7	12.2	11.5	14.0	29.8	25.8	141	1.0	2.4	2.3
5 228	-26.1	-14.9	2.1	2.0	4.8	-0.6	3.7	3.0	680	54.0	4.0	3.2
1 581	2.9	-3.7	7.2	6.9	0.2	2.7	11.7	11.5	148	14.0	1.9	1.2
2 943	2.0	-5.0	4.1	4.1	7.4	6.5	6.2	6.1	544	37.0	4.7	3.3
8 715	7.7	-3.6	1.8	1.6	4.9	1.1	1.8	1.5	335	-6.0	4.1	4.4
1 686	-6.6	-70.2	4.7	4.6	19.0	12.7	8.7	7.7	600	..	3.2	2.0
1 807	11.4	5.4	5.4	5.2	13.7	12.5	7.5	7.4	396	21.0	2.8	1.7
946	-11.1	-6.1	9.5	10.2	18.8	-4.0	14.2	12.0	257	218.0	5.6	6.4
566	35.1	14.1	7.7	9.2	3.4	7.6	20.3	28.9	247	..	4.0	4.5
335	-2.1	-20.4	16.1	18.9	4.6	-3.5	32.6	31.5	149	17.0	..	..
5 238	26.4	-5.3	1.6	1.4	8.8	5.8	2.1	2.1	740	34.0	3.6	3.5
1 805	4.8	0.0	6.3	6.3	12.7	8.9	5.9	6.6	333	4.0	3.0	3.3
458	4.8	4.2	7.8	8.0	11.5	10.7	22.0	20.6	242	59.0	3.1	2.7
1 456	-15.4	-9.4	5.8	5.9	7.7	5.2	6.7	6.6	167	23.0	1.2	1.0
3 614	-31.1	-15.7	3.0	1.8	-0.2	-0.4	2.5	1.9	14	..	2.0	1.7
309	18.4	8.9	14.8	14.3	11.2	2.8	25.0	19.7	52	..	1.9	2.8
1 292	-3.5	..	5.5	4.6	10.1	9.8	5.9	4.6	170	..	8.7	6.0
1 406	-0.6	-1.9	3.1	3.3	3.0	3.7	5.2	5.1	283	77.0	3.9	..
147	-14.5	-0.7	80.1	81.5	-161.5	-136.4	49.1	52.2	90	31.0	..	..
602	-1.3	-3.2	5.8	7.4	14.6	13.7	12.0	15.1	189	..	8.9	6.5
3 359	-4.0	20.7	3.0	..	5.4	5.7	1.9	..	144	..	16.3	15.9
1 774	26.7	36.3	3.5	3.3	3.5	3.3	3.5	3.6	157	..	2.8	1.3
143	-10.6	-5.2	12.2	15.1	53.4	28.2	42.7	36.9	357	..	2.0	5.1
764	6.3	-4.3	6.4	6.2	7.6	5.9	7.5	7.3	99	67.0	2.2	1.2
512	24.6	0.5	7.7	5.9	11.6	12.5	11.0	9.2	77	..	4.1	3.1
235	-10.0	1.5	10.4	15.9	16.4	-4.9	22.2	25.0	242	217.0	4.0	9.8
719	3.2	-21.0	4.2	5.0	6.6	2.8	7.2	7.6	126	..	0.8	..
154	-8.9	10.9	28.8	17.8	-0.3	..	31.8	22.1	29 808	..	..	..
<b>989 786</b>	<b>-2.1</b>	<b>-1.3</b>	<b>2.4</b>	<b>2.5</b>	<b>6.0</b>	<b>3.1</b>	<b>4.6</b>	<b>4.4</b>	<b>103 954</b>	<b>30.2</b>	<b>4.1</b>	<b>4.2</b>
<i>81</i>	<i>79</i>	<i>79</i>	<i>81</i>	<i>79</i>	<i>81</i>	<i>79</i>	<i>81</i>	<i>79</i>	<i>69</i>	<i>52</i>	<i>78</i>	<i>75</i>
78 196	6.9	2.8	4.3	4.3	6.7	1.2	12.7	11.9	13 812	20.0	4.8	5.7

## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Engineering &amp; Machinery (26) continued</b>									
2	MAN	47	Germany	400	-1.7	-1.7	14 947	-0.5	-2.8
3	Scania	66	Sweden	255	7.0	5.6	6 382	13.2	2.8
4	Heidelberger Druckmaschinen	67	Germany	244	-33.3	-19.1	3 360	-8.2	-12.4
5	ThyssenKrupp	79	Germany	191	4.4	2.0	39 342	8.9	1.2
6	Sandvik	81	Sweden	185	-0.3	8.2	6 046	11.9	3.7
7	Atlas Copco	95	Sweden	141	9.4	4.8	5 387	9.1	-1.6
8	Knorr-Bremse	106	Germany	124	3.3	5.4	2 423	9.8	13.7
9	Metso	118	Finland	103	-18.3	-9.1	3 976	-6.4	-2.9
10	SKF	134	Sweden	88	6.1	-3.0	4 963	8.3	1.1
11	Grundfos	144	Denmark	77	23.2	7.6	1 634	9.0	6.0
12	Danfoss	145	Denmark	76	-2.1	10.4	2 197	5.9	4.3
13	Claas	151	Germany	73	8.0	14.4	1 928	28.9	18.9
14	Tomkins	152	UK	73	-12.5	-1.8	4 210	-5.4	-4.0
15	Stork	154	The Netherlands	71	-4.1	41.6	1 824	-6.3	-6.0
16	Deutz	158	Germany	70	26.6	12.9	1 242	5.9	1.6
17	Kone	163	Finland	67	-23.9	18.0	4 450	-16.7	16.5
18	Wartsila	172	Finland	59	-15.4	-9.4	2 478	5.1	1.7
19	IWKA	173	Germany	59	-0.7	1.5	2 169	-5.2	-1.7
20	MG Technologies	176	Germany	59	-37.4	-18.6	4 059	-36.6	-22.8
21	Koenig & Bauer	177	Germany	58	0.9	16.5	1 423	15.5	3.3
22	VA Technologie	181	Austria	56	-2.5	-15.9	4 073	3.8	0.6
23	Bekaert	191	Belgium	54	49.8	17.1	2 173	20.9	6.6
24	Gamesa	196	Spain	50	22.4	0.9	1 736	10.4	33.0
25	Alfa Laval	207	Sweden	45	9.7	5.8	1 659	7.7	-1.8
26	Gildemeister	230	Germany	38	-8.1	-8.5	1 052	7.6	-2.8
27	Jungheinrich	231	Germany	38	15.1	10.1	1 531	4.1	-0.4
28	IMI	232	UK	38	-5.0	3.8	2 276	2.4	-0.6
29	Cookson	245	UK	34	-24.8	-15.7	2 335	0.8	-6.4
30	Duerr	257	Germany	33	-1.7	-3.8	2 136	-5.7	-1.0
31	JCB Service	258	UK	32	31.4	2.0	1 274	10.5	1.8
32	Jenoptik	261	Germany	32	1.3	4.1	2 523	27.3	8.0
33	Delft Instruments	285	The Netherlands	27	60.0	28.1	279	17.7	14.1
34	Henlys	294	UK	26	12.5	30.2	443	-34.3	-22.7
35	KSB	300	Germany	25	2.1	-0.4	1 267	7.6	3.2
36	Singulus Technologies	308	Germany	24	44.6	41.5	440	21.2	24.9
37	Andritz	321	Austria	21	-17.1	4.6	1 481	20.9	3.9
38	Seco Tools	327	Sweden	21	-8.3	14.3	480	10.6	0.4
39	Enodis	333	UK	20	8.3	1.2	927	-3.4	-15.3
40	Same Deutz-Fahr	340	Italy	20	..	..	905	..	..
41	FLS Industries (now FLSmidth)	348	Denmark	20	29.4	-7.1	1 979	-1.3	-8.0
42	Hexagon	353	Sweden	19	22.8	38.3	914	16.3	10.0
43	Cardo	367	Sweden	18	20.1	..	851	0.0	-10.7
44	IMA Industria Macchine Automatiche	375	Italy	17	-5.9	-3.1	363	4.9	2.0
45	Halma	388	UK	17	4.7	12.8	423	2.4	3.8
46	Morgan Crucible	389	UK	17	-25.5	-14.9	1 124	-6.3	-8.1
47	Uponor	398	Finland	16	0.0	-1.8	1 073	5.1	-3.4
48	Wanderer-Werke	417	Germany	14	125.0	22.8	410	-7.9	8.8
49	Muhlbauer	426	Germany	14	23.0	11.0	128	34.7	12.9
50	Steag Hamatech	431	Germany	14	62.4	12.4	149	1.4	6.6
51	Vossloh	432	Germany	14	87.8	12.4	922	0.2	0.7
52	BWT	465	Austria	12	23.5	2.7	488	17.3	5.1

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
62 790	-13.3	-7.2	2.7	2.7	4.0	2.3	6.4	5.6	5 869	47.0	4.0	3.9
29 064	5.1	2.5	4.0	4.2	10.9	9.8	8.8	8.6	6 306	29.0	11.4	15.4
19 451	-17.2	-8.9	7.3	10.0	4.3	-9.6	12.5	15.6	2 690	37.0	3.8	3.0
187 678	-0.5	-1.0	0.5	0.5	4.6	2.7	1.0	1.0	8 119	20.0	3.4	3.5
37 673	1.4	2.7	3.1	3.4	13.1	10.2	4.9	5.0	7 986	20.0	4.7	5.9
26 828	4.4	0.8	2.6	2.6	13.6	11.8	5.3	5.0	7 985	48.0	10.2	7.6
10 954	0.9	5.0	5.1	5.4	9.1	7.9	11.3	11.1	..	..	2.9	2.5
24 363	-11.1	-1.7	2.6	3.0	2.9	-5.7	4.2	4.6	2 720	109.0	2.3	4.2
38 502	2.3	0.8	1.8	1.8	9.4	6.9	2.3	2.2	4 312	36.0	3.1	3.3
12 618	8.1	4.1	4.7	4.2	10.6	9.7	6.1	5.3	..	..	10.0	9.3
17 399	-0.5	0.9	3.5	3.8	6.1	4.7	4.4	4.5	..	..	7.4	2.5
8 153	11.8	14.3	3.8	4.5	3.1	3.1	8.9	9.2	..	..	2.1	3.5
36 720	-6.6	-3.3	1.7	1.9	8.3	7.1	2.0	2.1	3 068	11.0	5.3	4.6
12 789	-11.7	-9.5	3.9	3.8	5.2	4.5	5.6	5.1	1 316	153.0	2.6	2.5
5 535	0.4	-3.1	5.6	4.7	1.2	3.8	12.6	10.0	558	111.0	2.1	2.4
30 976	-10.2	10.5	1.5	1.7	9.6	6.3	2.2	2.6	3 010	29.0	2.1	1.4
12 361	0.6	4.5	2.4	3.0	4.8	-1.8	4.8	5.7	2 250	124.0	1.9	2.4
13 311	2.4	1.1	2.7	2.6	3.7	3.4	4.5	4.6	501	15.0	1.9	2.4
26 327	-15.4	-9.9	1.4	1.5	4.3	-2.3	2.2	3.0	1 948	9.0	2.4	4.0
7 370	1.4	-0.2	4.1	4.7	1.4	-4.0	7.9	7.9	285	51.0	3.4	3.3
16 562	-5.2	-4.2	1.4	1.5	-1.8	1.5	3.4	3.3	997	-11.0	1.3	1.1
12 291	9.7	5.9	2.5	2.0	10.6	7.4	4.4	3.2	1 463	50.0	7.6	6.1
7 222	17.2	14.9	2.9	2.6	16.0	15.0	6.9	6.6	2 851	13.0	6.0	4.6
9 400	2.2	-1.0	2.7	2.6	8.1	8.1	4.8	4.4	1 440	9.0	2.3	1.8
5 117	1.4	0.1	3.6	4.2	4.0	3.5	7.5	8.2	268	10.0	1.2	2.4
9 012	-1.9	-1.0	2.5	2.3	4.8	5.2	4.2	3.6	312	21.0	9.5	11.4
17 063	1.6	-3.7	1.7	1.8	6.8	8.1	2.2	2.4	2 239	24.0	3.2	3.2
16 263	-1.3	-6.6	1.5	2.0	2.8	0.4	2.1	2.8	914	-3.0	2.6	3.0
13 079	0.9	1.4	1.5	1.5	1.6	0.6	2.5	2.6	217	-2.0	0.9	0.8
4 233	2.1	0.8	2.5	2.1	1.5	2.1	7.5	5.9	..	..	4.5	4.9
10 052	-0.1	14.6	1.3	1.6	1.1	-0.6	3.2	3.1	413	28.0	1.4	1.7
1 199	5.5	10.3	9.6	7.1	8.7	8.0	22.4	14.8	..	..	0.7	3.4
2 864	-3.4	-17.2	5.8	3.4	-7.8	1.5	9.0	7.7	..	..	2.3	1.3
12 523	2.0	0.8	1.9	2.0	2.0	2.5	2.0	2.0	257	12.0	2.1	3.1
707	18.0	24.4	5.4	4.5	16.6	16.5	33.3	27.2	384	-15.0	1.4	2.2
5 314	15.6	5.3	1.4	2.1	4.8	3.9	4.0	5.5	1 009	119.0	1.8	1.6
3 886	-1.3	-1.0	4.3	5.2	18.7	17.3	5.4	5.8	71	-87.0	5.0	4.6
6 048	-0.4	-15.1	2.2	1.9	6.4	5.1	3.3	3.1	722	40.0	2.2	1.5
2 542	..	..	2.2	..	3.6	..	7.8	..	..	..	0.9	..
5 667	-44.6	-25.2	1.0	0.8	0.3	-21.3	3.4	1.5	770	45.0	2.7	4.4
5 935	9.9	5.5	2.1	2.0	7.2	5.7	3.2	2.9	853	97.0	3.0	2.3
5 947	-4.1	-10.1	2.1	1.7	4.1	5.9	3.0	2.4	555	0.0	3.5	3.2
2 480	3.3	3.6	4.7	5.3	8.8	11.3	6.9	7.6	391	..	2.2	5.2
3 002	2.6	1.6	3.9	3.8	15.0	15.7	5.5	5.4	766	-2.0	3.1	3.4
12 787	-8.8	-7.4	1.5	1.8	-1.5	-3.8	1.3	1.6	848	58.0	5.1	3.7
4 684	-5.6	-6.5	1.5	1.6	8.8	2.4	3.4	3.2	1 306	40.0	3.3	3.3
3 306	-3.6	7.7	3.5	1.4	8.1	7.6	4.4	1.9	106	..	2.2	2.0
1 338	6.0	1.0	10.9	12.0	18.7	8.4	10.5	9.0	273	67.0	11.7	6.3
294	-24.4	-14.1	9.3	5.8	0.6	4.1	47.4	22.1	54	..	1.3	..
4 600	4.0	-5.0	1.5	0.8	10.8	10.9	3.0	1.7	649	..	3.1	2.5
2 734	6.1	3.1	2.5	2.4	4.8	2.9	4.5	3.9	584	91.0	1.2	1.2

## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Engineering &amp; Machinery (26) continued</b>									
53	Elektrobit	470	Finland	12	22.3	31.2	203	36.2	38.7
54	FKI	475	UK	12	-25.9	4.8	1 823	-4.1	-7.1
55	Vitec	491	UK	11	-10.2	1.3	262	-3.7	-0.9
56	Arup	500	UK	11	-18.2	..	578	3.8	8.6
57	Rational	510	Germany	10	-8.5	12.8	222	18.7	10.0
58	Pfeiffer Vacuum Technology	515	Germany	10	14.8	8.3	156	8.3	-2.8
59	Palfinger	520	Austria	10	34.7	16.4	404	21.0	6.8
60	Danieli	523	Italy	10	-16.7	-33.0	1 008	2.1	9.6
61	Isra Vision Systems	530	Germany	10	41.8	30.5	40	48.1	35.7
62	Charter	534	UK	10	-52.1	-18.8	1 229	-0.2	-3.3
63	Kyro	538	Finland	9	-4.1	-1.6	232	2.2	16.2
64	JCB Compact Products	543	UK	9	28.6	18.2	159	2.6	2.4
65	KCI Konecranes	553	Finland	9	7.6	3.4	728	9.5	-1.3
66	WEDECO	556	Germany	8	-3.3	45.8	126	-12.5	36.1
67	Weir	565	UK	8	11.3	5.4	1 044	7.0	0.5
68	Walter	580	Germany	7	-28.0	-16.2	261	1.6	-3.9
69	Spirax-Sarco Engineering	586	UK	7	3.5	3.2	460	3.6	3.7
70	Prima Industrie	596	Italy	7	16.4	4.1	100	5.3	-3.7
71	CAF	608	Spain	7	..	..	578	..	..
72	Rosenbauer International	619	Austria	6	0.0	19.4	299	-7.4	3.0
73	SolarWorld	630	Germany	6	22.0	6.9	200	104.1	34.6
74	Senior	632	UK	6	13.0	10.3	460	-8.2	-11.1
75	Nordex	644	Germany	6	16.7	-5.5	222	13.3	-13.8
76	LDV	650	UK	6	152.0	-5.1	199	-14.2	-13.8
77	IPTE	653	Belgium	6	-5.5	-2.2	129	17.3	6.1
78	Luxfer	654	UK	6	-2.4	1.7	321	2.9	-1.9
79	Aga Foodservice	664	UK	5	15.2	3.8	614	10.8	5.5
80	Karolin Machine Tool	665	Sweden	5	14.1	-2.4	160	37.9	2.4
81	Kaessbohrer Gelaendefahrzeug	687	Germany	5	-2.0	9.6	154	18.5	36.2
				<b>25 174</b>	<b>3.7</b>	<b>3.8</b>	<b>547 981</b>	<b>4.1</b>	<b>0.4</b>
<b>Automobiles &amp; parts (31)</b>		<i>number of companies for calculation</i>		<b>37</b>	<b>37</b>	<b>34</b>	<b>37</b>	<b>37</b>	<b>35</b>
1	DaimlerChrysler	1	Germany	5 658	1.6	-1.6	142 059	4.1	-2.4
2	Volkswagen	3	Germany	4 164	0.6	5.1	88 963	0.6	0.2
3	Robert Bosch	7	Germany	2 898	9.4	8.4	40 007	10.0	5.5
4	BMW	8	Germany	2 818	10.1	14.3	44 335	6.8	4.9
5	Peugeot (PSA)	14	France	2 118	1.0	6.9	56 797	4.7	3.2
6	Renault	15	France	1 961	12.9	0.4	40 715	8.5	3.9
7	Istituto Finanziario Industriale	16	Italy	1 827	3.6	-0.4	51 878	-3.1	-6.4
8	Michelin	30	France	674	-5.2	-1.4	15 689	2.1	-0.2
9	Valeo	34	France	584	3.5	-1.9	9 439	2.2	-2.7
10	Continental	37	Germany	530	6.4	4.9	12 597	9.2	3.9
11	ZF	38	Germany	521	-0.7	15.4	9 899	10.9	13.6
12	Autoliv	62	Sweden	271	20.6	22.4	4 520	15.9	15.5
13	Behr	76	Germany	195	6.0	8.0	3 050	1.5	10.7
14	Hella	85	Germany	172	2.3	8.5	3 141	3.7	3.2
15	Rheinmetall	90	Germany	152	-19.6	-8.3	3 413	-19.7	-9.5
16	GKN	105	UK	126	9.9	-3.2	4 921	4.5	0.5
17	Trelleborg	161	Sweden	68	27.0	7.6	2 537	27.6	6.9
18	Eberspaecher	165	Germany	66	7.0	..	1 468	9.9	..
19	Burelle	221	France	41	-0.8	12.5	2 038	4.5	4.3
20	IMMSI	229	Italy	39	2.1	..	1 137	748.5	..

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
1 385	24.6	25.8	5.9	6.6	16.4	10.7	8.7	8.8	324	21.0	1.0	0.7
13 311	-5.7	-7.3	0.6	0.8	5.1	2.6	0.9	1.1	852	-14.0	2.5	1.9
1 550	-4.6	1.3	4.3	4.6	7.0	5.9	7.2	7.7	216	14.0	5.3	5.1
6 399	1.2	8.5	1.8	2.3	2.4	2.0	1.7	2.1	..	..	2.6	1.6
742	9.3	4.0	4.7	6.1	24.1	22.5	14.0	16.7	1 014	100.0	2.3	3.2
750	-3.5	-1.8	6.6	6.2	11.6	13.2	13.7	11.5	367	46.0	1.9	1.4
2 563	11.8	7.3	2.5	2.2	10.3	8.1	3.9	3.3	573	..	3.2	4.5
3 470	23.7	4.7	1.0	1.2	7.1	2.6	2.9	4.3	371	73.0	2.1	0.6
244	45.2	28.1	24.3	25.4	14.0	14.8	39.9	40.8	31	..	..	..
9 038	-6.9	-6.2	0.8	1.6	4.0	3.2	1.1	2.1	725	119.0	1.3	0.8
1 175	15.8	35.6	4.1	4.3	7.7	8.8	8.0	9.7	353	34.0	2.6	3.5
524	3.6	-1.1	5.7	4.6	-1.4	7.7	17.3	14.0	..	..	0.6	..
4 369	-1.2	-0.5	1.2	1.2	5.0	2.0	1.9	1.8	545	..	1.5	1.5
733	1.2	41.5	6.6	5.9	-7.0	6.9	11.3	11.8	220	..	2.4	2.1
7 777	1.8	-2.7	0.7	0.7	7.2	8.1	1.0	0.9	1 055	27.0	3.4	3.0
1 865	-5.2	-1.9	2.8	4.0	15.4	7.4	3.9	5.2	388	..	9.6	3.9
4 104	1.2	0.4	1.6	1.6	15.7	14.6	1.7	1.7	821	40.0	4.6	3.8
465	4.5	3.0	6.9	6.2	4.9	-2.1	14.8	13.3	49	..	..	1.1
3 846	..	..	1.1	..	3.1	..	1.7	..	298	..	3.8	..
1 376	4.8	2.2	2.1	2.0	6.7	5.6	4.6	4.8	102	..	1.7	2.2
570	13.1	29.9	3.1	5.1	16.5	5.1	10.7	9.9	1 131	..	15.5	30.6
5 014	-2.6	-5.9	1.3	1.1	3.6	3.2	1.2	1.0	223	27.0	3.3	2.2
726	-16.3	3.7	2.6	2.5	-12.9	-87.8	7.9	5.7	97	..	1.8	4.1
932	-12.7	-10.5	2.9	1.0	-8.8	5.2	6.1	2.1	..	..	9.5	2.2
1 302	11.5	12.4	4.4	5.4	-1.4	0.9	4.3	5.1	26	..	2.3	2.7
2 034	-1.1	-2.9	1.8	1.9	5.2	0.3	2.8	2.8	..	..	3.7	2.9
5 139	8.3	2.1	0.9	0.8	6.6	6.0	1.1	1.0	547	41.0	3.4	4.5
747	6.6	4.2	3.3	4.0	5.3	-0.9	7.2	6.7	81	..	..	..
427	-0.7	1.2	3.2	3.9	11.1	6.9	11.7	11.9	98	..	0.7	3.1
<b>2 102 635</b>	<b>1.1</b>	<b>0.2</b>	<b>4.6</b>	<b>4.6</b>	<b>3.9</b>	<b>2.7</b>	<b>12.0</b>	<b>11.7</b>	<b>164 020</b>	<b>37.6</b>	<b>6.2</b>	<b>7.9</b>
37	37	35	37	36	37	35	37	37	30	22	35	34
379 019	2.2	-0.1	4.0	4.1	2.4	1.2	14.9	15.0	46 204	38.0	4.5	4.9
321 090	2.0	1.4	4.7	4.7	2.0	1.8	13.0	13.2	22 658	94.0	13.7	15.3
238 847	4.1	3.0	7.2	7.3	6.0	4.6	12.1	11.6	..	..	6.1	5.6
103 626	1.5	3.1	6.4	6.2	8.4	7.9	27.2	25.1	24 455	14.0	6.9	17.6
207 200	3.7	2.5	3.7	3.9	4.2	3.7	10.2	10.5	12 715	23.0	5.0	5.5
130 886	-0.3	-2.3	4.8	4.6	11.3	7.9	15.0	13.2	21 570	31.0	..	7.5
179 790	-6.6	-7.6	3.5	3.3	-2.3	-3.6	10.2	9.2	976	66.0	4.4	4.0
126 474	-0.6	-0.3	4.3	4.6	6.7	5.3	5.3	5.6	7 435	27.0	6.8	6.7
55 540	-18.6	-7.4	6.2	6.1	2.4	3.1	10.5	8.3	2 685	10.0	4.7	4.6
73 748	10.9	3.3	4.2	4.3	8.8	7.3	7.2	7.5	9 569	90.0	5.3	5.1
54 523	1.9	17.1	5.3	5.9	3.8	-0.1	9.5	9.8	..	..	5.7	6.9
34 500	7.5	6.8	6.0	5.8	8.5	8.3	7.9	7.0	3 053	5.0	5.3	4.9
16 986	5.6	7.2	6.4	6.1	4.0	3.4	11.5	11.4	..	..	5.4	..
23 336	8.3	-0.4	5.5	5.5	3.1	..	7.4	7.8	..	..	7.8	7.4
19 045	-24.4	-13.5	4.5	4.5	5.7	2.9	8.0	7.5	2 400	133.0	4.4	4.2
36 603	3.2	-2.9	2.6	2.4	-0.3	5.2	3.4	3.2	3 043	28.0	5.4	4.8
21 675	36.7	10.2	2.7	2.7	4.0	6.8	3.1	3.4	1 119	14.0	3.7	3.2
5 123	0.1	..	4.5	4.6	1.8	0.2	12.8	12.0	..	..	3.9	3.9
8 477	0.2	-6.5	2.0	2.1	2.8	3.5	4.8	4.9	204	..	6.2	4.5
6 599	40.5	..	3.4	28.3	4.3	-63.4	5.9	8.1	484	..	5.8	..



## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Automobiles &amp; parts (31) continued</b>									
21	Haldex	240	Sweden	37	11.8	3.3	748	12.0	2.8
22	Phoenix Venture	249	UK	34	-73.6	7.4	2 361	-3.9	20.2
23	Beru	264	Germany	31	5.9	9.7	386	9.0	8.4
24	Phoenix	281	Germany	27	-37.7	-18.4	1 023	-11.3	-3.4
25	MGI Coutier	299	France	25	6.7	4.3	461	-1.7	-1.8
26	ElringKlinger	315	Germany	22	12.7	22.8	454	8.9	7.3
27	WET Automotive Systems	393	Germany	16	25.1	31.8	177	21.2	16.8
28	Wagon	404	UK	16	-22.9	10.2	688	9.9	-0.3
29	Brembo	420	Italy	14	24.5	8.4	678	6.9	8.5
30	EYBL International	454	Austria	13	53.3	..	342	-0.9	-3.2
31	Miba	486	Austria	11	8.7	7.1	328	11.6	4.0
32	Avon Rubber	528	UK	10	26.5	9.7	338	-3.7	-4.9
33	Nokian Tyres	535	Finland	10	15.7	5.0	602	13.8	12.5
34	Carraro	536	Italy	10	15.1	-1.6	514	31.8	10.0
35	Torotrak	583	UK	7	-11.4	-7.3	1	..	..
36	Progress-Werk Oberkirch	648	Germany	6	-18.7	63.7	201	4.7	7.9
37	Pankl Racing Systems	668	Austria	5	-2.6	56.7	76	15.2	12.1
				<b>680</b>	<b>8.1</b>	<b>1.6</b>	<b>50 347</b>	<b>2.3</b>	<b>0.6</b>
<b>Household goods &amp; textiles (34)</b>		<i>number of companies for calculation</i>		<b>25</b>	<b>25</b>	<b>18</b>	<b>25</b>	<b>25</b>	<b>25</b>
1	Electrolux	68	Sweden	227	23.2	4.6	13 357	-2.8	-3.9
2	Adidas-Salomon	135	Germany	88	2.3	0.8	6 478	3.4	2.0
3	Groupe SEB	214	France	42	3.9	13.3	2 339	-0.4	8.0
4	Christian Dior	218	France	41	0.0	-13.8	13 201	5.9	1.7
5	PUMA	237	Germany	37	23.4	22.9	1 530	20.1	36.8
6	Amer (now Amer Sports)	262	Finland	31	2.0	11.1	1 059	-4.1	-1.3
7	Pace Micro Technology	269	UK	30	-21.2	-14.2	339	44.3	-22.9
8	Societe BIC	298	France	25	-17.9	-18.6	1 386	1.9	-3.3
9	Dyson Technology (now Dyson James)	325	UK	21	25.3	13.9	391	17.8	7.0
10	Hunter Douglas	379	The Netherlands	17	0.0	..	1 720	3.9	-0.2
11	Gamma	442	The Netherlands	13	-16.4	..	861	-4.8	-1.7
12	Bacou-Dalloz	457	France	13	3.3	70.3	706	-11.3	14.4
13	Tarkett	464	Germany	12	12.8	-4.2	1 437	6.5	1.3
14	Head	483	The Netherlands	11	13.9	17.7	351	10.7	6.8
15	Villeroy & Boch	497	Germany	11	-13.3	-8.1	960	1.2	-0.5
16	Mariella Burani Fashion	574	Italy	8	56.7	..	412	17.7	24.2
17	Games Workshop	591	UK	7	-24.8	3.7	193	-9.8	8.1
18	NIBE Industrier	594	Sweden	7	27.3	..	350	29.2	23.5
19	Leifheit	606	Germany	7	-1.0	8.8	317	-5.4	-6.4
20	Waterford Wedgwood	628	Ireland	6	-34.4	1.1	832	-12.5	-8.4
21	Surteco	663	Germany	5	2.5	..	380	7.0	11.9
22	Linn Products	677	UK	5	33.2	52.1	50	0.0	9.6
23	Umbro	681	UK	5	31.0	..	198	10.0	12.5
24	Gorenje	685	Slovenia	5	7 042.9	..	903	10.3	10.5
25	Fiskars	686	Finland	5	25.0	-5.9	597	-3.7	-7.8
				<b>44</b>	<b>7.2</b>	<b>-27.3</b>	<b>25 965</b>	<b>3.7</b>	<b>-4.8</b>
<b>Beverages (41)</b>		<i>number of companies for calculation</i>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
1	Diageo	405	UK	16	-26.7	-46.3	12 559	-5.8	-11.5
2	Carlsberg	413	Denmark	15	142.1	46.0	4 838	3.9	1.5
3	InBev	427	Belgium	14	0.0	11.9	8 568	21.6	5.5

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
4 317	7.4	2.1	4.9	4.9	4.6	2.8	8.5	8.2	299	27.0	4.0	3.7
6 523	-1.2	5.0	1.4	5.2	-5.1	-5.0	5.2	19.4	..	..	2.5	4.8
2 664	-1.1	10.0	8.1	8.3	13.3	15.0	11.7	11.0	700	42.0	9.6	10.2
8 820	-9.3	-5.1	2.7	3.8	5.1	2.8	3.1	4.5	380	54.0	4.2	5.0
4 395	1.7	2.1	5.3	4.9	5.2	4.5	5.6	5.3	91	37.0	2.4	1.7
3 122	2.2	4.8	4.9	4.7	15.6	13.0	7.1	6.4	622	..	9.0	10.8
3 231	33.8	16.9	9.2	8.9	16.0	17.1	5.1	5.4	168	..	10.2	11.0
5 322	-5.6	-7.6	2.3	3.3	2.8	2.9	2.9	3.6	162	-3.0	5.2	5.9
3 951	1.4	6.9	2.1	1.8	8.1	8.5	3.6	2.9	429	22.0	10.9	7.4
3 606	10.5	6.1	3.7	2.4	3.3	2.3	3.5	2.5	..	..	4.7	7.5
2 586	5.7	3.2	3.4	3.5	9.0	8.2	4.4	4.3	36	9.0	7.3	8.2
4 334	-1.0	-5.4	2.9	2.2	4.3	4.3	2.3	1.8	85	-6.0	3.0	3.4
2 843	7.3	1.9	1.6	1.6	18.3	14.9	3.4	3.1	2 049	..	7.0	7.2
2 142	2.1	-4.7	1.9	2.1	5.0	4.6	4.5	3.9	183	..	3.7	4.4
96	-5.9	-13.0	720.0	..	-1 191.5	..	75.0	79.7	95	-6.0	..	..
987	4.6	4.3	2.8	3.7	7.3	7.8	5.8	7.4	67	..	8.5	8.3
609	6.8	15.3	6.9	8.1	3.5	-4.5	8.6	9.4	84	..	10.5	18.2
<b>264 252</b>	<b>-0.5</b>	<b>-0.1</b>	<b>1.4</b>	<b>1.3</b>	<b>9.1</b>	<b>8.6</b>	<b>2.5</b>	<b>2.3</b>	<b>40 448</b>	<b>41.4</b>	<b>3.8</b>	<b>3.5</b>
24	24	24	25	25	25	23	24	24	23	14	25	25
72 382	-6.2	-6.0	1.7	1.3	3.9	5.7	3.1	2.4	5 295	33.0	3.7	2.8
16 342	6.0	5.7	1.4	1.4	8.9	7.8	5.4	5.6	7 540	72.0	1.8	1.8
14 359	-2.1	3.5	1.8	1.7	7.4	8.3	2.9	2.8	1 495	-1.0	3.6	4.1
58 679	3.3	2.5	0.3	0.3	15.6	13.4	0.7	0.7	12 021	48.0	5.1	4.5
3 475	23.0	26.5	2.4	2.3	23.9	20.6	10.6	10.6	3 613	25.0	2.6	2.0
4 174	2.1	1.3	3.0	2.8	9.6	9.0	7.5	7.5	1 118	11.0	1.4	1.6
598	-21.5	-24.9	8.9	16.3	1.7	-29.8	50.4	50.2	243	27.0	1.2	1.3
8 650	-0.6	-3.2	1.8	2.2	11.5	12.8	2.9	3.5	2 497	48.0	4.5	4.9
1 420	-15.1	-6.4	5.3	5.0	14.1	7.8	14.7	10.0	..	..	4.1	2.7
16 066	1.0	2.9	1.0	1.0	10.5	10.9	1.1	1.1	1 772	26.0	2.8	3.3
9 293	-0.2	1.1	1.6	1.8	5.4	7.7	1.4	1.7	274	..	3.9	4.0
6 050	-3.3	-3.3	1.8	1.5	1.6	7.5	2.1	2.0	569	75.0	2.4	2.0
6 883	-1.3	-0.4	0.9	0.8	6.2	6.4	1.8	1.6	718	68.0	3.6	3.5
..	..	..	3.2	3.2	1.9	..	..	..	93	6.0	4.8	3.8
10 390	-3.9	-1.4	1.1	1.3	3.5	3.5	1.1	1.2	182	65.0	5.2	5.6
2 172	26.6	27.3	1.8	1.4	7.2	3.1	3.5	2.8	308	..	2.2	2.3
3 161	-0.5	8.4	3.7	4.4	10.2	13.1	2.2	3.0	182	-40.0	8.8	9.8
3 755	30.4	19.8	2.0	2.0	12.1	9.6	1.8	1.9	417	..	7.7	8.9
2 070	-11.2	-6.6	2.1	2.0	-4.1	3.6	3.2	2.9	113	..	2.2	3.3
8 482	-5.0	-4.3	0.7	1.0	-2.2	2.8	0.7	1.0	252	..	4.2	2.3
1 998	2.9	-2.6	1.4	1.5	11.7	10.4	2.7	2.7	282	..	3.4	4.2
370	6.9	10.9	10.3	7.7	1.0	..	13.9	11.2	..	..	8.0	6.0
198	2.6	-4.7	2.6	2.2	12.8	7.2	25.6	20.1	281	..	1.0	1.1
9 503	3.9	25.0	0.6	0.0	3.2	2.8	0.5	0.0	320	..	7.1	12.7
3 782	4.1	-5.6	0.8	0.6	10.1	-8.4	1.3	1.1	863	..	2.8	4.0
<b>122 016</b>	<b>12.2</b>	<b>-3.7</b>	<b>0.2</b>	<b>0.2</b>	<b>16.3</b>	<b>17.4</b>	<b>0.4</b>	<b>0.4</b>	<b>54 981</b>	<b>32.8</b>	<b>6.4</b>	<b>6.4</b>
3	3	3	3	3	3	3	3	3	3	2	3	3
23 720	-39.1	-30.8	0.1	0.2	25.4	23.8	0.7	0.5	32 545	11.0	3.6	4.2
23 602	-25.1	-4.8	0.3	0.1	4.6	8.0	0.6	0.2	3 184	..	8.5	10.7
74 694	95.4	25.7	0.2	0.2	9.7	11.6	0.2	0.4	19 252	101.0	9.5	7.7

## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
				<b>1 810</b>	<b>0.5</b>	<b>-0.4</b>	<b>114 537</b>	<b>-0.6</b>	<b>-2.9</b>
<b>Food producers (43)</b>		<i>number of companies for calculation</i>		24	24	21	24	24	24
1	Unilever	23	UK	1 040	-2.3	-4.1	40 169	-5.9	-8.0
2	Danone	101	France	131	0.8	1.3	13 700	4.3	-1.8
3	Kerry	109	Ireland	111	25.5	23.7	4 129	11.8	11.2
4	Cadbury Schweppes	133	UK	89	18.9	29.5	9 517	4.6	6.9
5	Danisco	147	Denmark	75	10.1	6.3	2 398	8.8	0.3
6	Arla Foods	204	Denmark	46	-9.5	..	6 400	17.1	7.7
7	CSM	222	The Netherlands	40	0.0	..	3 475	-1.2	-1.4
8	Vilmorin Clause	243	France	35	18.0	6.5	492	13.1	5.1
9	Numico	255	The Netherlands	33	3.1	..	1 722	-45.4	-26.5
10	Sudzucker	279	Germany	28	6.2	6.6	4 827	5.5	0.4
11	Tate & Lyle	286	UK	27	11.8	3.8	4 239	4.4	-6.0
12	Campina	289	The Netherlands	26	-1.5	2.3	3 559	-2.6	-3.1
13	Nutreco	296	The Netherlands	25	4.2	6.6	3 858	5.0	0.2
14	Aviagen	412	UK	15	-29.5	-17.6	199	-11.2	-0.3
15	Raisio	421	Finland	14	-32.7	-8.1	627	-27.2	-8.7
16	Royal Cosun	477	The Netherlands	12	26.1	9.6	1 317	-0.3	10.4
17	Wittington Investments	487	UK	11	33.3	4.5	7 394	5.1	5.5
18	Valio	505	Finland	11	2.9	1.9	1 582	1.0	1.4
19	Sygen International	518	UK	10	-6.5	9.4	183	-2.1	-8.6
20	Atria	592	Finland	7	4.5	8.4	834	9.0	9.4
21	Provimi	610	France	7	-56.7	-24.3	1 580	2.3	1.7
22	HK Ruokatalo	616	Finland	6	4.3	15.8	680	5.1	5.1
23	Greencore	624	Ireland	6	-15.7	-7.9	1 446	-1.8	-7.0
24	Devro	647	UK	6	-0.7	-15.4	210	1.9	-10.6
				<b>1 714</b>	<b>-1.4</b>	<b>5.8</b>	<b>34 002</b>	<b>1.0</b>	<b>2.3</b>
<b>Health (44)</b>		<i>number of companies for calculation</i>		23	23	22	23	23	23
1	Amersham (now GE Healthcare)	64	UK	257	-1.2	6.9	2 218	2.1	7.0
2	Carl Zeiss	70	Germany	209	10.0	12.7	2 135	5.2	1.3
3	Agfa-Gevaert	78	Belgium	191	-18.0	-6.1	3 762	-10.7	-8.5
4	Fresenius	100	Germany	133	9.9	2.6	7 271	2.9	-0.2
5	BioMerieux	104	France	127	-3.3	9.7	931	1.7	5.2
6	Essilor International	113	France	107	3.1	10.2	2 260	6.8	3.7
7	Dragerwerk	116	Germany	104	7.3	12.7	1 520	7.6	6.5
8	B Braun Melsungen	125	Germany	94	-10.7	7.1	2 793	5.5	9.8
9	Smith & Nephew	126	UK	94	-0.6	9.0	1 764	5.9	4.9
10	Orion	157	Finland	71	-17.9	-5.6	1 944	-14.1	26.0
11	Gambro	162	Sweden	68	-4.2	13.2	2 947	1.9	-0.1
12	Sorin	189	Italy	54	-11.3	6.2	719	-14.8	-9.1
13	Getinge	210	Sweden	44	53.8	22.2	1 206	18.9	10.2
14	William Demant	211	Denmark	44	9.9	8.6	578	11.2	7.1
15	Coloplast	280	Denmark	27	-1.4	..	816	7.1	14.3
16	Elekta	297	Sweden	25	19.6	21.2	321	4.2	10.3
17	Biacore International	352	Sweden	19	40.4	18.3	55	-3.5	-2.9
18	Gyrus	514	UK	10	12.3	0.5	123	11.8	20.1
19	Ion Beam Applications	537	Belgium	9	-48.5	-21.5	175	-25.2	-12.1
20	Huntleigh Technology	567	UK	8	2.5	0.0	281	6.4	5.3
21	Biocompatibles International	575	UK	8	17.0	-17.1	4	33.3	-65.5
22	Wavelight Laser Technologie	617	Germany	6	50.6	38.1	62	29.2	37.2
23	Bespak	683	UK	5	-44.0	-0.8	117	-6.4	1.8

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
573 166	-3.5	-3.3	1.6	1.6	8.0	8.5	3.1	3.0	117 687	23.0	3.8	3.5
23	24	23	24	24	24	24	23	24	18	13	24	24
227 000	-5.4	-6.6	2.6	2.5	8.6	12.0	4.6	4.4	54 212	15.0	2.5	2.4
89 449	1.0	-3.8	1.0	1.0	7.5	12.0	1.5	1.5	22 394	38.0	3.7	4.1
21 671	14.9	13.0	2.7	2.4	5.7	7.0	5.1	4.7	3 901	38.0	2.8	2.7
58 442	4.7	14.9	0.9	0.8	12.4	11.4	1.5	1.3	15 771	20.0	4.3	4.7
9 235	9.4	0.5	3.1	3.1	10.8	10.8	8.1	8.1	2 429	27.0	4.3	5.3
20 855	17.2	4.6	0.7	0.9	3.1	3.0	2.2	2.9	..	..	6.3	5.1
13 614	-0.7	-0.4	1.2	1.1	6.4	6.9	2.9	2.9	2 070	51.0	3.5	4.0
3 029	8.7	3.2	7.1	6.8	9.5	9.7	11.5	10.6	507	..	2.4	2.8
10 901	-58.4	-28.3	1.9	1.0	18.5	-18.5	3.0	1.2	6 186	..	5.2	2.4
17 494	-2.7	-9.5	0.6	0.6	11.0	9.7	1.6	1.4	3 252	28.0	10.2	5.1
6 687	0.6	-7.7	0.6	0.6	6.9	8.8	4.0	3.6	3 196	43.0	4.0	4.1
7 099	2.3	-0.1	0.7	0.7	0.4	0.9	3.7	3.8	..	..	3.9	3.8
12 615	-4.3	0.6	0.7	0.7	3.1	-2.6	2.0	1.8	1 269	67.0	2.2	2.4
1 515	1.4	-2.1	7.4	9.4	23.1	17.0	9.8	14.0	..	..	3.5	3.6
2 005	-29.0	-9.3	2.3	2.5	32.4	-1.6	7.1	7.5	405	55.0	4.3	6.9
3 993	-7.7	5.9	0.9	0.7	8.8	4.5	2.9	2.1	..	..	4.8	3.8
36 365	0.5	1.5	0.2	0.1	7.8	8.2	0.3	0.2	..	..	4.4	3.5
4 389	0.5	0.3	0.7	0.7	4.3	1.1	2.4	2.3	..	..	8.1	7.2
1 261	8.1	0.9	5.6	5.8	4.9	5.9	8.1	9.3	178	37.0	5.5	3.7
..	..	..	0.8	0.9	4.7	4.1	..	2.0	190	..	3.5	6.3
8 170	1.8	8.6	0.4	1.0	4.5	5.8	0.8	1.9	498	44.0	1.8	1.8
4 713	-7.1	4.9	0.9	0.9	4.6	4.2	1.3	1.2	269	..	4.1	4.5
10 512	-6.5	-8.4	0.4	0.5	5.8	5.6	0.6	0.7	677	..	4.2	4.1
2 152	4.7	-11.2	2.7	2.8	14.4	14.6	2.7	2.8	283	10.0	7.6	4.9
<b>239 313</b>	<b>0.6</b>	<b>2.3</b>	<b>5.0</b>	<b>5.2</b>	<b>9.8</b>	<b>8.8</b>	<b>7.2</b>	<b>7.3</b>	<b>37 827</b>	<b>14.9</b>	<b>5.1</b>	<b>5.4</b>
23	23	23	23	23	23	23	23	23	20	19	22	22
10 312	2.6	5.6	11.6	12.0	13.1	17.7	24.9	25.9	..	..	10.6	9.9
13 543	-4.4	-0.5	9.8	9.4	5.7	1.9	15.4	13.4	..	..	4.1	5.2
16 224	-12.8	-8.4	5.1	5.5	12.5	7.1	11.8	12.5	2 926	29.0	2.7	3.6
67 838	4.0	5.7	1.8	1.7	11.6	11.1	2.0	1.9	3 382	-50.0	4.1	4.4
5 430	-0.9	-0.1	13.6	14.3	13.8	10.5	23.4	23.9	1 607	55.0	8.1	8.2
24 045	10.7	4.7	4.7	4.9	15.0	15.1	4.5	4.8	6 130	31.0	6.4	6.1
9 781	-5.4	0.9	6.8	6.9	6.6	4.3	10.6	9.4	310	25.0	3.0	3.5
29 822	2.0	2.5	3.4	4.0	7.3	6.0	3.2	3.6	..	..	6.1	5.9
7 866	5.6	-0.3	5.3	5.7	14.1	17.4	11.9	12.7	6 964	-5.0	7.6	6.1
4 614	-17.2	-5.4	3.6	3.8	6.6	3.9	15.3	15.4	1 602	26.0	1.2	1.4
21 391	0.6	3.1	2.3	2.5	-1.8	5.9	3.2	3.3	3 722	41.0	5.5	7.9
4 776	-13.1	-4.8	7.5	7.2	-3.5	-10.1	11.3	11.1	868	1 834.0	5.0	5.5
6 713	10.8	7.7	3.6	2.8	13.8	13.7	6.5	4.7	1 928	21.0	3.2	3.6
4 490	5.1	4.0	7.5	7.6	23.3	22.1	9.7	9.3	2 373	33.0	7.1	3.5
6 085	5.4	13.9	3.3	3.6	16.3	16.4	4.5	4.8	1 989	27.0	8.9	10.2
1 136	12.4	12.1	7.8	6.8	10.9	12.0	22.0	20.7	1 054	106.0	2.8	1.3
342	1.8	8.3	34.9	24.0	-1.1	5.3	56.1	40.7	1 427	1 316.0	1.8	3.5
617	-3.7	3.1	8.3	8.3	6.4	3.6	16.6	14.3	643	168.0	3.3	4.5
804	-53.2	-18.8	5.4	7.8	5.9	-43.6	11.7	10.6	161	22.0	8.6	13.2
2 530	8.6	13.1	2.7	2.8	13.9	12.9	3.0	3.2	268	10.0	8.2	9.5
72	7.5	-60.6	188.0	214.3	-293.6	-366.7	104.4	96.0	133	15.0	..	..
215	39.6	30.8	10.2	8.8	8.8	10.4	29.5	27.3	135	..	8.1	2.1
667	-19.3	-5.4	4.3	7.2	10.4	2.4	7.5	10.8	205	12.0	6.0	17.6

## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
				<b>1 010</b>	<b>4.6</b>	<b>1.1</b>	<b>38 088</b>	<b>4.5</b>	<b>-0.6</b>
<b>Personal care &amp; household (47)</b>		<i>number of companies for calculation</i>		8	8	8	8	8	8
1	L'Oreal	39	France	507	5.6	5.5	14 534	3.6	2.3
2	Henkel	61	Germany	272	5.8	-7.4	10 592	12.3	-6.7
3	Beiersdorf	119	Germany	101	1.0	3.2	4 546	-2.7	0.0
4	Reckitt Benckiser	138	UK	85	5.3	6.3	5 468	4.3	4.0
5	Clarins	330	France	21	1.8	14.8	939	5.6	3.3
6	SSL International	467	UK	12	-24.5	-9.5	648	-23.9	-8.2
7	Oriflame Cosmetics	613	Belgium	6	2.9	18.1	671	2.9	14.5
8	PZ Cussons	649	UK	6	7.4	7.5	690	4.9	6.3
				<b>17 571</b>	<b>2.3</b>	<b>11.9</b>	<b>140 716</b>	<b>2.1</b>	<b>8.7</b>
<b>Pharma &amp; biotech (48)</b>		<i>number of companies for calculation</i>		94	89	84	94	88	82
1	GlaxoSmithKline	4	UK	4 010	1.7	2.3	28 757	-5.1	-0.2
2	Sanofi-Aventis	5	France	3 961	-2.6	56.6	25 418	4.6	57.6
3	AstraZeneca	9	UK	2 798	10.2	11.1	15 763	13.7	9.1
4	Boehringer Ingelheim	20	Germany	1 232	4.8	6.5	8 157	10.5	6.8
5	Schering	26	Germany	933	-1.5	2.6	4 907	1.6	0.4
6	Merck	32	Germany	599	-0.9	1.8	5 859	-18.6	-8.0
7	Novo Nordisk	33	Denmark	585	3.8	3.1	3 903	9.4	6.9
8	ALTANA	41	Germany	445	8.1	16.1	2 963	8.3	8.7
9	UCB	49	Belgium	376	39.3	27.7	3 068	3.4	7.4
10	Schwarz Pharma	74	Germany	198	37.2	22.7	947	-36.7	7.2
11	Lundbeck	84	Denmark	173	-29.8	-3.6	1 308	-2.1	8.3
12	Shire Pharmaceuticals	88	UK	159	-12.3	4.2	1 066	-0.8	9.1
13	Pierre Fabre	94	France	145	7.1	1.7	1 426	6.8	7.0
14	Ipsen	97	Luxembourg	136	4.1	..	737	2.6	4.1
15	Elan	98	Ireland	136	-27.3	-22.8	341	-39.2	-35.7
16	Novozymes	112	Denmark	109	8.0	6.1	810	3.8	4.5
17	Merial	115	UK	104	6.0	3.2	1 375	8.3	5.1
18	Cambridge Antibody	167	UK	62	-1.9	27.3	22	83.3	30.1
19	Chiesi Farmaceutici	168	Italy	62	-4.7	..	474	14.2	..
20	Chr Hansen	170	Denmark	61	-9.6	11.6	601	3.1	-1.3
21	Nyco	194	Denmark	51	55.8	71.6	645	1.6	8.2
22	Genmab	195	Denmark	50	7.9	23.8	1	-88.9	..
23	Gedeon Richter	212	Hungary	43	12.3	17.2	606	2.5	12.2
24	Acambis	220	UK	41	45.2	17.8	121	-49.4	110.4
25	SkyePharma	223	UK	40	11.6	34.2	88	17.3	10.6
26	Recordati	234	Italy	37	13.9	6.4	488	0.0	4.1
27	Zeltia	239	Spain	37	-28.3	4.6	79	6.8	9.0
28	Krka	242	Slovenia	35	14.3	14.0	473	17.1	12.3
29	Biovitrum	260	Sweden	32	-10.8	0.5	71	-61.2	3.0
30	Zambon	265	Italy	31	-3.4	..	433	-5.7	..
31	Sartorius	270	Germany	30	8.1	5.6	468	5.9	1.4
32	Innogenetics	276	Belgium	28	10.4	15.6	71	9.2	10.2
33	GPC Biotech	277	Germany	28	86.4	11.4	13	-38.1	2.7
34	Vernalis	283	UK	27	-38.6	-3.3	21	16.7	119.0
35	Active Biotech	288	Sweden	27	-15.7	-3.8	8	..	-10.1
36	Flamel Technologies	291	France	26	74.8	49.1	41	115.8	60.1
37	Qiagen	295	The Netherlands	25	15.5	10.6	280	8.1	13.0
38	Guerbet	304	France	24	0.0	6.3	248	10.2	5.9

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
<b>165 128</b>	<b>0.1</b>	<b>-2.1</b>	<b>2.7</b>	<b>2.7</b>	<b>16.2</b>	<b>12.4</b>	<b>6.1</b>	<b>5.9</b>	<b>82 892</b>	<b>19.2</b>	<b>2.9</b>	<b>3.2</b>
<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>7</i>	<i>8</i>	<i>8</i>
52 081	3.1	2.0	3.5	3.4	15.4	15.9	9.7	9.5	41 897	18.0	3.0	3.5
49 947	3.4	-5.9	2.6	2.7	19.5	5.4	5.4	5.3	10 826	45.0	3.2	3.4
16 492	-9.6	-2.4	2.2	2.1	11.1	10.4	6.1	5.5	7 989	13.0	3.4	3.3
19 900	-2.5	-3.9	1.6	1.5	19.6	18.3	4.3	3.9	17 706	12.0	2.0	1.9
5 459	4.0	2.3	2.2	2.3	13.0	10.7	3.8	3.8	1 823	31.0	2.5	3.7
5 095	-20.8	-12.7	1.9	1.9	1.0	5.6	2.4	2.5	784	-1.0	2.0	2.2
4 527	8.3	12.3	1.0	1.0	15.6	17.5	1.4	1.5	1 086	..	2.8	4.1
11 627	-0.3	2.4	0.8	0.8	9.9	11.1	0.5	0.5	781	8.0	2.8	4.3
<b>531 521</b>	<b>1.8</b>	<b>7.8</b>	<b>12.5</b>	<b>12.4</b>	<b>15.4</b>	<b>13.5</b>	<b>32.9</b>	<b>30.3</b>	<b>341 157</b>	<b>37.1</b>	<b>3.5</b>	<b>3.7</b>
<i>92</i>	<i>90</i>	<i>84</i>	<i>84</i>	<i>81</i>	<i>90</i>	<i>83</i>	<i>92</i>	<i>87</i>	<i>72</i>	<i>57</i>	<i>68</i>	<i>64</i>
99 837	-3.2	-2.6	13.9	13.0	30.3	30.2	40.2	38.2	108 038	16.0	4.9	4.1
96 439	..	46.8	15.6	16.7	11.6	8.0	41.1	..	98 605	175.0	..	..
64 200	6.3	6.9	17.8	18.3	22.3	21.8	43.6	42.0	59 035	2.0	5.0	6.6
35 284	3.8	8.3	15.1	15.9	16.8	10.6	34.9	34.6	..	..	5.2	7.0
26 131	-1.6	1.4	19.0	19.6	14.6	14.0	35.7	35.7	10 296	27.0	4.3	4.8
28 877	-15.6	-5.6	10.2	8.4	10.9	7.3	20.7	17.7	3 712	73.0	4.0	3.9
19 520	6.2	9.7	15.0	15.8	23.6	24.1	30.0	30.7	11 908	8.0	10.8	9.4
10 691	6.1	5.9	15.0	15.1	20.6	20.8	41.6	40.9	6 405	14.0	6.2	6.2
12 015	-0.6	5.3	12.3	9.1	13.8	15.8	31.3	22.3	6 589	31.0	..	5.5
3 813	-1.0	3.6	20.9	9.6	2.2	18.4	51.8	37.4	2 206	94.0	2.0	1.7
5 155	-1.3	13.1	13.2	18.4	26.0	21.4	33.5	47.1	4 352	27.0	11.9	12.4
1 892	-0.7	8.7	14.9	16.9	8.7	-40.1	84.0	95.2	4 455	36.0	4.4	4.1
9 179	4.5	5.0	10.2	10.2	4.0	3.9	15.8	15.4	..	..	3.1	4.2
3 769	4.3	3.1	18.5	18.2	21.2	17.7	36.2	36.2	..	..	4.2	4.2
1 832	-31.8	-26.0	39.9	33.4	-84.4	-139.4	74.3	69.6	2 526	-57.0	14.1	4.6
3 928	3.0	5.5	13.4	12.9	17.8	16.9	27.7	26.4	..	..	4.7	6.8
6 246	-1.9	0.8	7.6	7.7	13.1	12.9	16.7	15.4	..	..	4.9	5.1
283	-4.4	8.1	283.3	529.5	-265.0	-541.7	220.2	214.7	511	78.0	4.5	58.3
2 517	6.7	..	13.1	15.8	9.8	5.8	24.8	27.7	..	..	1.3	..
3 644	2.3	0.2	10.1	11.6	7.2	5.3	16.7	18.9	1 070	153.0	10.8	10.1
3 019	6.6	7.7	8.0	5.2	3.1	-2.4	17.0	11.7	..	..	4.5	2.7
206	3.5	43.3	5 019.0	516.8	-10 766.4	-522.2	243.6	233.7	403	33.0	300.0	33.3
..	..	..	7.1	6.5	25.1	22.2	..	..	2 148	59.0	..	..
289	-6.8	24.4	33.7	11.8	25.8	21.8	141.2	90.7	397	-22.0	4.1	3.8
438	-8.0	2.1	44.9	47.2	-33.3	-74.7	90.2	74.4	520	6.0	6.8	8.0
1 796	-16.8	-2.2	7.6	6.7	17.5	9.2	20.8	15.2	1 268	73.0	3.9	3.5
532	-9.8	5.5	46.5	69.2	-7.3	-32.4	69.0	86.8	1 195	27.0	3.8	13.5
4 678	5.7	9.9	7.4	7.6	15.4	15.1	7.5	6.9	1 109	17.0	16.9	21.0
579	3.8	15.0	45.0	19.6	-12.5	20.2	55.1	64.1	..	..	22.5	5.5
2 352	-2.9	..	7.2	7.0	6.3	9.6	13.2	13.2	..	..	5.5	5.4
3 711	-0.1	-0.1	6.3	6.2	6.5	3.2	8.0	7.4	410	..	1.9	2.0
589	-0.3	0.6	39.5	39.1	-20.8	-26.2	47.6	43.0	284	-11.0	4.2	4.6
171	-12.3	-0.6	212.4	70.5	-335.6	-128.6	161.5	75.9	318	24.0	7.7	..
131	-37.9	3.8	129.2	245.4	-202.8	-388.9	207.1	209.4	191	24.0	4.8	5.6
151	-15.6	-16.4	331.1	..	-291.2	..	175.4	175.5	182	47.0	..	..
224	28.7	17.5	63.4	78.3	15.9	-15.8	116.1	85.5	266	-10.0	24.4	10.5
1 322	-14.9	..	9.0	8.4	21.8	18.9	19.0	14.0	1 362	29.0	3.2	5.4
1 140	1.7	2.6	9.7	10.7	12.4	10.2	21.1	21.4	251	66.0	7.7	5.3

## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Pharma &amp; biotech (48) continued</b>									
39	Stada Arzneimittel	309	Germany	23	12.2	-21.3	814	9.3	14.8
40	Galen (now Warner Chilcott)	323	UK	21	7.4	23.0	318	11.6	37.6
41	Q-Med	331	Sweden	20	19.6	15.1	91	35.8	29.4
42	Xenova	334	UK	20	-5.3	-2.4	6	-45.5	26.0
43	Egis Pharmaceuticals	342	Hungary	20	-1.7	12.2	354	8.3	7.4
44	GW Pharmaceuticals	343	UK	20	9.9	28.0	0	-100.0	..
45	FAES Farma	345	Spain	20	..	..	163	..	..
46	Biotest	358	Germany	19	0.9	1.0	218	-1.8	-4.6
47	Transgene	363	France	18	2.7	-2.7	3	0.0	44.2
48	ML Laboratories (now Innovata)	364	UK	18	18.2	5.6	11	22.2	-5.4
49	Ardana Bioscience (now Ardana)	370	UK	18	..	..	0	-100.0	..
50	Bavarian Nordic	390	Denmark	17	92.6	20.7	22	-67.6	..
51	Astex Technology (now Astex Therapeutics)	396	UK	16	31.2	48.8	4	0.0	58.7
52	Crucell	399	The Netherlands	16	-20.3	-0.4	18	260.0	31.0
53	Intercell	403	Austria	16	17.9	39.0	3	200.0	..
54	Medigene	415	Germany	14	-28.8	-13.7	13	550.0	22.9
55	Axis-Shield	422	UK	14	-22.2	14.6	74	4.2	7.2
56	Randox Laboratories	424	UK	14	2.0	30.0	44	15.8	16.3
57	Bioinvent	429	Sweden	14	-3.8	40.7	7	0.0	5.3
58	ProStrakan	430	UK	14	92.8	14.3	30	150.0	115.4
59	Evotec OAI	436	Germany	14	-10.9	-15.7	73	-5.2	5.0
60	Omega Pharma	437	Belgium	14	102.8	202.0	833	14.9	24.7
61	Microscience	438	UK	14	-6.3	32.4	0	..	-100.0
62	Oxford Biomedica	447	UK	13	-14.7	2.3	1	0.0	0.0
63	Ark Therapeutics	448	UK	13	70.4	26.3	0	..	..
64	Arakis	453	UK	13	..	..	0	..	..
65	Morphosys	461	Germany	12	37.7	7.8	22	46.7	11.2
66	Vectura	462	UK	12	23.8	100.9	4	-20.0	0.0
67	Stallergenes	466	France	12	43.3	33.4	95	10.5	14.7
68	Cerep	471	France	12	1.0	1.5	51	50.0	22.1
69	Pharmagene	480	UK	12	4.1	21.1	6	-14.3	14.5
70	Zentiva	489	The Netherlands	11	0.3	..	276	10.8	..
71	NicOx	508	France	10	-31.4	-5.2	2	100.0	..
72	PPL Therapeutics	525	UK	10	-27.7	-9.2	0	..	..
73	Biotage	529	Sweden	10	-3.5	-8.9	41	115.8	50.6
74	Karo Bio	539	Sweden	9	3.3	52.6	4	-55.6	-35.6
75	Phytopharm	544	UK	9	-12.1	16.3	2	-33.3	0.0
76	Alizyme	548	UK	9	-45.0	-6.8	2	0.0	..
77	Biotie Therapies	557	Finland	8	-21.6	-6.4	4	100.0	..
78	Franz Haniel & Cie	560	Germany	8	300.0	..	24 317	5.6	6.2
79	Servier	561	UK	8	1.7	6.1	10	11.1	0.0
80	Pharmexa	563	Denmark	8	-35.7	-16.8	3	0.0	0.0
81	Biolipox	573	Sweden	8	25.1	..	0	..	..
82	Napp Pharmaceutical	572	UK	8	-61.4	-25.5	147	1.4	8.5
83	Epigenomics	595	Germany	7	-26.9	-4.9	8	-27.3	..
84	Protherics	614	UK	6	23.6	72.4	27	-10.0	34.9
85	Lorantis	615	UK	6	17.2	19.0	0	..	..
86	Sanochemia Pharmazeutika	618	Austria	6	52.1	22.7	26	36.8	26.0
87	MWG-Biotech	645	Germany	6	170.3	-8.0	33	-23.3	-14.1
88	Pharming	658	The Netherlands	6	4.7	25.0	1	..	-51.9



Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
2 586	4.9	12.3	2.9	2.8	10.3	11.4	9.0	8.4	1 564	100.0	0.9	1.5
1 045	-33.9	-4.5	6.6	6.9	28.5	21.4	20.2	12.4	..	..	1.6	5.6
495	18.1	30.6	22.2	25.2	-3.8	-3.0	40.8	40.4	85	-13.0	14.3	16.4
93	-11.4	-11.5	336.2	193.5	-324.8	-218.2	216.9	202.8	25	-55.0	16.7	9.1
..	..	..	5.6	6.1	8.1	7.6	..	4.3	497	105.0	..	..
128	8.5	38.7	..	255.9	..	-214.3	153.8	151.8	113	-39.0	..	..
747	..	..	12.0	..	12.3	..	26.1	..	902	..	2.5	..
1 025	-5.8	-5.6	8.5	8.3	8.4	2.7	18.1	16.9	114	118.0	6.4	8.6
168	1.2	..	608.0	592.0	-862.4	-733.3	108.6	107.0	105	66.0	..	33.3
115	-25.8	-21.6	165.7	171.3	-152.4	-133.3	158.5	99.5	179	226.0	27.3	11.1
20	33.3	71.0	..	..	-17 352.4	-1 700.0	878.5	..	89	..	..	..
117	42.7	17.6	74.9	12.6	-52.2	42.6	140.8	104.3	429	36.0	118.2	5.9
103	12.0	27.2	401.8	306.3	-365.2	-300.0	156.0	133.2	..	..	25.0	75.0
210	15.4	9.7	88.8	401.2	-150.0	-580.0	76.1	110.2	680	236.0	11.1	60.0
140	16.7	21.5	524.0	1 333.0	-601.5	-1 600.0	112.3	111.1	255	..	33.3	..
117	-5.6	-9.9	110.9	1 013.0	-110.3	-1 600.0	123.2	163.4	133	69.0	7.7	..
440	-3.3	2.3	19.1	25.6	-4.3	-19.7	32.2	40.0	226	86.0	6.8	7.0
510	32.1	13.7	32.0	36.3	-11.6	5.3	27.6	35.8	..	..	4.5	5.3
101	-15.1	1.7	199.4	207.3	-166.8	-157.1	138.2	121.9	41	..	..	..
158	79.5	31.8	46.5	60.3	-84.8	-108.3	88.4	82.3	..	..	36.7	..
639	-1.1	3.0	18.9	20.1	-126.3	-19.5	21.6	23.9	174	88.0	4.1	18.2
2 723	16.9	25.6	1.7	0.9	5.4	9.0	5.1	2.9	1 279	..	2.2	1.7
70	-2.8	16.7	..	..	-26 250.8	..	193.7	201.0	..	..	..	..
62	-13.9	-5.3	1 298.0	1 522.0	-2 423.7	-1 900.0	209.4	211.4	192	127.0	..	..
86	68.6	43.7	..	..	-10 420.2	..	150.2	148.6	178	4.0	..	..
36	..	..	..	..	..	..	353.1	..	..	..	..	..
117	23.2	3.7	56.3	60.0	0.6	-20.0	105.9	94.7	209	91.0	9.1	6.7
101	3.1	22.5	308.3	199.2	-311.7	-200.0	122.1	101.6	119	35.0	25.0	100.0
509	6.9	5.9	12.9	9.9	16.6	15.1	24.0	17.9	341	..	3.2	3.5
465	36.0	24.2	23.4	34.7	0.3	-2.9	25.6	34.5	113	10.0	5.9	11.8
76	-3.8	-0.9	193.0	158.9	-195.9	-157.1	152.4	140.8	17	-52.0	..	..
2 885	49.7	..	4.1	4.5	23.6	24.1	3.9	5.8	1 045	..	6.9	5.6
56	-6.7	7.6	522.0	1 522.0	-762.0	-2 000.0	186.4	253.7	140	121.0	..	..
126	-37.9	-6.9	..	..	-39 024.6	..	78.8	67.6	..	..	..	..
246	48.2	25.3	23.8	53.2	-27.8	-152.6	39.6	60.8	74	47.0	2.4	..
85	-27.4	-11.3	233.8	100.6	-293.2	-266.7	110.0	77.4	37	70.0	..	11.1
40	17.6	8.9	448.5	340.3	-652.1	-266.7	224.3	300.3	58	-36.0	..	..
16	6.7	2.2	443.0	805.0	-352.0	-800.0	553.8	1 073.3	233	-27.0	..	..
47	-28.8	-11.6	206.8	527.5	-181.1	-700.0	176.0	159.8	40	..	..	..
53 200	21.7	14.3	0.0	0.0	4.1	3.1	0.2	0.1	..	..	1.2	1.2
66	-9.6	-7.4	79.9	87.3	5.4	..	121.1	107.7	..	..	..	22.2
60	-43.4	-20.6	264.7	411.3	-289.6	-533.3	132.3	116.4	96	191.0	..	33.3
33	94.1	..	..	..	..	..	229.7	356.5	..	..	..	..
662	-5.8	0.5	5.2	13.6	11.6	10.3	11.5	28.0	..	..	4.1	4.1
145	1.4	8.0	86.8	86.3	-135.1	-63.6	47.9	66.4	134	..	12.5	9.1
212	-3.2	13.8	23.7	17.3	-12.5	6.7	30.2	23.7	182	28.0	7.4	16.7
49	2.1	17.8	..	..	..	..	130.6	113.8	..	..	..	..
149	0.7	2.6	24.3	21.8	-7.0	-26.3	42.3	28.0	86	..	11.5	21.1
325	-14.5	-7.1	17.4	4.9	-112.3	-25.6	17.6	5.6	11	..	12.1	7.0
39	8.3	-37.4	553.0	..	-2 076.3	..	141.8	146.7	284	..	100.0	..

## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Pharma &amp; biotech (48) continued</b>									
89	LION Bioscience	660	Germany	6	-56.2	-44.9	10	-50.0	-37.0
90	NeuroSearch	666	Denmark	5	..	-33.8	16	-27.3	38.7
91	Norbrook Laboratories	678	UK	5	3.6	17.7	97	9.0	12.0
92	Virbac	680	France	5	..	..	355	-1.1	3.0
93	Proteome Sciences	690	UK	5	-2.2	68.8	0	..	..
94	CeNeS Pharmaceuticals	689	UK	5	18.3	-25.7	0	-100.0	-100.0
				<b>107</b>	<b>-6.2</b>	<b>4.3</b>	<b>16 644</b>	<b>1.7</b>	<b>-1.8</b>
<b>Tobacco (49)</b>		<i>number of companies for calculation</i>		2	2	2	2	2	2
1	BAT	123	UK	95	-8.2	4.3	15 204	1.8	-1.8
2	Swedish Match	458	Sweden	13	13.0	4.2	1 440	-0.2	-1.6
				<b>190</b>	<b>-4.1</b>	<b>-2.1</b>	<b>48 444</b>	<b>-2.3</b>	<b>-0.1</b>
<b>General retailers (52)</b>		<i>number of companies for calculation</i>		7	7	6	7	7	7
1	GUS	124	UK	95	3.1	-2.0	10 999	3.2	6.4
2	lastminute.com	252	UK	33	7.6	17.8	621	133.5	188.0
3	Boots	259	UK	32	6.1	-6.2	7 725	2.7	0.9
4	Baxi	549	UK	9	-15.1	-3.2	636	-36.1	-12.5
5	Karstadt Quelle	555	Germany	8	-60.6	-25.2	13 447	-11.9	-5.8
6	Body Shop International	611	UK	7	-13.2	0.7	592	10.0	3.4
7	Otto	626	Germany	6	4.6	..	14 424	0.8	0.1
				<b>193</b>	<b>12.8</b>	<b>5.7</b>	<b>27 582</b>	<b>-2.8</b>	<b>-4.9</b>
<b>Leisure &amp; hotels (53)</b>		<i>number of companies for calculation</i>		3	3	1	3	3	3
1	Amadeus Global Travel	89	Spain	153	5.7	5.7	2 057	6.6	4.8
2	TUI	267	Germany	31	47.4	..	18 046	-6.1	-7.0
3	Thomas Cook	547	Germany	9	76.1	..	7 479	3.3	-1.7
				<b>835</b>	<b>-5.0</b>	<b>-8.3</b>	<b>50 127</b>	<b>-5.4</b>	<b>-16.5</b>
<b>Media &amp; entertainment (54)</b>		<i>number of companies for calculation</i>		13	12	11	13	13	13
1	Lagardere	54	France	321	-2.7	1.2	13 389	7.5	0.2
2	Vivendi Universal	75	France	196	15.3	-6.1	21 428	-15.9	-28.0
3	Reuters	82	UK	181	-25.1	-24.2	4 075	-9.8	-9.4
4	Aegis	227	UK	39	7.0	6.0	1 055	15.2	12.2
5	BBC	287	UK	27	-10.0	7.4	5 417	3.5	4.3
6	Spector Photo	391	Belgium	16	-7.5	-0.1	358	-5.0	-11.4
7	Channel Four Television	449	UK	13	21.3	5.3	1 188	9.3	4.8
8	Eniro	504	Sweden	11	-5.0	16.6	544	0.2	2.9
9	Photo-Me	524	UK	10	-7.5	17.1	333	7.1	8.1
10	JC Decaux	568	France	8	-7.2	-17.7	1 631	5.6	2.2
11	Straffors	693	Sweden	5	..	..	339	2.4	-2.3
12	OFCOM	695	UK	5	-0.4	42.4	205	345.7	101.7
13	Sondagsavisen	698	Denmark	5	39.2	..	165	-2.4	6.9
				<b>701</b>	<b>20.6</b>	<b>5.1</b>	<b>91 872</b>	<b>7.0</b>	<b>8.2</b>
<b>Support services (58)</b>		<i>number of companies for calculation</i>		26	24	22	26	26	24
1	Deutsche Post	58	Germany	290	85.9	27.5	43 168	7.9	9.0
2	Giesecke & Devrient	166	Germany	63	-15.1	-10.6	1 157	10.5	1.2
3	Assa Abloy	182	Sweden	55	11.9	10.9	2 826	6.0	4.3
4	De La Rue	305	UK	24	-21.1	-11.8	909	-5.7	-0.4
5	La Poste	310	France	23	76.9	..	18 677	3.7	..

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
85	-52.0	-47.6	54.8	62.6	-144.2	-115.0	64.5	70.7	9	11.0	10.0	5.0
175	-2.2	3.9	33.4	..	-57.3	-18.2	30.6	..	160	..	12.5	..
734	-0.3	9.2	5.3	5.6	6.7	3.4	7.0	6.7	..	..	4.1	12.4
2 248	1.7	2.2	1.4	..	6.0	9.2	2.3	..	289	..	3.4	2.8
42	-2.3	37.9	..	..	-7 958.3	..	116.9	116.7	161	50.0	..	..
14	7.7	-53.5	..	207.5	-10 610.5	-450.0	350.7	319.2	47	83.0	..	..
<b>75 992</b>	<b>-0.1</b>	<b>0.9</b>	<b>0.6</b>	<b>0.7</b>	<b>18.7</b>	<b>17.4</b>	<b>1.4</b>	<b>1.5</b>	<b>36 153</b>	<b>28.7</b>	<b>3.4</b>	<b>4.1</b>
2	2	2	2	2	2	2	2	2	2	2	2	2
60 953	0.1	0.7	0.6	0.7	18.0	17.5	1.6	1.7	32 964	29.0	3.4	4.0
15 039	-0.5	1.6	0.9	0.8	25.9	17.1	0.8	0.7	3 189	26.0	3.8	4.2
<b>286 056</b>	<b>-2.5</b>	<b>-2.3</b>	<b>0.4</b>	<b>0.4</b>	<b>1.7</b>	<b>5.0</b>	<b>0.7</b>	<b>0.7</b>	<b>22 577</b>	<b>3.0</b>	<b>3.0</b>	<b>2.4</b>
7	7	7	7	7	7	7	7	7	4	4	7	7
73 088	-4.2	1.3	0.9	0.9	9.6	9.1	1.3	1.2	13 112	6.0	4.5	3.4
2 220	81.4	49.9	5.4	11.7	-16.9	-25.6	15.0	25.3	..	..	5.6	9.4
69 631	1.1	-4.0	0.4	0.4	9.2	10.3	0.5	0.4	6 239	-15.0	5.3	4.0
5 513	-2.2	-4.8	1.4	1.0	11.0	10.4	1.6	1.8	..	..	3.1	3.0
74 340	-7.1	-6.0	0.1	0.1	-10.3	1.4	0.1	0.3	2 521	42.0	1.3	1.7
6 836	15.9	2.7	1.1	1.4	8.9	8.0	1.0	1.3	705	52.0	6.8	3.3
54 428	-1.8	-0.5	0.0	0.0	3.1	3.0	0.1	0.1	..	..	1.8	1.3
<b>93 062</b>	<b>-5.7</b>	<b>-3.0</b>	<b>0.7</b>	<b>0.6</b>	<b>3.8</b>	<b>1.4</b>	<b>2.1</b>	<b>1.7</b>	<b>8 553</b>	<b>58.7</b>	<b>2.6</b>	<b>2.5</b>
3	3	3	3	3	3	3	3	3	2	2	3	3
5 760	12.3	13.7	7.4	7.5	16.3	15.6	26.6	28.3	4 354	56.0	3.8	2.8
62 674	-7.3	-3.4	0.2	0.1	4.6	2.1	0.5	0.3	4 199	62.0	3.3	2.8
24 628	-5.2	-4.6	0.1	0.1	-1.4	-4.0	0.4	0.2	..	..	0.5	1.7
<b>159 276</b>	<b>-3.0</b>	<b>-31.5</b>	<b>1.7</b>	<b>1.7</b>	<b>8.6</b>	<b>1.3</b>	<b>5.2</b>	<b>5.4</b>	<b>51 843</b>	<b>33.2</b>	<b>5.9</b>	<b>4.4</b>
13	13	13	13	12	13	12	13	12	10	8	13	13
47 287	9.9	1.3	2.4	2.7	5.1	3.7	6.8	7.7	8 362	34.0	5.1	4.0
39 181	-21.0	-53.2	0.9	0.7	14.1	1.0	5.0	3.4	27 676	42.0	5.4	4.1
15 980	-6.7	-5.0	4.4	5.3	7.3	2.5	11.3	14.1	7 287	11.0	3.9	4.1
10 149	20.3	14.3	3.7	4.0	9.6	8.2	3.8	4.3	1 894	44.0	3.9	3.2
27 264	-1.3	2.2	0.5	0.6	-5.5	-10.4	1.0	1.1	..	..	12.8	6.5
1 710	5.1	-1.0	4.6	4.7	0.7	4.5	9.6	10.9	42	-25.0	1.7	2.1
884	6.0	-5.1	1.1	1.0	7.3	5.9	14.5	12.7	..	..	0.6	0.5
4 752	3.4	9.6	1.9	2.0	18.5	13.4	2.2	2.4	1 319	39.0	1.3	2.6
1 671	-8.1	-0.7	3.0	3.5	14.6	10.3	6.0	5.9	633	8.0	12.6	6.4
6 933	3.4	-1.9	0.5	0.5	12.3	10.4	1.1	1.2	4 376	26.0	8.5	9.3
1 728	-0.7	-2.3	1.4	..	2.7	..	2.8	..	127	..	3.5	5.1
768	300.0	66.6	2.4	10.5	18.8	-143.5	6.3	25.2	..	..	3.9	50.0
969	22.8	3.3	2.9	2.0	3.5	5.9	4.9	4.3	127	..	20.6	11.8
<b>1 221 335</b>	<b>7.2</b>	<b>13.1</b>	<b>0.8</b>	<b>0.7</b>	<b>5.8</b>	<b>4.4</b>	<b>0.6</b>	<b>0.5</b>	<b>43 889</b>	<b>92.9</b>	<b>3.5</b>	<b>3.5</b>
26	26	24	26	24	26	26	26	24	21	10	26	25
381 493	1.7	5.7	0.7	0.4	6.8	5.4	0.8	0.4	23 063	185.0	2.9	2.8
7 337	7.4	2.9	5.4	7.1	5.7	4.4	8.5	10.8	..	..	3.8	9.1
29 160	1.6	6.4	2.0	1.9	10.9	4.5	1.9	1.7	3 601	19.0	2.9	3.4
6 516	-4.8	-0.6	2.6	3.1	5.9	3.3	3.6	4.4	953	13.0	3.2	5.0
309 286	-1.9	..	0.1	0.1	3.3	2.0	0.1	0.0	..	..	3.5	3.8

## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Support services (58) continued</b>									
6	BTG	322	UK	21	-21.8	3.3	54	-21.7	7.1
7	Finland Post	347	Finland	20	-12.9	-2.4	1 235	7.8	5.7
8	Ureco	357	UK	19	-9.6	6.1	707	2.8	8.9
9	Rexam	361	UK	18	-18.8	-22.6	4 352	-1.0	-3.1
10	YIT	365	Finland	18	12.5	14.5	3 033	26.9	23.2
11	Huhtamaki	366	Finland	18	27.9	11.8	2 092	-0.8	-4.2
12	Funkwerk	372	Germany	18	43.4	49.2	249	39.1	54.9
13	AEA Technology	416	UK	14	6.3	-17.6	334	-5.9	-10.6
14	Genus	456	UK	13	11.4	0.5	259	6.1	4.0
15	Gunnebo	492	Sweden	11	0.0	..	811	5.2	3.1
16	Datalogic	509	Italy	10	8.9	5.2	146	12.3	9.9
17	Observer	533	Sweden	10	10.6	..	179	4.7	..
18	Robotic Technology Systems	570	UK	8	13.2	90.0	69	-19.8	-28.1
19	GfK	579	Germany	7	-12.9	-4.1	672	12.9	8.1
20	Techem	601	Germany	7	94.3	14.8	432	5.9	6.8
21	Constantia Packaging	621	Austria	6	31.7	16.5	945	-3.2	4.7
22	Ricardo	622	UK	6	-13.6	-5.7	207	7.3	1.5
23	Larox	635	Finland	6	..	19.7	97	70.2	13.1
24	Serco	640	UK	6	..	..	1 951	4.3	14.8
25	Group 4 Securicor	643	UK	6	1 278.6	-43.9	4 483	23.5	40.9
26	Posten	672	Sweden	5	-81.9	-40.2	2 828	4.2	2.0
				<b>52</b>	<b>13.7</b>	<b>-10.6</b>	<b>26 947</b>	<b>5.2</b>	<b>1.1</b>
<b>Transport (59)</b>		<i>number of companies for calculation</i>		<b>4</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>4</b>
1	Bolloré Investissement	313	France	22	16.1	10.3	5 608	4.0	3.6
2	BBA	384	UK	17	26.6	-1.9	1 942	3.4	0.2
3	DSV	605	Denmark	7	31.5	..	2 432	2.4	0.2
4	Lufthansa	636	Germany	6	-25.0	-40.7	16 965	6.3	0.5
				<b>3 261</b>	<b>3.5</b>	<b>1.7</b>	<b>292 508</b>	<b>3.0</b>	<b>4.6</b>
<b>Telecommunication services (67)</b>		<i>number of companies for calculation</i>		<b>16</b>	<b>16</b>	<b>13</b>	<b>16</b>	<b>16</b>	<b>16</b>
1	Deutsche Telekom	27	Germany	900	0.0	0.0	57 880	3.7	6.2
2	France Telecom	35	France	564	18.0	-0.2	47 157	2.2	3.1
3	Telefonica	40	Spain	461	4.8	-2.1	30 322	6.8	-0.2
4	BT	50	UK	363	-23.1	-10.8	26 305	0.6	-3.2
5	Vodafone	55	UK	309	28.1	25.8	48 213	1.7	14.3
6	TeliaSonera	56	Sweden	308	9.4	28.8	9 071	-0.6	12.7
7	Telecom Italia	96	Italy	139	0.0	..	31 237	1.3	-0.8
8	FastWeb	184	Italy	55	43.6	19.1	720	36.1	66.9
9	Telekom Austria	213	Austria	42	-0.9	24.8	4 056	2.2	15.1
10	Auna	250	Spain	34	58.7	..	4 217	11.2	21.8
11	KPN	303	The Netherlands	24	4.3	-19.5	11 731	-1.2	-0.0
12	Elisa	380	Finland	17	-29.2	-22.1	1 356	-11.8	-2.0
13	Telekomunikacja Polska	387	Poland	17	15.3	52.9	4 560	1.5	2.3
14	O2	488	UK	11	-20.0	0.0	9 440	17.4	16.1
15	Portugal Telecom	501	Portugal	11	-25.9	..	6 023	4.3	1.7
16	Netia	659	Poland	6	-26.2	22.7	220	29.4	18.6
				<b>1 064</b>	<b>14.3</b>	<b>-4.9</b>	<b>129 866</b>	<b>8.3</b>	<b>7.8</b>
<b>Electricity (72)</b>		<i>number of companies for calculation</i>		<b>10</b>	<b>9</b>	<b>8</b>	<b>10</b>	<b>10</b>	<b>10</b>
1	Electricité de France	44	France	425	11.5	0.6	46 928	4.5	7.1

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
146	-9.9	-11.3	39.1	39.1	-99.5	-56.5	144.5	166.6	384	74.0	7.4	11.6
23 544	-0.2	0.3	1.6	2.0	6.8	6.5	0.8	1.0	..	..	4.4	6.6
1 899	3.5	2.7	2.6	3.0	35.4	28.2	9.8	11.2	..	..	35.4	39.0
22 300	2.3	-1.0	0.4	0.5	9.0	6.9	0.8	1.0	4 060	17.0	5.9	5.4
21 884	35.0	29.3	0.6	0.7	4.4	2.9	0.8	1.0	1 882	..	0.7	1.2
15 652	-1.3	-3.2	0.9	0.7	4.8	4.6	1.1	0.9	1 389	40.0	4.4	5.5
1 223	34.7	28.2	7.0	6.8	9.1	9.5	14.3	13.4	271	9.0	3.2	3.9
2 648	-12.8	-14.5	4.3	3.8	-5.2	2.3	5.4	4.5	153	..	2.4	2.8
1 325	-2.0	-3.9	4.9	4.7	4.9	4.5	9.5	8.4	181	71.0	2.3	3.7
8 188	-1.0	-0.4	1.4	1.4	3.6	5.7	1.4	1.3	323	..	1.9	2.2
875	12.9	7.8	7.1	7.4	11.5	4.6	11.9	12.3	291	..	4.1	3.1
2 487	2.6	..	5.4	5.1	2.0	3.5	3.9	3.6	224	..	2.8	3.5
308	-47.4	-30.6	11.0	7.8	-9.9	-47.7	24.7	11.5	42	-19.0	1.5	1.2
5 417	8.3	5.2	1.1	1.4	14.2	11.6	1.4	1.7	969	..	2.2	2.4
2 153	-9.2	2.1	1.6	0.9	19.8	10.5	3.2	1.5	913	..	10.2	2.0
5 203	-3.1	3.2	0.7	0.5	7.6	5.9	1.2	0.9	542	..	7.9	5.5
1 738	10.1	7.8	3.0	3.7	-1.3	11.4	3.6	4.6	188	..	7.2	6.2
436	55.7	14.0	6.2	..	5.2	5.3	13.8	..	36	..	3.1	1.8
28 073	6.1	8.6	0.3	..	4.3	3.6	0.2	..	1 658	..	1.8	2.7
306 313	32.9	45.7	0.1	0.0	-0.9	2.6	0.0	0.0	2 766	40.0	3.2	..
35 731	-5.7	-5.0	0.2	1.1	3.1	-1.1	0.1	0.8	..	..	2.7	2.7
<b>147 396</b>	<b>-1.8</b>	<b>1.4</b>	<b>0.2</b>	<b>0.2</b>	<b>2.8</b>	<b>-1.0</b>	<b>0.4</b>	<b>0.3</b>	<b>11 108</b>	<b>18.4</b>	<b>6.8</b>	<b>4.4</b>
4	4	4	4	4	4	4	4	4	4	1	4	4
32 808	-1.8	3.6	0.4	0.4	1.1	2.6	0.7	0.6	2 160	..	2.1	2.7
12 620	-0.4	-2.5	0.9	0.7	6.8	6.3	1.3	1.1	2 120	18.0	4.2	5.2
9 225	-0.3	-4.1	0.3	0.2	3.9	4.0	0.7	0.6	1 722	..	2.0	2.7
92 743	-2.2	1.8	0.0	0.1	2.8	-3.8	0.1	0.1	5 106	..	9.4	5.2
<b>1 015 268</b>	<b>-3.2</b>	<b>-3.0</b>	<b>1.1</b>	<b>1.1</b>	<b>11.7</b>	<b>8.2</b>	<b>3.2</b>	<b>3.0</b>	<b>482 927</b>	<b>27.3</b>	<b>12.1</b>	<b>11.9</b>
15	16	14	16	16	16	16	15	16	15	11	15	16
247 559	-1.5	0.8	1.6	1.6	14.9	7.2	3.6	3.6	73 547	38.0	8.8	9.9
204 826	-7.6	-0.2	1.2	1.0	16.4	12.0	2.8	2.2	62 272	41.0	10.8	10.9
156 819	4.9	-0.9	1.5	1.6	18.0	13.7	2.9	2.9	67 911	30.0	10.5	10.4
99 600	-3.4	-7.2	1.4	1.8	16.7	15.2	3.6	4.6	26 253	15.0	16.1	14.3
57 378	-4.5	-5.1	0.6	0.5	-12.7	-13.3	5.4	4.0	133 326	19.0	14.8	14.2
25 381	-3.1	0.5	3.4	3.1	22.2	16.7	12.1	10.8	16 934	12.0	12.7	10.2
88 892	-7.2	-8.0	0.4	0.5	21.0	18.6	1.6	1.5	37 213	17.0	10.6	10.1
2 108	43.4	19.7	7.7	7.3	-16.8	-69.2	26.1	26.1	2 741	..	50.0	75.4
13 639	-6.9	-8.1	1.1	1.1	11.5	9.6	3.1	2.9	7 654	34.0	13.5	15.1
4 582	-8.2	..	0.8	0.6	7.2	2.8	7.3	4.2	..	..	16.2	13.4
28 911	-7.5	-14.2	0.2	0.2	20.4	26.6	0.8	0.7	17 143	28.0	14.6	12.6
5 590	-22.1	-10.4	1.3	1.6	14.7	-2.2	3.0	3.3	1 952	50.0	10.8	11.0
36 589	-17.9	-15.3	0.4	0.3	18.6	18.1	0.5	0.3	6 971	..	13.1	19.0
13 911	12.7	-2.7	0.1	0.2	4.8	2.9	0.8	1.1	18 377	68.0	20.3	19.9
29 483	18.5	12.2	0.2	0.2	16.5	12.3	0.4	0.6	9 332	..	..	2.0
..	..	..	2.5	4.4	10.4	-95.9	..	5.8	1 301	..	17.7	15.9
<b>389 296</b>	<b>0.1</b>	<b>1.6</b>	<b>0.8</b>	<b>0.8</b>	<b>10.2</b>	<b>3.8</b>	<b>2.7</b>	<b>2.3</b>	<b>78 484</b>	<b>41.4</b>	<b>10.8</b>	<b>13.9</b>
9	10	9	10	9	10	10	9	9	7	6	9	10
156 152	-6.7	-1.3	0.9	0.8	7.1	10.0	2.7	2.3	..	..	0.0	0.1

## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Electricity (72) continued</b>									
2	AREVA	46	France	402	41.1	2.2	11 109	34.6	7.7
3	British Nuclear Fuels (now British Nuclear Group Sellafield)	139	UK	83	-11.9	2.4	3 280	4.7	2.7
4	Vattenfall	175	Sweden	59	10.7	-4.9	12 551	1.3	18.0
5	Enel	337	Italy	20	-52.4	-41.5	34 329	18.6	8.2
6	Pohjolan Voima	339	Finland	20	59.7	14.2	667	1.2	5.4
7	British Energy	341	UK	20	-6.7	-6.3	2 141	-20.4	-10.6
8	Cez	408	Czech Republic	15	..	..	3 300	18.1	21.0
9	Union Electrica Fenosa	444	Spain	13	-28.1	-53.5	5 717	3.8	1.7
10	Energie Baden	576	Germany	8	-29.9	..	9 844	-7.2	7.8
				<b>398</b>	<b>-44.3</b>	<b>-37.3</b>	<b>176 572</b>	<b>-0.1</b>	<b>-8.2</b>
<b>Utilities - other (77)</b>		<i>number of companies for calculation</i>		<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>
1	RWE	103	Germany	128	-70.6	-41.8	40 996	-4.2	-11.9
2	Veolia Environnement	121	France	95	3.0	6.3	28 603	-4.9	2.7
3	Suez	136	France	85	7.6	-30.2	40 739	2.8	-1.3
4	E ON	185	Germany	55	-20.3	-52.4	44 745	5.2	-13.8
5	National Grid Transco	452	UK	13	-10.1	-17.5	12 036	-5.7	4.1
6	Edison	522	Italy	10	-23.1	-52.3	5 696	5.0	-28.6
7	Northumbrian Water	590	UK	7	1.6	-2.0	817	9.1	5.7
8	Severn Trent	669	UK	5	15.7	1.9	2 940	3.3	5.1
				<b>101</b>	<b>-48.7</b>	<b>-23.6</b>	<b>12 952</b>	<b>18.5</b>	<b>1.6</b>
<b>Banks (81)</b>		<i>number of companies for calculation</i>		<b>3</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>
1	HVB	192	Germany	53	-41.8	-27.7	9 219	28.3	1.8
2	Danske Bank	241	Denmark	37	..	..	3 623	-0.5	0.7
3	Voca	478	UK	12	-66.8	31.5	110	3.8	13.1
				<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>
<b>Insurance (83)</b>		<i>number of companies for calculation</i>		<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>
1	Gerling-Konzern Versicherungs	406	Germany	16	14.0	-19.3	4 172	-15.4	-26.2
				<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>
<b>Life assurance (84)</b>		<i>number of companies for calculation</i>		<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>
1	Eureko	493	The Netherlands	11	400.0	-0.3	6 534	13.1	-4.1
				<b>122</b>	<b>-7.0</b>	<b>-24.5</b>	<b>12 370</b>	<b>14.4</b>	<b>79.1</b>
<b>Other financials (87)</b>		<i>number of companies for calculation</i>		<b>6</b>	<b>6</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>6</b>
1	Deutsche Borse	200	Germany	47	-14.0	-23.6	1 591	-0.2	27.9
2	Euronext	233	The Netherlands	38	75.2	..	887	-9.0	9.1
3	OMX	443	Sweden	13	-45.7	-32.7	322	8.4	0.7
4	NPM/CNP	519	Belgium	10	22.4	..	9 229	21.7	547.5
5	Baltimore Technologies (now Baltimore)	545	UK	9	-43.2	-24.5	26	-48.0	-37.2
6	Intrum Justitia	700	Sweden	5	-23.5	35.1	315	-0.6	7.0
				<b>10 878</b>	<b>-7.0</b>	<b>-12.4</b>	<b>79 238</b>	<b>4.3</b>	<b>-11.8</b>
<b>IT Hardware (93)</b>		<i>number of companies for calculation</i>		<b>49</b>	<b>49</b>	<b>46</b>	<b>49</b>	<b>49</b>	<b>48</b>
1	Nokia	6	Finland	3 834	-3.6	3.9	29 267	-0.6	-2.1
2	Ericsson	11	Sweden	2 436	-24.9	-22.2	14 611	12.1	-17.1
3	Alcatel	18	France	1 557	-2.3	-20.5	12 265	-2.0	-21.5
4	Infineon Technologies	21	Germany	1 219	12.6	..	7 195	17.0	..
5	ASML	52	The Netherlands	331	15.4	-6.8	2 465	59.8	10.2

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
70 069	45.9	12.0	3.6	3.5	5.4	2.7	5.7	5.9	700	1.3	0.0	0.0
23 149	0.8	1.3	2.5	3.0	-12.3	-43.5	3.6	4.1	..	..	0.0	0.0
33 017	-6.5	11.5	0.5	0.4	17.3	13.7	1.8	1.5	8 800	0.9	0.1	0.1
62 218	-7.4	-5.0	0.1	0.1	13.1	13.7	0.3	0.6	42 674	0.2	0.0	0.0
873	1.0	3.7	3.0	1.9	-0.3	-3.8	22.7	14.4	..	..	0.5	0.2
5 165	-34.6	-0.9	0.9	0.8	23.9	-178.2	3.8	2.7	3 704	18.0	0.0	0.0
17 855	-1.4	30.6	0.5	..	22.8	13.4	0.8	..	10 160	..	0.0	0.0
20 798	-2.2	-6.9	0.2	0.3	12.7	9.9	0.6	0.9	7 468	0.4	0.1	0.0
..	..	..	0.1	0.1	11.3	-5.2	..	0.3	4 978	1.1	0.0	0.0
<b>596 003</b>	<b>-13.2</b>	<b>-9.5</b>	<b>0.2</b>	<b>0.4</b>	<b>9.8</b>	<b>8.3</b>	<b>0.7</b>	<b>1.0</b>	<b>157 532</b>	<b>44.4</b>	<b>8.0</b>	<b>8.5</b>
<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>7</i>	<i>8</i>	<i>8</i>
106 138	-23.9	-13.2	0.3	1.0	12.3	6.5	1.2	3.1	30 918	55.0	8.1	9.5
207 561	-19.3	-1.2	0.3	0.3	-2.8	5.1	0.5	0.4	13 193	..	7.4	7.1
160 712	-7.3	-5.1	0.2	0.2	7.9	6.0	0.5	0.5	25 182	74.0	5.3	6.5
73 142	8.8	-23.8	0.1	0.2	13.2	8.8	0.8	1.0	54 599	49.0	6.7	6.9
24 406	-4.9	-0.9	0.1	0.1	21.6	23.1	0.5	0.6	19 580	3.0	16.8	16.4
3 878	-14.1	-49.1	0.2	0.2	9.9	8.3	2.6	2.9	7 675	49.0	8.0	6.5
3 792	3.0	3.3	0.9	0.9	35.0	31.9	1.9	1.9	1 684	74.0	36.4	35.8
16 374	3.7	4.4	0.2	0.2	18.6	19.6	0.3	0.3	4 701	21.0	25.5	24.6
<b>74 543</b>	<b>-7.2</b>	<b>-5.7</b>	<b>0.8</b>	<b>1.7</b>	<b>-0.4</b>	<b>-8.6</b>	<b>1.4</b>	<b>2.0</b>	<b>31 696</b>	<b>..</b>	<b>..</b>	<b>..</b>
<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>2</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>2</i>	<i>2</i>	<i>..</i>	<i>..</i>	<i>..</i>
58 438	-8.0	-5.6	0.6	1.3	-20.2	-37.1	0.9	1.4	16 895	94.0	..	..
15 712	-4.1	-6.1	1.0	..	50.0	47.1	2.3	..	14 801	..	..	..
393	-1.5	-1.2	10.5	32.9	1.6	5.7	29.5	87.4	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..
7 756	-23.6	-14.4	0.4	0.3	7.6	-0.1	2.0	1.3	810	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..
14 405	-5.4	-7.1	0.2	0.0	10.0	8.7	0.8	0.1	..	..	..	..
<b>23 954</b>	<b>-3.1</b>	<b>9.7</b>	<b>1.0</b>	<b>1.2</b>	<b>12.3</b>	<b>10.1</b>	<b>5.1</b>	<b>5.3</b>	<b>17 173</b>	<b>..</b>	<b>..</b>	<b>..</b>
<i>6</i>	<i>6</i>	<i>5</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>5</i>	<i>..</i>	<i>..</i>	<i>..</i>
3 080	1.0	41.6	3.0	3.4	31.1	30.4	15.3	18.0	8 190	107.0	..	..
2 511	-7.9	8.9	4.2	2.2	25.9	20.8	15.0	7.9	3 307	42.0	..	..
1 517	-9.8	-1.4	4.1	8.2	18.8	-12.8	8.8	14.5	1 111	..	..	..
13 678	-1.5	..	0.1	0.1	7.9	7.1	0.7	0.6	4 128	..	..	..
223	-56.0	-34.2	34.3	31.4	-98.2	-166.0	40.1	31.0	..	..	..	2.0
2 945	2.6	7.1	1.5	2.0	11.5	-3.8	1.6	2.2	437	..	..	..
<b>271 586</b>	<b>-1.7</b>	<b>-11.5</b>	<b>13.7</b>	<b>15.4</b>	<b>10.7</b>	<b>1.5</b>	<b>38.9</b>	<b>39.9</b>	<b>143 325</b>	<b>33.5</b>	<b>3.6</b>	<b>3.2</b>
<i>46</i>	<i>48</i>	<i>43</i>	<i>48</i>	<i>49</i>	<i>49</i>	<i>48</i>	<i>46</i>	<i>48</i>	<i>48</i>	<i>40</i>	<i>43</i>	<i>42</i>
53 511	3.7	-2.5	13.1	13.5	14.7	16.8	71.6	77.1	58 171	48.0	1.7	1.3
51 742	-9.5	-18.5	16.7	24.9	21.8	-9.2	47.1	56.7	43 334	37.0	1.9	3.0
55 718	-7.9	-17.5	12.7	12.7	1.5	-13.8	27.9	26.3	12 849	9.0	1.8	1.1
34 127	8.3	..	16.9	17.6	1.1	-4.8	35.7	34.4	5 808	-2.0	16.2	14.2
5 038	-5.4	-13.1	13.4	18.6	15.4	-13.9	65.7	53.9	6 761	33.0	3.6	4.6



## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>IT Hardware (93) continued</b>									
6	Marconi	63	UK	263	-5.6	-33.3	1 889	-14.2	-32.3
7	Oce	72	The Netherlands	207	-0.8	1.2	2 652	-4.2	-6.4
8	Spirent	122	UK	95	2.0	-11.1	671	1.8	-16.0
9	ASM International	137	The Netherlands	85	7.4	2.1	754	29.6	10.4
10	Italtel	148	Italy	75	-7.7	-14.5	542	-8.4	-16.3
11	ARM	155	UK	71	4.1	8.8	216	19.3	1.4
12	Bull	190	France	54	-10.0	-24.0	1 139	-10.0	-23.5
13	Wavecom	201	France	47	-24.2	13.0	152	-44.9	-22.2
14	GN Store Nord	205	Denmark	46	16.2	-20.0	746	17.1	-8.8
15	TTP Communications	215	UK	42	31.3	12.2	88	25.7	15.6
16	Filtron	224	UK	39	-1.5	-4.4	335	-1.8	-7.3
17	Micronic Laser Systems	256	Sweden	33	-1.3	11.1	93	97.9	6.5
18	Intracom	271	Greece	29	-46.1	-26.4	620	-3.3	-13.6
19	Dialog Semiconductor	272	UK	29	-5.0	1.4	116	24.7	9.6
20	Kontron	273	Germany	28	8.1	17.1	262	14.4	11.5
21	Imagination Technologies	282	UK	27	19.5	20.7	43	-2.3	31.3
22	ELMOS Semiconductor	316	Germany	22	-8.0	9.1	143	18.2	10.2
23	CSR	335	UK	20	64.5	23.7	186	272.0	122.0
24	Aixtron	369	Germany	18	23.8	10.2	140	53.8	-16.4
25	Psion	371	UK	18	-1.7	-14.1	191	4.9	-9.3
26	Melexis	381	Belgium	17	42.6	66.7	153	14.2	18.5
27	Anoto	383	Sweden	17	-12.6	-12.5	16	-23.8	-2.0
28	Option	419	Belgium	14	59.7	5.0	103	80.7	67.3
29	Augusta Technologie	423	Germany	14	9.8	4.4	234	-0.8	-5.5
30	Axis	425	Sweden	14	2.3	-5.6	77	11.6	0.0
31	Radiall	445	France	13	4.8	-3.6	163	12.4	-10.6
32	ADVA	460	Germany	12	0.8	19.0	102	13.3	4.3
33	BE Semiconductor Industries	468	The Netherlands	12	-8.8	-7.9	126	46.5	-5.6
34	Wolfson Microelectronics	476	UK	12	69.7	63.1	88	57.1	76.5
35	ARC International	479	UK	12	-34.0	-14.8	17	13.3	2.0
36	Tecnomen	482	Finland	12	22.3	-9.9	51	13.3	6.7
37	Soitec	484	France	11	0.8	26.6	139	58.0	14.3
38	SUSS MicroTec	511	Germany	10	-1.2	-14.7	116	20.8	-19.6
39	Plasmon	516	UK	10	-14.0	-14.0	63	-11.3	-10.2
40	Zetex	527	UK	10	-20.1	-6.0	102	-20.9	-7.8
41	ICOS Vision Systems	546	Belgium	9	36.6	19.4	89	97.8	70.4
42	Radstone Technology	551	UK	9	35.1	20.7	70	12.9	6.5
43	Glunz & Jensen	562	Denmark	8	-7.2	4.2	83	-9.8	-9.0
44	Telindus	589	Belgium	7	36.2	..	532	2.7	-5.8
45	Teleste	597	Finland	7	19.0	-9.1	66	22.2	-13.8
46	Net Insight	598	Sweden	7	40.3	-27.2	4	0.0	26.0
47	Newport Networks	607	UK	7	51.1	..	0	-100.0	..
48	AudioDev	641	Sweden	6	15.6	14.8	30	0.0	7.7
49	CML Microsystems	682	UK	5	26.9	22.6	33	43.5	12.8
				<b>3 028</b>	<b>6.5</b>	<b>4.0</b>	<b>26 758</b>	<b>7.9</b>	<b>1.4</b>
	<b>Software &amp; Computer services (97)</b>	<i>number of companies for calculation</i>		<b>83</b>	<b>82</b>	<b>78</b>	<b>83</b>	<b>82</b>	<b>82</b>
1	SAP	24	Germany	1 020	2.4	4.3	7 514	7.0	0.8
2	Dassault Systemes	69	France	222	2.9	2.0	797	5.6	2.2
3	Misys	102	UK	128	2.6	2.4	1 255	-1.3	-5.0
4	Business Objects	110	France	111	57.8	39.7	681	64.9	30.6

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
..	..	..	13.9	12.6	-7.4	-16.4	..	18.6	852	-52.0	2.6	2.1
21 760	-2.6	-0.9	7.8	7.5	4.2	4.5	9.5	9.3	1 068	11.0	6.4	6.5
4 521	0.5	-16.7	14.2	14.1	7.2	5.0	21.0	20.7	736	-1.0	5.4	3.6
8 160	16.6	7.2	11.3	13.6	11.7	2.4	10.4	11.3	599	-2.0	7.7	5.2
2 484	-6.8	-14.9	13.8	13.6	-1.6	0.3	30.0	30.3	..	..	2.4	3.4
774	6.0	4.5	32.8	37.6	23.0	14.4	91.5	93.1	2 356	55.0	3.2	2.8
7 531	-3.4	-16.1	4.7	4.7	2.1	3.7	7.2	7.7	648	174.0	1.2	0.7
458	-33.8	2.8	31.0	22.5	-53.4	-11.2	102.8	89.8	161	305.0	2.0	4.0
4 640	6.8	-9.3	6.2	6.2	9.5	2.0	10.0	9.2	1 874	39.0	4.0	3.1
560	13.8	21.0	47.4	45.3	-1.7	-7.1	74.4	64.5	114	-36.0	8.0	4.3
3 369	16.5	-3.3	11.8	11.7	1.2	2.9	11.7	13.8	281	52.0	4.8	3.5
359	15.1	8.1	35.0	70.2	15.2	-44.7	90.7	105.7	324	59.0	2.2	12.8
..	..	..	4.7	8.4	9.4	8.0	..	..	604	52.0	..	1.9
281	2.9	-0.5	25.1	32.9	-5.7	-31.2	103.5	112.1	110	-6.0	10.3	6.5
1 803	17.5	24.9	10.9	11.5	6.7	-10.9	15.8	17.2	389	54.0	2.7	2.6
303	11.0	13.7	63.2	51.7	-25.0	-13.6	89.7	83.3	168	2.0	7.0	6.8
928	6.2	14.1	15.4	19.8	20.0	17.4	23.7	27.4	255	25.0	18.9	16.5
248	33.3	12.8	10.8	24.4	23.3	-4.0	80.9	65.6	873	51.0	3.2	8.0
416	1.5	-4.4	12.6	15.6	5.8	-31.9	42.3	34.7	245	-3.0	2.9	4.4
1 002	4.9	-9.1	9.2	9.8	-14.1	-17.0	17.5	18.7	376	5.0	3.1	2.7
643	16.9	13.8	11.1	8.9	18.9	18.7	26.4	21.7	465	32.0	7.2	8.2
132	-27.5	-23.9	105.4	91.8	-75.6	-181.0	127.7	105.9	175	24.0	..	..
196	25.6	7.2	13.9	15.8	18.0	12.3	73.2	57.6	390	..	1.9	3.5
954	-8.6	-2.4	6.0	5.4	-2.8	-0.8	14.8	12.3	45	456.0	1.3	1.3
343	-3.7	-7.9	18.3	19.9	7.1	..	41.0	38.7	241	160.0	..	..
1 673	6.8	-7.1	8.0	8.6	1.8	-2.1	7.8	8.0	125	4.0	3.7	2.8
450	12.8	3.0	12.2	13.7	7.2	4.4	27.6	30.9	232	47.0	2.9	3.3
781	12.5	-1.6	9.6	15.4	-7.7	-23.3	15.5	19.1	131	3.0	2.4	14.0
189	47.7	45.0	13.3	12.3	14.0	16.1	62.0	53.9	275	-9.0	9.1	30.4
147	-26.1	-17.9	68.2	117.1	-79.7	-260.0	78.8	88.3	75	47.0	5.9	26.7
355	-19.3	-14.5	22.6	20.9	3.1	-15.6	32.4	21.4	48	-27.0	2.0	..
542	15.1	29.4	8.2	12.8	-0.7	-31.8	20.9	23.9	622	..	24.5	28.4
..	..	..	8.9	10.9	-8.2	-17.7	..	14.2	79	-1.0	0.9	1.0
430	4.4	-4.6	16.3	16.8	-18.3	-7.0	23.8	28.9	138	-18.0	4.8	9.9
755	-29.9	-15.2	9.7	9.6	6.3	-10.9	13.1	11.5	137	-37.0	19.6	5.4
262	51.4	..	10.0	14.5	30.6	13.3	33.9	37.6	261	..	2.2	..
430	-2.5	2.9	12.3	10.3	16.4	16.1	20.1	14.5	126	6.0	10.0	24.2
371	-4.6	-7.4	9.6	9.3	2.9	-8.7	21.4	22.0	22	131.0	1.2	2.2
2 233	2.2	-2.7	1.3	1.0	-1.2	-2.7	3.2	2.4	375	..	3.4	7.9
492	8.9	-6.1	10.5	10.7	8.0	3.7	14.0	12.8	115	..	1.5	..
65	-5.8	-23.8	172.3	122.8	-208.9	-225.0	106.0	71.2	86	..	..	..
65	12.1	..	..	440.0	-2 365.3	-600.0	102.3	75.9	78	..	..	..
123	17.1	5.8	19.5	16.8	13.3	16.7	47.5	48.1	50	..	..	3.3
222	1.4	2.7	15.3	17.3	-0.8	-4.3	22.7	18.2	78	-8.0	6.1	4.3
<b>164 824</b>	<b>6.3</b>	<b>1.6</b>	<b>11.3</b>	<b>11.5</b>	<b>12.0</b>	<b>8.7</b>	<b>18.4</b>	<b>18.3</b>	<b>81 514</b>	<b>27.2</b>	<b>2.5</b>	<b>2.3</b>
<i>83</i>	<i>81</i>	<i>82</i>	<i>83</i>	<i>82</i>	<i>83</i>	<i>77</i>	<i>83</i>	<i>81</i>	<i>75</i>	<i>49</i>	<i>72</i>	<i>66</i>
31 224	7.3	4.4	13.6	14.2	26.6	24.3	32.7	34.2	45 426	22.0	2.3	2.9
4 456	9.0	5.0	27.8	28.6	28.9	28.2	49.8	52.7	4 554	22.0	2.5	2.1
6 507	1.0	-0.8	10.2	9.8	4.3	3.4	19.7	19.4	1 654	20.0	1.0	1.3
3 834	-2.3	19.9	16.3	17.0	9.2	8.2	28.9	17.9	2 315	64.0	3.2	2.2

## II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Software &amp; Computer services (97) continued</b>									
5	Infogrames Entertainment	111	France	111	19.6	2.9	701	-20.4	1.3
6	Sage	114	UK	105	28.3	14.1	971	22.8	12.4
7	Amdocs	127	UK	93	6.0	6.1	1 305	19.6	4.9
8	UBIsoft Entertainment	143	France	80	9.5	0.8	508	13.1	25.0
9	Wincor Nixdorf	149	Germany	73	10.3	11.6	1 576	9.4	2.5
10	LogicaCMG	178	UK	58	-28.5	-20.7	2 359	-2.2	-6.0
11	Eidos	183	UK	55	20.3	-2.6	189	-11.7	-2.4
12	Symbian	187	UK	54	15.9	11.6	64	52.4	47.4
13	Intenia International	193	Sweden	52	1.2	0.9	330	1.9	-9.0
14	Software	198	Germany	49	-16.0	-9.4	411	-2.6	-11.3
15	IBS	244	Sweden	35	8.3	3.7	262	-1.5	-3.3
16	Sopra	263	France	31	6.5	6.4	629	19.8	7.6
17	Industrial and Financial Systems	274	Sweden	28	-4.8	7.6	241	-7.0	-11.6
18	ISOFT	293	UK	26	44.1	51.4	370	75.4	63.3
19	Unit 4 Agresso	306	The Netherlands	24	8.9	3.2	276	26.0	9.9
20	Systems Union	324	UK	21	36.3	7.3	147	32.4	9.8
21	RM	328	UK	21	24.0	7.7	372	22.4	2.8
22	Telelogic	344	Sweden	20	-16.8	-12.2	115	10.6	-11.5
23	WEB DE	355	Germany	19	36.3	16.5	43	30.3	36.3
24	Beta Systems Software	362	Germany	18	60.7	34.0	101	80.4	30.9
25	London Bridge Software	368	UK	18	-6.9	7.5	82	-6.8	0.8
26	JoWood Productions Software	373	Austria	17	91.8	..	17	-26.1	-26.0
27	ESI	376	France	17	34.7	20.9	58	18.4	10.5
28	Ilog	385	France	17	20.8	15.5	76	11.8	9.4
29	Torex Retail	386	UK	17	..	..	105	..	..
30	NSB	394	UK	16	-21.6	-16.2	64	-29.7	-21.6
31	Intec Telecom Systems	395	UK	16	14.1	25.1	97	34.7	20.1
32	AVEVA	401	UK	16	63.6	24.8	81	50.0	21.6
33	Simcorp	402	Denmark	16	24.3	10.5	82	22.4	10.4
34	Lectra	409	France	15	4.9	-2.0	208	12.4	2.4
35	Anite	418	UK	14	-13.9	17.9	268	-3.3	-2.1
36	SCI Entertainment	434	UK	14	19.6	21.9	44	10.0	144.8
37	Autonomy	439	UK	14	16.7	18.3	50	6.4	-1.3
38	IONA Technologies	455	Ireland	13	-37.0	-24.7	50	-9.1	-27.8
39	CODASciSys	459	UK	12	-1.2	..	96	0.0	1.4
40	Exact	463	The Netherlands	12	-22.9	-11.9	212	2.9	1.0
41	Gameloft	469	France	12	208.7	393.8	23	130.0	97.2
42	Empire Interactive	472	UK	12	-12.7	19.2	42	-2.3	37.9
43	Teleca	473	Sweden	12	104.0	..	302	11.0	3.3
44	XRT	474	France	12	2.4	3.5	40	2.6	-3.9
45	DICOM	490	UK	11	9.0	14.6	221	0.0	3.7
46	F-Secure	495	Finland	11	24.5	-4.4	47	20.5	3.8
47	PSI	498	Germany	11	20.5	-1.0	115	-16.7	-11.3
48	Northgate Information Solutions	499	UK	11	10.8	0.6	193	60.8	8.5
49	Staffware (now TIBCO BPM)	503	UK	11	5.7	5.8	60	9.1	4.2
50	Linedata Services	506	France	11	32.9	25.6	113	13.0	12.7
51	Royalblue	507	UK	11	8.6	6.6	84	5.0	-3.7
52	Teligent	512	Sweden	10	66.7	1.1	40	42.9	5.6
53	Tekla	541	Finland	9	-25.6	-1.9	38	-5.0	-0.9
54	Marlborough Stirling	554	UK	8	29.7	6.5	133	-14.2	10.3
55	P&I Personal & Informatik	558	Germany	8	-5.5	20.6	40	5.3	12.6

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
1 511	-18.1	-12.7	15.8	10.5	-1.4	-5.8	73.1	50.1	273	85.0	0.6	0.7
7 635	31.5	13.8	10.8	10.4	26.9	27.9	13.8	14.1	4 281	37.0	6.4	7.7
10 600	3.9	3.0	7.1	8.0	16.8	14.2	8.8	8.6	4 448	29.0	3.1	4.2
2 352	18.2	8.6	15.8	16.3	1.0	5.6	34.1	36.8	774	183.0	1.2	1.8
5 575	16.2	10.1	4.6	4.6	5.4	3.6	13.1	13.8	1 237	..	1.7	1.5
19 651	-7.0	-8.0	2.5	3.4	4.1	-1.2	3.0	3.8	1 908	9.0	1.6	1.5
696	29.9	8.0	29.3	21.5	-2.5	8.9	79.5	85.9	..	..	2.1	0.9
734	12.4	9.6	84.7	111.3	-65.7	-133.3	73.8	71.6	..	..	7.8	9.5
2 639	-15.0	-7.3	15.6	15.7	-9.3	-8.3	19.5	16.4	288	122.0	0.6	0.6
2 512	-11.7	-9.7	11.9	13.8	20.4	-0.7	19.5	20.5	1 081	63.0	1.5	1.9
1 915	-2.4	-5.7	13.2	12.0	1.6	1.1	18.1	16.3	162	129.0	1.1	1.1
7 500	23.8	7.7	5.0	5.6	6.2	5.3	4.2	4.9	551	59.0	1.7	0.8
2 661	-6.5	-8.2	11.8	11.5	-9.6	-0.8	10.7	10.5	180	150.0	0.8	1.9
2 546	90.3	80.9	7.0	8.5	18.5	13.7	10.1	13.4	1 388	18.0	1.4	1.9
1 677	18.9	6.4	8.6	9.9	7.2	8.7	14.1	15.4	327	34.0	1.1	1.4
1 252	47.3	17.1	14.3	13.9	4.7	6.3	16.8	18.2	202	55.0	2.7	2.7
1 875	21.4	2.6	5.5	5.5	2.2	2.3	11.0	10.7	219	44.0	4.3	2.3
674	-1.2	-18.9	17.0	22.6	15.8	1.0	29.0	34.5	473	70.0	1.7	1.0
456	38.6	17.7	43.5	41.6	-15.1	-9.1	41.0	41.7	371	50.0	20.9	9.1
864	134.8	37.3	18.2	20.4	3.9	8.9	21.2	31.0	50	-14.0	8.9	3.6
737	-6.9	12.3	21.7	21.7	0.6	-83.0	24.1	24.1	..	..	2.4	2.3
184	17.9	-12.7	101.3	39.0	-95.1	30.4	93.6	57.6	22	..	..	..
492	..	13.3	29.5	25.9	-3.3	-6.1	34.8	..	96	72.0	1.7	..
632	5.0	2.6	22.1	20.4	1.5	2.9	26.5	23.1	222	62.0	1.3	1.5
1 000	..	..	16.0	..	13.2	..	16.8	..	415	..	1.0	..
742	-22.5	-17.0	25.5	22.8	-19.6	-44.0	22.0	21.7	151	20.0	..	..
687	29.9	14.6	16.7	19.8	-1.9	-4.2	23.6	26.9	267	48.0	5.2	4.2
474	45.4	11.7	19.6	17.9	10.0	16.7	33.4	29.7	256	56.0	2.5	3.7
519	-1.3	-3.1	19.3	19.0	20.2	9.0	30.4	24.2	359	145.0	1.2	1.5
1 500	15.8	1.7	7.2	7.8	3.5	4.9	10.0	11.1	174	-21.0	1.4	1.1
1 700	-11.3	-8.1	5.4	6.0	0.3	-16.6	8.4	8.7	326	33.0	5.2	2.5
139	135.6	52.8	31.4	28.9	14.6	12.5	99.4	195.9	394	..	2.3	..
219	3.8	2.4	27.1	24.7	0.1	2.1	61.9	55.0	524	102.0	6.0	2.1
346	-2.0	-27.5	25.3	36.5	0.3	-58.2	36.6	56.9	84	18.0	2.0	1.8
845	-4.8	0.6	13.0	13.1	5.3	5.2	14.7	14.2	144	..	9.4	2.1
2 153	6.3	4.9	5.8	7.7	20.2	20.4	5.7	7.9	569	24.0	2.4	1.9
722	305.6	131.8	52.3	39.0	11.3	70.0	16.7	21.9	356	..	4.3	..
121	-23.4	2.6	28.3	31.7	1.6	2.3	98.3	86.3	8	0.0	..	..
2 810	12.6	2.6	3.9	2.1	0.3	-4.4	4.2	2.3	214	..	1.7	1.5
394	7.1	-0.5	29.4	29.4	5.8	..	29.8	31.2	48	151.0	..	2.6
846	2.4	10.1	5.1	4.7	6.3	5.4	13.3	12.5	295	30.0	1.8	1.4
291	-1.4	-8.2	23.2	22.4	13.2	7.7	37.4	29.7	258	23.0	2.1	..
1 106	-9.4	-7.7	9.4	6.5	-7.9	..	9.8	7.3	55	78.0	0.9	1.5
1 888	84.9	21.4	5.6	8.1	-6.4	-0.8	5.7	9.5	595	52.0	15.0	2.5
348	2.7	2.4	17.6	18.1	6.5	5.5	30.3	29.4	..	..	1.7	3.6
698	3.1	7.1	9.3	7.9	11.6	13.0	15.0	11.7	208	..	0.9	3.0
485	1.5	-7.6	12.5	12.1	13.6	13.8	21.6	20.2	315	54.0	7.1	5.0
290	18.4	0.1	25.8	22.1	-6.1	-21.4	35.6	25.3	57	..	2.5	3.6
368	-14.0	-1.2	24.1	30.7	-5.6	-25.0	24.8	28.7	70	..	2.6	..
1 532	-8.4	13.3	6.3	4.2	-14.0	0.6	5.5	3.9	..	..	9.8	4.5
239	1.3	2.0	20.7	23.0	10.7	7.9	34.6	37.0	94	..	..	2.6

### II.1.3. Ranking of the Top 700 EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Software &amp; Computer services (97) continued</b>									
56	Delcam	559	UK	8	12.1	12.9	30	3.4	4.9
57	IDS Scheer	564	Germany	8	4.4	5.4	280	26.7	20.5
58	Mensch und Maschine Software	571	Germany	8	-6.4	1.2	135	3.1	-2.8
59	Ubizen	578	Belgium	8	-25.1	-14.9	43	-40.3	-24.3
60	SurfControl	587	UK	7	28.5	19.4	64	18.5	30.2
61	Macro 4	588	UK	7	-13.9	1.1	44	-4.3	-13.1
62	Orc Software	593	Sweden	7	-16.9	11.9	27	3.8	5.5
63	PiroNet NDH	600	Germany	7	192.7	26.8	35	66.7	13.4
64	Proha	602	Finland	7	-13.9	-16.4	66	-14.3	-7.4
65	Trintech	604	Ireland	7	10.8	-23.6	41	28.1	-6.4
66	Global Graphics	609	France	7	5.1	-19.4	19	5.6	-37.8
67	Clearswift Systems	620	UK	6	-2.3	65.8	33	3.1	122.4
68	AIT (now Portrait Software)	627	UK	6	-31.2	-8.8	28	12.0	-16.4
69	Infovista	631	France	6	-2.9	8.2	29	11.5	1.2
70	SoftM Software und Beratung	637	Germany	6	-6.3	1.1	88	27.5	12.4
71	Microgen	638	UK	6	76.9	48.7	60	62.2	26.0
72	TELES AG Informationstechnologien	639	Germany	6	33.3	0.7	79	3.9	7.8
73	GFT Technologies	642	Germany	6	25.8	29.4	126	-8.7	-5.2
74	GFI Informatique	655	France	6	24.5	..	518	3.6	-4.6
75	Innovation	661	UK	6	-40.5	-15.9	82	-1.2	0.0
76	ALTEC	662	Greece	5	58.1	53.3	289	12.9	-1.8
77	Infor Business Solutions	671	Germany	5	-57.8	-27.7	57	-13.6	-8.7
78	MessageLabs	674	UK	5	69.5	45.2	81	35.0	50.0
79	Superscape	676	UK	5	18.9	36.2	6	200.0	26.0
80	Stonesoft	679	Finland	5	-22.2	-16.6	22	-4.3	-27.6
81	Artwork Systems	694	Belgium	5	11.0	13.3	47	6.8	-0.7
82	Alphameric	697	UK	5	-17.8	-7.1	99	11.2	7.4
83	TTP	699	UK	5	-17.7	-3.5	32	-8.6	3.3

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
343	11.0	11.3	27.3	25.2	5.8	6.9	23.8	23.6	25	29.0	3.3	3.4
1 945	18.7	10.1	2.8	3.4	11.5	12.7	4.0	4.6	553	..	1.4	1.4
355	-12.3	6.0	5.6	6.2	-2.3	-5.3	21.4	20.1	69	184.0	0.7	0.8
299	-14.3	-19.4	17.4	13.9	-17.9	-52.8	25.0	28.6	85	12.0	2.3	1.4
464	8.4	20.8	11.1	10.3	14.0	11.1	15.3	12.9	198	-17.0	3.1	1.9
262	-17.4	-7.8	16.2	18.0	4.3	-15.2	27.1	26.1	89	70.0	2.3	2.2
157	14.6	16.6	25.9	32.3	12.4	30.8	44.5	61.3	83	..	3.7	3.8
320	53.8	6.8	19.6	11.1	9.7	4.8	21.4	11.3	63	..	5.7	9.5
569	-11.4	-6.2	10.3	10.3	-10.5	-9.1	12.0	12.3	27	..	..	..
315	-6.3	-14.9	16.5	19.0	2.7	-9.4	21.4	18.1	42	..	..	..
98	1.0	-40.8	34.5	34.6	3.1	..	66.8	64.2	111	..	..	..
213	-12.3	90.1	19.1	20.1	-53.7	-71.9	29.5	26.5	..	..	3.0	6.3
159	-53.6	-19.3	22.0	35.8	11.8	-228.0	38.7	26.1	18	-55.0	3.6	..
190	0.5	-1.7	21.0	24.1	-22.6	-46.2	32.0	33.1	92	..	3.4	3.8
476	6.0	8.2	6.8	9.3	1.3	..	12.6	14.3	21	..	1.1	..
499	72.7	25.1	10.0	9.1	0.4	-10.8	12.0	11.7	113	60.0	1.7	2.7
503	29.3	-11.9	7.6	5.9	5.4	17.1	11.9	11.5	172	..	12.7	7.9
952	-8.7	-1.0	4.6	3.3	-1.2	-10.1	6.1	4.4	51	..	0.8	0.7
6 305	1.9	-3.8	1.1	0.9	-3.0	1.8	0.9	0.7	235	..	0.6	0.6
983	-2.1	15.3	6.7	11.1	-14.8	-42.2	5.6	9.2	185	24.0	2.4	1.2
942	-2.1	-11.9	1.9	1.3	0.0	-5.5	5.8	3.6	36	..	2.1	2.3
457	-23.7	-14.8	9.1	18.7	-16.3	-22.7	11.4	20.6	76	..	1.8	..
557	46.2	28.6	6.4	5.1	-8.2	-6.7	9.3	8.0	..	..	18.5	10.0
67	24.1	-12.5	85.8	216.5	-143.8	-500.0	76.9	80.2	69	14.0	..	..
258	-13.4	-23.7	23.1	28.4	-46.6	-69.6	19.7	21.9	34	..	..	..
227	4.6	10.1	10.3	9.9	36.0	34.1	21.3	20.1	172	..	2.1	2.3
776	3.7	3.6	4.8	6.5	-5.7	-3.4	6.1	7.8	157	31.0	8.1	7.9
280	-6.7	-2.8	14.8	16.5	-3.9	..	16.9	19.2	..	..	..	2.9

## II.1.4. Top 10 R&D investing companies in 2004 from selected Member States (not fully represented elsewhere in the Scoreboard)

Explanations of the terms in the header are to be found in Volume II, page nr. 195, Glossary of Definitions

No.	Company*	— R&D Investment —			— Net Sales —			— Employees —			R&D/Sales ratio	Operating Profit	R&D per employee	Market Capitalisation
		2004	change 04/03	CAGR 3 yrs	2004	change 04/03	CAGR 3 yrs	2004	change 04/03	CAGR 3 yrs	2004	2004	2004	2004
		units	€m	%	%	€m	%	%	#	%	%	%	% of Net Sales	€K
<b>Austria</b>														
1	Siemens	525	-3,0	1,0	2.347	17,0	0,0	7.852	-1,0	-2,0	22,4	7,7	66,9	..
2	Voest-Alpine	60	16,0	19,0	5.779	24,0	20,0	23.877	1,0	12,0	1,0	8,9	2,5	2.540
3	VA Technologie	56	-3,0	-16,0	4.073	4,0	1,0	16.562	-5,0	-4,0	1,4	-1,8	3,4	997
4	Telekom Austria	42	-1,0	25,0	4.056	2,0	15,0	13.639	-7,0	-8,0	1,1	11,5	3,1	7.654
5	Andritz	21	-17,0	5,0	1.481	21,0	4,0	5.314	16,0	5,0	1,4	4,8	4,0	1.009
6	RHI	20	22,0	..	1.297	5,0	-11,0	7.807	0,0	-11,0	1,5	10,4	2,5	602
7	OMV	19	-18,0	-3,0	9.880	29,0	8,0	6.232	2,0	3,0	0,2	9,0	3,0	12.225
8	JoWood Productions Software	17	92,0	..	17	-25,0	-26,0	184	18,0	-13,0	101,3	-95,1	93,6	22
9	Lenzing	17	11,0	8,0	871	40,0	12,0	4.763	63,0	14,0	2,0	12,3	3,6	692
10	Bohler-Uddeholm	16	4,0	0,0	1.934	29,0	9,0	11.711	15,0	7,0	0,8	9,7	1,4	1.573
<b>Belgium</b>														
1	Janssen Pharmaceutica	938	..	..	1.934	..	..	4.063	..	..	48,5	33,8	230,9	..
2	Solvay	427	2,0	6,0	7.877	4,0	-3,0	29.300	-3,0	6,0	5,4	9,8	14,6	7.612
3	UCB	376	39,0	28,0	3.068	3,0	7,0	12.015	-1,0	5,0	12,3	13,8	31,3	6.589
4	Agfa-Gevaert	191	-18,0	-6,0	3.762	-11,0	-9,0	16.224	-13,0	-8,0	5,1	12,5	11,8	2.926
5	Umicore	89	112,0	..	7.115	52,0	27,0	11.521	20,0	13,0	1,3	3,9	7,7	1.866
6	Barco	69	-1,0	-13,0	672	7,0	-5,0	4.389	9,0	-4,0	10,3	8,7	15,7	764
7	Bekaert	54	50,0	17,0	2.173	21,0	7,0	12.291	10,0	6,0	2,5	10,6	4,4	1.463
8	Tessenderlo	28	3,0	4,0	2.078	5,0	3,0	8.330	2,0	3,0	1,4	3,6	3,4	807
9	Innogenetics	28	10,0	16,0	71	9,0	10,0	589	0,0	1,0	39,5	-20,8	47,6	284
10	Recticel	20	9,0	17,0	1.276	3,0	3,0	11.034	38,0	5,0	1,6	2,6	1,8	215
<b>Cyprus</b>														
1	Options Cassoulides	0,09	..	..	37	9,0	0,0	230	0,0	2,0	0,2	12,2	0,4	..
2	Muskita Aluminium Industries	0,03	460,0	14,0	48	11,0	8,0	386	-1,0	2,0	0,1	21,0	0,1	..
<b>Czech Republic</b>														
1	Skoda Auto	160	13,0	..	4.784	0,0	..	21.256	-1,0	..	3,3	3,5	7,5	..
2	Cez	15	..	..	3.300	18,0	21,0	17.855	-1,0	31,0	0,5	22,8	0,8	10.160
3	Unipetrol	1,8	50,0	..	633	20,0	3,0	7.079	-7,0	-1,0	0,3	30,7	0,3	1.156
4	Ispat Nova Hut AS (now Mittal Steel Ostrava)	1,3	-21,0	..	1.403	52,0	..	11.205	-28,0	..	0,1	12,5	0,1	..
5	Trinecke Zelezarny	1,0	-10,0	..	729	0,0	..	8.209	-4,0	..	0,1	4,5	0,1	..
6	Cesky Telecom	0,3	-13,0	-51,0	2.047	21,0	4,0	12.215	-8,0	-7,0	0,0	13,4	0,0	4.595
7	Oskar Cesky Mobile	0,30	0,0	7,0	465	23,0	37,0	1.513	12,0	10,0	0,1	9,0	0,2	..
8	NKT Cables	0,06	6,0	-34,0	83	28,0	-8,0	374	-12,0	-13,0	0,1	-0,7	0,1	..
9	SMP	0,03	-31,0	-22,0	326	1,0	-2,0	898	-6,0	-6,0	0,0	4,6	0,0	..

\* Companies for which name is indented are foreign-owned subsidiaries



No.	Company	— R&D Investment —			— Net Sales —			— Employees —			R&D/Sales ratio	Operating Profit	R&D per employee	Market Capitalisation
		2004	change 04/03	CAGR 3 yrs	2004	change 04/03	CAGR 3 yrs	2004	change 04/03	CAGR 3 yrs	2004	2004	2004	2004
		units	€m	%	€m	%	%	#	%	%	%	% of Net Sales	€K	€m
<b>Denmark</b>														
1	Novo Nordisk	585	4,0	3,0	3.903	9,0	7,0	19.520	6,0	10,0	15,0	23,6	30,0	11.908
2	Lundbeck	173	-30,0	-4,0	1.308	-2,0	8,0	5.155	-1,0	13,0	13,2	26,0	33,5	4.352
3	Novozymes	109	8,0	6,0	810	4,0	5,0	3.928	3,0	5,0	13,4	17,8	27,7	..
4	Grundfos	77	23,0	8,0	1.634	9,0	6,0	12.618	8,0	4,0	4,7	10,6	6,1	..
5	Danfoss	76	-2,0	10,0	2.197	6,0	4,0	17.399	0,0	1,0	3,5	6,1	4,4	..
6	Danisco	75	10,0	6,0	2.398	9,0	0,0	9.235	9,0	0,0	3,1	10,8	8,1	2.429
7	Bang & Olufsen	61	28,0	10,0	486	-9,0	-2,0	2.717	-3,0	-1,0	12,6	9,3	22,6	622
8	Chr Hansen	61	-10,0	12,0	601	3,0	-1,0	3.644	2,0	0,0	10,1	7,2	16,7	1.070
9	NEG Micon	55	39,0	39,0	708	-16,0	9,0	2.601	19,0	21,0	7,8	-7,1	21,2	..
10	Nyco	51	56,0	72,0	645	1,0	8,0	3.019	7,0	8,0	8,0	3,1	17,0	..
<b>Estonia</b>														
1	Norma	2,04	62,0	..	63	-1,0	..	874	-1,0	..	3,2	11,5	2,3	..
2	Hansabank	0,60	20,0	..	421	17,0	..	6.026	4,0	..	0,1	47,3	0,1	..
3	Port of Tallinn	0,57	14,0	..	68	11,0	..	632	-10,0	..	0,8	50,5	0,9	..
4	Harju Elekter	0,31	-10,0	..	29	33,0	..	378	25,0	..	1,1	6,9	0,8	..
<b>Finland</b>														
1	Nokia	3.834	-4,0	4,0	29.267	-1,0	-2,0	53.511	4,0	-2,0	13,1	14,7	71,6	58.171
2	Metso	103	-18,0	-9,0	3.976	-6,0	-3,0	24.363	-11,0	-2,0	2,6	2,9	4,2	2.720
3	Stora Enso	82	-8,0	-4,0	12.396	2,0	-3,0	43.779	-1,0	0,0	0,7	4,9	1,9	9.069
4	Orion	71	-18,0	-6,0	1.944	-14,0	26,0	4.614	-17,0	-5,0	3,6	6,6	15,3	1.602
5	Kone	67	-24,0	18,0	4.450	-17,0	16,0	30.976	-10,0	11,0	1,5	9,6	2,2	3.010
6	Wartsila	59	-15,0	-9,0	2.478	5,0	2,0	12.361	1,0	4,0	2,4	4,8	4,8	2.250
7	UPM-Kymmene	47	-2,0	1,0	9.820	-1,0	0,0	34.815	-3,0	0,0	0,5	6,0	1,4	8.388
8	Kemira	46	-5,0	5,0	2.533	-7,0	1,0	9.714	-8,0	-2,0	1,8	5,1	4,7	1.435
9	Outokumpu	41	-15,0	0,0	7.136	21,0	10,0	19.761	2,0	1,0	0,6	7,6	2,1	2.235
10	Patria	39	46,0	73,0	346	34,0	17,0	1.988	-2,0	-4,0	11,4	8,7	19,8	..
<b>France</b>														
1	Sanofi-Aventis	3.961	-3,0	57,0	25.418	5,0	58,0	96.439	..	47,0	15,6	11,6	41,1	98.605
2	Peugeot (PSA)	2.118	1,0	7,0	56.797	5,0	3,0	207.200	4,0	2,0	3,7	4,2	10,2	12.715
3	Renault	1.961	13,0	0,0	40.715	9,0	4,0	130.886	0,0	-2,0	4,8	11,3	15,0	21.570
4	Alcatel	1.557	-2,0	-20,0	12.265	-2,0	-21,0	55.718	-8,0	-18,0	12,7	1,5	27,9	12.849
5	Snecma	754	21,0	16,0	6.812	6,0	0,0	35.451	-11,0	-2,0	11,1	6,2	21,3	5.351
6	Michelin	674	-5,0	-1,0	15.689	2,0	0,0	126.474	-1,0	0,0	4,3	6,7	5,3	7.435
7	Total	635	-5,0	-3,0	122.700	17,0	5,0	111.401	1,0	-3,0	0,5	14,9	5,7	132.130
8	Valeo	584	4,0	-2,0	9.439	2,0	-3,0	55.540	-19,0	-7,0	6,2	2,4	10,5	2.685
9	France Telecom	564	18,0	0,0	47.157	2,0	3,0	204.826	-8,0	0,0	1,2	16,4	2,8	62.272
10	Schneider	535	8,0	1,0	10.365	18,0	2,0	84.866	14,0	6,0	5,2	9,6	6,3	14.646

## II.1.4. Ranking of Top 10 companies by R&D investment in the 2004 financial year, within selected EU Member States (not fully represented elsewhere in the Scoreboard)

No.	Company	— R&D Investment —			— Net Sales —			— Employees —			R&D/Sales ratio	Operating Profit	R&D per employee	Market Capitalisation
		2004	change 04/03	CAGR 3 yrs	2004	change 04/03	CAGR 3 yrs	2004	change 04/03	CAGR 3 yrs	2004	2004	2004	2004
		units	€m	%	€m	%	%	#	%	%	%	% of Net Sales	€K	€m
<b>Germany</b>														
1	DaimlerChrysler	5.658	2,0	-2,0	142.059	4,0	-2,0	379.019	2,0	0,0	4,0	2,4	14,9	46.204
2	Siemens	5.063	-8,0	-9,0	75.167	1,0	-5,0	419.200	0,0	-4,0	6,7	4,0	12,1	59.127
3	Volkswagen	4.164	1,0	5,0	88.963	1,0	0,0	321.090	2,0	1,0	4,7	2,0	13,0	22.658
4	Robert Bosch	2.898	9,0	8,0	40.007	10,0	6,0	238.847	4,0	3,0	7,2	6,0	12,1	..
5	BMW	2.818	10,0	14,0	44.335	7,0	5,0	103.626	2,0	3,0	6,4	8,4	27,2	24.455
6	Bayer	2.404	0,0	-1,0	29.758	4,0	-1,0	113.825	-4,0	0,0	8,1	5,4	21,1	21.669
7	Boehringer Ingelheim	1.232	5,0	7,0	8.157	10,0	7,0	35.284	4,0	8,0	15,1	16,8	34,9	..
8	Infineon Technologies	1.219	13,0	..	7.195	17,0	..	34.127	8,0	..	16,9	1,1	35,7	5.808
9	BASF	1.173	6,0	-2,0	37.537	13,0	5,0	81.958	-6,0	-4,0	3,1	11,8	14,3	33.240
10	SAP	1.020	2,0	4,0	7.514	7,0	1,0	31.224	7,0	4,0	13,6	26,6	32,7	45.426
<b>Greece</b>														
1	Intracom	29	-46,0	-26,0	620	-3,0	-14,0	..	..	..	4,7	9,4	..	604
2	ALTEC	5,4	58,0	53,0	289	13,0	-2,0	942	-2,0	-12,0	1,9	0,0	5,8	36
3	Lavipharm	3,2	25,0	92,0	246	-24,0	-5,0	698	..	-2,0	1,3	2,3	4,6	35
4	Gek	3,0	..	..	262	..	..	1.862	..	..	1,1	19,7	1,6	241
5	Frigoglass	2,3	26,0	23,0	341	9,0	6,0	4.683	-8,0	1,0	0,7	10,5	0,5	183
6	MJ Maillis	2,1	12,0	..	341	15,0	8,0	2.090	3,0	73,0	0,6	9,9	1,0	247
7	Hellenic Telecommunications	2,0	-35,0	-27,0	5.184	5,0	8,0	16.206	-6,0	-4,0	0,0	12,0	0,1	7.813
8	Sato Office Furniture MFRS	1,8	123,0	36,0	82	18,0	2,0	558	-6,0	-4,0	2,2	-1,7	3,2	21
9	EYDAP Athens Water Supply	1,4	9,0	-9,0	327	-1,0	4,0	4.240	-3,0	..	0,4	8,6	0,3	676
10	Klonatex	1,4	44,0	-4,0	223	-18,0	-2,0	3.713	2,0	1,0	0,6	-24,6	0,4	17
<b>Hungary</b>														
1	Gedeon Richter	43	12,0	17,0	606	2,0	12,0	..	..	..	7,1	25,1	..	2.148
2	Egis Pharmaceuticals	20	-2,0	12,0	354	8,0	7,0	..	..	..	5,6	8,1	..	497
3	Graphisoft	4,6	13,0	-4,0	27	-3,0	-3,0	264	-5,0	-4,0	16,9	12,5	17,3	69
4	Antenna Hungaria	1,1	..	..	108	7,0	6,0	1.010	-11,0	-1,0	1,1	3,2	1,1	..
5	Raba	0,52	-50,0	..	129	-20,0	..	3.782	-25,0	..	0,4	-31,0	0,1	35
6	NABI Bus Industries Rt	0,18	-68,0	-53,0	278	18,0	3,0	..	..	..	0,1	-13,5	..	..
<b>Ireland</b>														
1	Elan	136	-27,0	-23,0	341	-39,0	-36,0	1.832	-32,0	-26,0	39,9	-84,4	74,3	2.526
2	Kerry	111	26,0	24,0	4.129	12,0	11,0	21.671	15,0	13,0	2,7	5,7	5,1	3.901
3	IONA Technologies	13	-37,0	-25,0	50	-8,0	-28,0	346	-2,0	-27,0	25,3	0,3	36,6	84
4	Trintech	6,8	11,0	-24,0	41	30,0	-7,0	315	-6,0	-15,0	16,5	2,7	21,4	42
5	Greencore	6,2	-16,0	-8,0	1.446	-2,0	-7,0	10.512	-6,0	-8,0	0,4	5,8	0,6	677
6	Waterford Wedgwood	6,1	-34,0	1,0	832	-13,0	-8,0	8.482	-5,0	-4,0	0,7	-2,2	0,7	252
7	Kingspan	5,0	0,0	8,0	958	22,0	5,0	3.351	5,0	0,0	0,5	9,9	1,5	1.795

No.	Company	— R&D Investment —			— Net Sales —			— Employees —			R&D/Sales ratio	Operating Profit	R&D per employee	Market Capitalisation
		2004	change 04/03	CAGR 3 yrs	2004	change 04/03	CAGR 3 yrs	2004	change 04/03	CAGR 3 yrs	2004	2004	2004	2004
		units	€m	%	€m	%	%	#	%	%	%	% of Net Sales	€K	€m
<b>Ireland continued</b>														
8	Irish Life & Permanent	4,6	-59,0	..	4.132	50,0	13,0	4.769	-3,0	-4,0	0,1	11,2	1,0	3.689
9	Glanbia	4,3	-8,0	5,0	1.846	-10,0	-11,0	3.831	-24,0	-18,0	0,2	4,6	1,1	689
10	Trinity Biotech	3,4	-11,0	19,0	59	22,0	29,0	675	8,0	27,0	5,8	7,0	5,1	66
<b>Italy</b>														
1	Istituto Finanziario Industriale	1.827	4,0	0,0	51.878	-3,0	-6,0	179.790	-7,0	-8,0	3,5	-2,3	10,2	976
2	Finmeccanica	1.454	18,0	19,0	7.529	0,0	4,0	46.401	3,0	6,0	19,3	-0,8	31,3	6.266
3	ENI	257	8,0	8,0	58.382	13,0	6,0	71.497	-7,0	0,0	0,4	20,4	3,6	96.868
4	Pirelli	198	-3,0	-6,0	7.114	7,0	-2,0	33.704	-8,0	-6,0	2,8	5,6	5,9	4.420
5	Telecom Italia	139	0,0	..	31.237	1,0	-1,0	88.892	-7,0	-8,0	0,4	21,0	1,6	37.213
6	Italtel	75	-8,0	-15,0	542	-8,0	-16,0	2.484	-7,0	-15,0	13,8	-1,6	30,0	..
7	Chiesi Farmaceutici	62	-5,0	..	474	14,0	..	2.517	7,0	..	13,1	9,8	24,8	..
8	FastWeb	55	44,0	19,0	720	36,0	67,0	2.108	43,0	20,0	7,7	-16,8	26,2	2.741
9	Sorin	54	-11,0	6,0	719	-15,0	-9,0	4.776	-13,0	-5,0	7,5	-3,5	11,3	868
10	IMMSI	39	2,0	..	1.137	751,0	..	6.599	40,0	..	3,4	4,3	5,9	484
<b>Latvia</b>														
1	PJSC Grindeks	0,38	..	..	27	..	..	..	..	..	1,4	9,6	..	..
2	Latvenergo	0,04	-65,0	..	329	14,0	8,0	6.389	-3,0	-2,0	0,0	15,4	0,0	..
3	Saf Tehnika	0,02	..	..	18	163,0	..	116	55,0	..	0,1	39,6	0,2	..
<b>Lithuania</b>														
1	Lietuvos Energija	0,43	..	..	271	-1,0	-18,0	1.140	-1,0	-49,0	0,2	12,3	0,4	..
<b>Luxembourg</b>														
1	Ipsen	136	4,0	..	737	3,0	4,0	3.769	4,0	3,0	18,5	21,2	36,1	..
2	Arcelor	135	-5,0	..	30.176	16,0	..	95.829	-4,0	..	0,4	12,0	1,4	11.580
3	Gemplus International	72	0,0	-14,0	865	15,0	-5,0	5.476	9,0	-7,0	8,3	2,4	13,2	1.195
4	Tenaris	19	331,0	..	3.043	30,0	9,0	16.447	14,0	5,0	0,6	24,3	1,2	1.652
5	Millicom International Cellular	0,88	4,0	-44,0	678	42,0	13,0	2.269	18,0	-9,0	0,1	27,3	0,4	1.383
6	Stolt Offshore	0,52	-53,0	21,0	914	-16,0	0,0	..	..	..	0,1	-0,5	..	1.715
7	Quilmes Industrial	0,29	100,0	0,0	563	23,0	-7,0	6.188	..	..	0,1	19,8	0,0	1.271
<b>Malta</b>														
1	Sebgha	0,44	-56,0	-5,0	14	4,0	8,0	71	-28,0	6,0	3,1	17,8	6,3	..
2	Carlo Gavazzi	0,38	-3,0	0,0	13	11,0	8,0	206	-8,0	-2,0	2,9	8,2	1,9	..
3	Maltacom	0,23	..	..	126	-1,0	3,0	1.560	2,0	-3,0	0,2	23,1	0,1	..
4	Seifert mtm Systems Malta	0,16	36,0	11,0	8	15,0	-11,0	125	-7,0	-6,0	2,0	-8,6	1,3	..
5	Medelec Switchgear	0,15	500,0	-10,0	18	-20,0	5,0	117	-1,0	2,0	0,8	2,8	1,3	..

## II.1.4. Ranking of Top 10 companies by R&D investment in the 2004 financial year, within selected EU Member States (not fully represented elsewhere in the Scoreboard)

No.	Company	— R&D Investment —			— Net Sales —			— Employees —			R&D/Sales ratio	Operating Profit	R&D per employee	Market Capitalisation
		2004	change 04/03	CAGR 3 yrs	2004	change 04/03	CAGR 3 yrs	2004	change 04/03	CAGR 3 yrs	2004	2004	2004	2004
		units	€m	%	€m	%	%	#	%	%	%	% of Net Sales	€K	€m
<b>Malta continued</b>														
6	Francis Busuttil	0,14	-10,0	-13,0	51	12,0	9,0	361	5,0	1,0	0,3	29,6	0,4	..
7	Consolidated Biscuit	0,05	44,0	..	6	..	..	142	..	..	0,8	11,7	0,3	..
<b>Poland</b>														
1	Telekomunikacja Polska	17	15,0	53,0	4.560	2,0	2,0	36.589	-18,0	-15,0	0,4	18,6	0,5	6.971
2	Netia	6	-26,0	23,0	220	29,0	19,0	..	..	..	2,5	10,4	..	1.301
3	KGHM Polska Miedz	0,29	-89,0	-52,0	1.683	22,0	11,0	27.410	52,0	14,0	0,0	23,9	0,0	1.867
4	Krosno	0,04	..	..	98	16,0	..	..	..	..	0,0	10,0	..	50
<b>Portugal</b>														
1	Portugal Telecom	11	-26,0	..	6.023	4,0	2,0	29.483	19,0	12,0	0,2	16,5	0,4	9.332
2	Energias de Portugal	2,8	191,0	365,0	6.699	-4,0	6,0	15.727	-10,0	4,0	0,0	13,3	0,2	6.188
3	BRISA	2,7	35,0	..	559	4,0	8,0	3.082	4,0	3,0	0,5	64,7	0,9	3.752
4	Novabase	0,8	231,0	-18,0	172	34,0	21,0	1.076	14,0	4,0	0,5	1,1	0,7	159
5	RAR	0,7	309,0	..	577	50,0	13,0	2.537	31,0	16,0	0,1	5,5	0,3	..
6	Cofina	0,6	13.900,0	..	218	1,0	..	1.591	8,0	..	0,3	8,3	0,4	141
7	Mota-Engil	0,48	13,0	..	1.169	16,0	10,0	13.334	10,0	1,0	0,0	5,9	0,0	570
8	Refer	0,36	..	..	76	-3,0	..	4.814	-7,0	..	0,5	-101,6	0,1	..
9	Somague	0,31	21,0	..	877	14,0	..	4.444	30,0	..	0,0	2,7	0,1	..
10	Galp Energia	0,30	66,0	-25,0	9.259	25,0	10,0	5.644	4,0	4,0	0,0	5,4	0,1	..
<b>Slovakia</b>														
1	Biotika	1,1	-26,0	..	24	-34,0	-17,0	812	-20,0	-9,0	4,8	-26,6	1,4	..
2	Zeleziarne Podbrezova	0,08	126,0	..	295	26,0	..	4.092	-1,0	..	0,0	4,1	0,0	57
<b>Slovenia</b>														
1	Krka	35	14,0	14,0	473	17,0	12,0	4.678	6,0	10,0	7,4	15,4	7,5	1.109
2	Gorenje	5	7.146,0	..	903	10,0	10,0	9.503	4,0	25,0	0,6	3,2	0,5	320
<b>Spain</b>														
1	Telefonica	461	5,0	-2,0	30.322	7,0	0,0	156.819	5,0	-1,0	1,5	18,0	2,9	67.911
2	Amadeus Global Travel	153	6,0	6,0	2.057	7,0	5,0	5.760	12,0	14,0	7,4	16,3	26,6	4.354
3	Industria de Turbo Propulsores	82	-24,0	34,0	379	-6,0	1,0	2.244	2,0	1,0	21,6	9,9	36,4	..
4	Repsol YPF	57	-57,0	-23,0	40.585	13,0	-2,0	32.376	6,0	-5,0	0,1	9,2	1,8	29.484
5	Gamesa	50	22,0	1,0	1.736	10,0	33,0	7.222	17,0	15,0	2,9	16,0	6,9	2.851
6	Seat	40	..	..	5.862	6,0	..	12.931	0,0	..	0,7	2,0	3,1	..
7	Zeltia	37	-28,0	5,0	79	7,0	9,0	532	-10,0	6,0	46,5	-7,3	69,0	1.195
8	Auna	34	59,0	..	4.217	11,0	22,0	4.582	-8,0	..	0,8	7,2	7,3	..
9	Abengoa	21	4,0	-16,0	1.687	3,0	7,0	9.318	6,0	-1,0	1,2	5,8	2,2	1.040
10	FAES Farma	20	..	..	163	..	..	747	..	..	12,0	12,3	26,1	902

No.	Company	— R&D Investment —			— Net Sales —			— Employees —			R&D/Sales ratio	Operating Profit	R&D per employee	Market Capitalisation
		2004	change 04/03	CAGR 3 yrs	2004	change 04/03	CAGR 3 yrs	2004	change 04/03	CAGR 3 yrs	2004	2004	2004	2004
		units	€m	%	€m	%	%	#	%	%	%	% of Net Sales	€K	€m
<b>Sweden</b>														
1	Ericsson	2.436	-25,0	-22,0	14.611	12,0	-17,0	51.742	-10,0	-18,0	16,7	21,8	47,1	43.334
2	Volvo	991	14,0	6,0	23.294	15,0	4,0	78.196	7,0	3,0	4,3	6,7	12,7	13.812
3	TeliaSonera	308	9,0	29,0	9.071	-1,0	13,0	25.381	-3,0	1,0	3,4	22,2	12,1	16.934
4	Autoliv	271	21,0	22,0	4.520	16,0	15,0	34.500	7,0	7,0	6,0	8,5	7,9	3.053
5	Scania	255	7,0	6,0	6.382	13,0	3,0	29.064	5,0	3,0	4,0	10,9	8,8	6.306
6	Electrolux	227	23,0	5,0	13.357	-3,0	-4,0	72.382	-6,0	-6,0	1,7	3,9	3,1	5.295
7	Sandvik	185	0,0	8,0	6.046	12,0	4,0	37.673	1,0	3,0	3,1	13,1	4,9	7.986
8	Atlas Copco	141	9,0	5,0	5.387	9,0	-2,0	26.828	4,0	1,0	2,6	13,6	5,3	7.985
9	SAAB	89	0,0	4,0	1.976	3,0	4,0	12.115	-8,0	-4,0	4,5	8,9	7,4	1.319
10	SKF	88	6,0	-3,0	4.963	8,0	1,0	38.502	2,0	1,0	1,8	9,4	2,3	4.312
<b>The Netherlands</b>														
1	Philips Electronics	2.534	-3,0	-9,0	30.319	4,0	-2,0	141.966	-4,0	-12,0	8,4	7,7	17,8	28.322
2	EADS	2.295	5,0	4,0	31.761	5,0	1,0	110.662	1,0	2,0	7,2	7,0	20,7	22.087
3	AKZO Nobel	826	-7,0	-1,0	12.688	-3,0	-3,0	63.600	-4,0	-2,0	6,5	6,3	13,0	12.124
4	ASML	331	15,0	-7,0	2.465	60,0	10,0	5.038	-5,0	-13,0	13,4	15,4	65,7	6.761
5	DSM	286	7,0	-1,0	7.752	28,0	-1,0	24.479	19,0	4,0	3,7	4,2	11,7	6.255
6	CNH Global	267	40,0	6,0	12.179	55,0	19,0	26.000	-3,0	-3,0	2,2	5,6	10,3	..
7	Oce	207	-1,0	1,0	2.652	-4,0	-6,0	21.760	-3,0	-1,0	7,8	4,2	9,5	1.068
8	ASM International	85	7,0	2,0	754	30,0	10,0	8.160	17,0	7,0	11,3	11,7	10,4	599
9	Stork	71	-4,0	42,0	1.824	-6,0	-6,0	12.789	-12,0	-10,0	3,9	5,2	5,6	1.316
10	Draka	54	24,0	-2,0	1.743	23,0	-3,0	8.502	11,0	0,0	3,1	-0,3	6,4	367
<b>UK</b>														
1	GlaxoSmithKline	4.010	2,0	2,0	28.757	-5,0	0,0	99.837	-3,0	-3,0	13,9	30,3	40,2	108.038
2	AstraZeneca	2.798	10,0	11,0	15.763	14,0	9,0	64.200	6,0	7,0	17,8	22,3	43,6	59.035
3	BAE Systems	1.568	1,0	4,0	12.847	8,0	0,0	69.400	1,0	-2,0	12,2	-0,6	22,6	15.191
4	Ford	1.078	-12,0	1,0	13.738	-8,0	1,0	27.800	-31,0	-13,0	7,8	-8,1	38,8	..
5	Unilever	1.040	-2,0	-4,0	40.169	-6,0	-8,0	227.000	-5,0	-7,0	2,6	8,6	4,6	54.212
6	Pfizer	844	8,0	17,0	1.543	15,0	13,0	5.559	9,0	8,0	54,7	35,2	151,9	..
7	Airbus	487	-1,0	..	2.405	4,0	..	9.536	6,0	..	20,3	-9,9	51,1	..
8	Shell (now Royal Dutch Shell)	407	-5,0	13,0	195.104	31,0	25,0	114.000	-4,0	8,0	0,2	12,3	3,6	183.576
9	Rolls-Royce	398	0,0	-8,0	8.389	5,0	-2,0	35.200	-2,0	-7,0	4,7	5,8	11,3	8.591
10	BT	363	-23,0	-11,0	26.305	1,0	-3,0	99.600	-3,0	-7,0	1,4	16,7	3,6	26.253

## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Explanations of the terms in the header are to be found in Volume II, page nr. 195, Glossary of Definitions

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				<i>units</i>	€m	%	%	%	€m
<b>Top 700 Companies</b>				<b>212 785</b>	<b>6.9</b>	<b>5.2</b>	<b>1.4</b>	<b>5 121 736</b>	<b>10.9</b>
<i>number of companies for calculation</i>				<i>700</i>	<i>693</i>	<i>678</i>	<i>655</i>	<i>700</i>	<i>693</i>
1	Pfizer	Pharma & biotech (48)	USA	5 653	7.8	37.8	6.8	38 637	16.2
2	Ford Motor	Automobiles & parts (31)	USA	5 444	-1.3	-2.6	4.1	126 287	4.5
3	Toyota Motor	Automobiles & parts (31)	Japan	5 422	10.7	2.1	13.4	133 197	11.9
4	General Motors	Automobiles & parts (31)	USA	4 782	14.0	-1.7	-6.5	142 373	4.3
5	Microsoft	Software & computer services (97)	USA	4 550	-20.5	67.0	8.2	29 273	8.0
6	Matsushita Electric	Electronic & electrical (25)	Japan	4 419	6.3	5.1	-2.6	62 562	16.5
7	IBM	Software & computer services (97)	USA	4 167	11.8	6.9	2.7	70 844	8.0
8	Johnson & Johnson	Pharma & biotech (48)	USA	3 828	11.1	18.4	10.2	34 835	13.1
9	Sony	Electronic & electrical (25)	Japan	3 604	-2.4	16.1	2.3	47 940	-10.9
10	Intel	IT hardware (93)	USA	3 515	9.6	8.1	6.3	25 168	13.5
11	Samsung Electronics	Electronic & electrical (25)	South Korea	3 484	37.0	17.6	22.9	58 251	26.5
12	Honda Motor	Automobiles & parts (31)	Japan	3 358	4.2	2.8	10.6	62 106	6.0
13	Roche	Pharma & biotech (48)	Switzerland	3 295	6.9	12.0	9.4	20 233	0.2
14	Novartis	Pharma & biotech (48)	Switzerland	3 095	12.0	-1.7	3.7	20 782	13.6
15	Merck	Pharma & biotech (48)	USA	2 950	26.2	18.7	9.0	16 876	2.0
16	Hitachi	IT hardware (93)	Japan	2 790	4.5	-1.4	-9.2	64 813	4.6
17	Hewlett-Packard	IT hardware (93)	USA	2 579	-4.0	10.3	24.1	58 787	9.4
18	Nissan Motor	Automobiles & parts (31)	Japan	2 544	18.0	14.6	13.1	53 340	8.8
19	Toshiba	IT hardware (93)	Japan	2 418	1.6	1.6	-0.5	40 060	-1.3
20	Cisco Systems	IT hardware (93)	USA	2 348	1.8	-9.1	-12.1	16 219	16.8
21	NTT	Telecommunication services (67)	Japan	2 284	-10.4	-10.4	1.3	77 584	-2.6
22	General Electric	Diversified industrials (24)	USA	2 274	16.4	19.9	11.9	112 096	14.7
23	Motorola	IT hardware (93)	USA	2 251	-18.9	0.5	-13.1	23 045	15.8
24	Eli Lilly	Pharma & biotech (48)	USA	1 980	14.5	9.3	-3.8	10 195	10.1
25	NEC	IT hardware (93)	Japan	1 977	7.3	-13.4	-11.2	34 859	-1.1
26	Canon	Electronic & electrical (25)	Japan	1 977	6.2	10.9	6.9	24 899	8.4
27	Bristol-Myers Squibb	Pharma & biotech (48)	USA	1 839	9.7	2.8	1.6	14 258	-7.2
28	Wyeth	Pharma & biotech (48)	USA	1 810	17.5	0.6	11.3	12 771	9.5
29	Fujitsu	IT hardware (93)	Japan	1 802	-12.2	-18.3	-13.3	34 225	3.2
30	Delphi	Automobiles & parts (31)	USA	1 545	5.0	17.6	0.0	21 058	1.9
31	Denso	Automobiles & parts (31)	Japan	1 543	17.5	-1.5	4.9	18 398	9.8
32	Amgen	Pharma & biotech (48)	USA	1 492	22.5	48.3	29.1	7 762	26.3
33	Texas Instruments	IT hardware (93)	USA	1 455	13.2	8.0	1.3	9 255	27.9
34	Nortel Networks	IT hardware (93)	Canada	1 441	-0.1	-12.1	-30.8	6 035	-19.5
35	Sun Microsystems	IT hardware (93)	USA	1 417	4.8	0.3	-9.1	8 229	-2.2
36	Boeing	Aerospace & defence (21)	USA	1 382	13.8	0.7	-15.3	38 593	3.9
37	Hyundai Motor	Automobiles & parts (31)	South Korea	1 379	102.2	54.9	-36.7	37 739	14.0
38	Procter & Gamble	Personal care & household (47)	USA	1 326	8.2	4.0	-9.5	37 821	18.5
39	Abbott Laboratories	Health (44)	USA	1 248	-2.1	11.0	-1.0	14 479	0.0
40	Fuji Photo Film	Media & entertainment (54)	Japan	1 244	8.9	8.3	85.6	18 383	2.2
41	Schering-Plough	Pharma & biotech (48)	USA	1 182	9.4	3.1	8.6	6 086	-0.7
42	Oracle	Software & computer services (97)	USA	1 097	16.7	8.3	9.7	8 681	16.2
43	LG Electronics	Electronic & electrical (25)	South Korea	1 097	40.8	19.3	..	30 737	21.5
44	STMicroelectronics	IT hardware (93)	Switzerland	1 065	24.6	22.8	-3.3	6 442	21.1
45	Sharp	Electronic & electrical (25)	Japan	997	-8.8	20.8	-5.2	16 207	12.7
46	El du Pont de Nemours	Chemicals (11)	USA	981	-1.2	6.7	-20.4	20 114	1.3
47	Lucent Technologies	IT hardware (93)	USA	934	-14.7	-35.6	-34.4	6 655	6.8
48	Takeda Chemical (now Takeda Pharmaceutical)	Pharma & biotech (48)	Japan	931	4.4	23.9	11.6	7 800	3.8
49	United Technologies	Diversified industrials (24)	USA	924	22.3	-13.8	-5.0	27 549	20.7
50	Nestle	Food producers (43)	Switzerland	914	17.3	-0.2	4.0	56 138	-1.4

Sales		Employees		-R&D/Sales ratio-		Operating Profit	-R&D per employee-		-Market Capitalisation-		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
7.9	-0.0	17 936 565	1.3	4.2	4.3	10.2	11.3	10.9	6 855 871	12.0	5.9	5.7
683	669	662	623	699	691	699	662	630	686	494	689	685
39.6	0.4	115 000	-5.7	14.6	15.8	26.8	49.2	43.0	141 853	-22.0	5.0	5.8
0.5	0.6	324 864	-0.8	4.3	4.6	6.2	16.8	16.8	13 584	-29.0	3.9	4.7
6.9	8.3	265 753	0.5	4.1	4.1	9.8	20.4	18.5	106 171	1.0	10.4	..
-0.7	5.4	324 000	-0.6	3.4	3.1	6.4	14.8	12.9	14 524	-18.0	4.0	4.0
14.4	13.5	61 000	7.0	15.5	21.1	38.1	74.6	100.4	215 020	-5.0	2.0	3.0
1.1	7.6	334 752	15.2	7.1	7.7	2.8	13.2	14.3	31 262	29.0	4.0	3.7
9.8	-5.5	329 001	3.1	5.9	5.7	13.3	12.7	11.7	96 496	-11.0	4.5	4.9
15.3	10.0	109 900	-0.6	11.0	11.2	27.1	34.8	31.2	139 050	15.0	4.6	5.4
0.3	-1.4	151 400	-6.5	7.5	6.9	2.8	23.8	22.8	24 975	5.0	6.8	5.7
12.6	0.9	85 000	6.7	14.0	14.5	29.7	41.4	40.2	117 943	-1.0	11.2	12.1
8.8	28.3	..	..	6.0	5.5	14.7	..	..	68 619	64.0	12.8	11.9
2.4	8.3	137 827	4.7	5.4	5.5	8.7	24.4	24.5	35 907	3.0	4.3	3.5
5.0	1.9	64 703	-1.0	16.3	15.3	24.0	50.9	47.2	92 766	42.0	7.5	7.3
-12.8	1.2	81 392	3.6	14.9	15.1	23.7	38.0	35.2	100 808	10.0	4.5	5.3
-56.6	8.5	63 000	-0.3	17.5	14.1	33.9	46.8	37.0	49 348	-34.0	7.5	8.5
5.4	2.5	347 424	6.5	4.3	4.3	2.6	8.0	8.2	15 627	3.0	4.1	3.4
30.2	24.1	151 000	6.3	4.4	5.0	5.2	17.1	18.9	51 028	12.0	2.7	2.7
10.2	1.8	123 748	-3.0	4.8	4.4	9.9	20.6	16.9	35 606	1.0	5.8	5.5
4.9	-9.4	161 000	-2.9	6.0	5.9	2.2	15.0	14.4	9 446	10.0	3.6	4.4
-0.2	-15.2	34 000	0.0	14.5	16.6	28.2	69.1	67.8	83 643	-21.0	2.8	3.8
1.6	-5.3	201 486	-1.9	2.9	3.2	11.5	11.3	12.4	96 526	-1.0	14.9	15.9
6.9	-1.1	307 000	0.7	2.0	2.0	21.0	7.4	6.4	269 147	8.0	8.6	7.4
1.4	-11.1	68 000	-22.7	9.8	13.9	10.2	33.1	31.5	38 681	38.0	1.6	2.4
13.6	-4.0	44 500	-3.5	19.4	18.7	21.6	44.5	37.5	43 985	-17.0	13.7	13.6
4.5	-8.0	147 753	3.0	5.7	5.2	2.7	13.4	12.9	7 706	-13.0	5.4	4.7
8.8	1.1	108 257	5.5	7.9	8.1	15.8	18.3	18.1	32 628	3.0	7.4	6.6
15.3	-0.1	43 000	-2.3	12.9	10.9	22.3	42.8	38.1	35 701	9.0	3.5	4.5
8.7	3.2	27 617	-47.3	14.2	13.2	0.4	65.6	29.4	44 876	29.0	7.2	12.0
-7.8	-8.7	156 169	-0.6	5.3	6.2	0.8	11.5	13.1	8 966	-1.0	3.0	3.5
2.4	5.1	185 200	-2.5	7.3	7.1	-1.5	8.3	7.7	2 239	-43.0	3.4	3.6
-2.8	19.2	95 461	6.8	8.4	7.8	7.1	16.2	14.7	17 126	8.0	7.7	7.7
51.3	37.5	14 400	11.6	19.2	19.8	31.7	103.6	94.4	72 973	38.0	12.7	16.2
17.3	2.2	35 472	3.9	15.7	17.8	18.3	41.0	37.7	37 961	41.0	10.3	8.1
-3.5	-39.7	34 150	-2.9	23.9	19.2	-2.0	42.2	41.0	10 500	-7.0	3.4	1.7
-8.5	-31.5	32 600	-9.7	17.2	16.1	3.1	43.5	37.4	9 597	-1.0	2.2	3.3
-6.6	-7.1	159 000	1.3	3.6	3.3	4.3	8.7	7.7	29 354	-6.0	1.9	1.5
-3.2	20.8	..	..	3.7	2.1	5.0	..	..	13 837	98.0	6.4	6.5
7.8	2.5	110 000	12.2	3.5	3.8	19.4	12.1	12.5	98 277	-3.0	3.9	3.4
11.3	8.6	60 600	-16.1	8.6	8.8	22.2	20.6	17.7	53 224	18.0	6.6	6.3
4.4	66.7	73 164	0.7	6.8	6.4	6.5	17.0	15.7	12 543	11.0	6.3	4.9
-18.1	3.9	30 500	0.0	19.4	17.6	-0.9	38.8	35.4	23 636	13.0	5.9	8.4
7.2	-2.1	49 872	19.7	12.6	12.6	33.9	22.0	22.6	50 323	24.0	1.6	1.9
92.0	..	..	..	3.6	3.1	7.4	..	..	7 104	56.0	13.2	8.6
15.4	-0.5	49 500	8.3	16.5	16.1	7.7	21.5	18.7	11 259	-8.0	23.4	16.9
11.1	-10.4	46 164	-1.0	6.1	7.6	4.6	21.6	23.4	12 522	6.0	8.1	8.6
12.5	-2.9	60 000	-25.9	4.9	5.0	7.2	16.3	12.3	30 584	-3.0	4.5	6.3
-31.3	-42.1	31 800	-7.8	14.0	17.6	15.1	29.4	31.7	9 647	0.0	1.7	3.4
4.1	4.3	14 592	0.3	11.9	11.9	39.9	63.8	61.3	34 095	11.0	5.0	3.2
10.9	1.8	210 000	3.3	3.4	3.3	11.9	4.4	3.7	38 925	11.0	2.1	1.7
-1.3	5.3	247 000	-2.4	1.6	1.4	11.6	3.7	3.1	84 909	12.0	3.8	3.8



## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment					Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03	
				units	€m	%	%	%	€m	%
51	Mitsubishi Electric	IT hardware (93)	Japan	900	-22.5	-21.0	4.2	23 763	-9.1	
52	Sanyo Electric	Electronic & electrical (25)	Japan	899	3.6	12.9	-1.7	18 007	10.3	
53	Ricoh	Electronic & electrical (25)	Japan	793	19.4	10.7	3.4	13 025	1.9	
54	Dow Chemical	Chemicals (11)	USA	752	4.2	-8.0	-0.6	29 547	23.1	
55	EMC	IT hardware (93)	USA	746	21.9	-8.4	-2.2	6 055	31.9	
56	Applied Materials	IT hardware (93)	USA	730	7.7	-12.5	-12.2	5 895	79.0	
57	Mitsubishi Heavy	Engineering & machinery (26)	Japan	715	-9.1	-7.7	2.0	17 041	-8.5	
58	Freescall Semiconductor	IT hardware (93)	USA	710	..	..	..	4 205	..	
59	Lockheed Martin	Aerospace & defence (21)	USA	708	6.5	8.8	36.7	26 137	11.6	
60	Medtronic	Health (44)	USA	700	11.7	13.6	16.0	7 397	10.6	
61	Advanced Micro Devices	IT hardware (93)	USA	688	9.7	4.4	25.4	3 680	62.9	
62	Agilent Technologies	Electronic & electrical (25)	USA	686	-11.2	-10.1	-13.3	5 283	18.6	
63	Caterpillar	Engineering & machinery (26)	USA	683	38.7	2.0	-5.7	22 256	32.9	
64	Honeywell	Aerospace & defence (21)	USA	675	22.1	-0.8	-9.0	18 835	10.8	
65	Visteon	Automobiles & parts (31)	USA	659	-0.8	0.1	-19.4	13 726	5.6	
66	Aisin Seiki	Automobiles & parts (31)	Japan	640	11.2	18.3	15.0	11 525	14.0	
67	Mitsubishi Chemical	Chemicals (11)	Japan	636	-2.8	7.6	24.4	13 824	2.0	
68	Mazda Motor	Automobiles & parts (31)	Japan	630	0.0	-7.5	13.6	20 937	23.3	
69	Eastman Kodak	Media & entertainment (54)	USA	628	9.3	2.5	-2.2	9 945	1.5	
70	Sankyo	Pharma & biotech (48)	Japan	623	0.1	6.2	3.6	4 282	4.6	
71	Syngenta	Chemicals (11)	Switzerland	595	11.3	4.3	-3.6	5 348	10.5	
72	Altria	Tobacco (49)	USA	595	6.2	11.1	6.0	65 927	9.5	
73	Tyco International	Diversified industrials (24)	Bermuda	577	16.9	5.9	10.7	29 541	9.1	
74	Xerox	IT hardware (93)	USA	559	-12.4	-5.3	-8.0	11 567	0.1	
75	Computer Associates	Software & computer services (97)	USA	559	7.6	0.3	-3.7	2 597	7.8	
76	3M	Diversified industrials (24)	USA	558	1.3	1.5	-0.9	14 722	9.8	
77	Micron Technology	IT hardware (93)	USA	555	15.0	16.9	14.7	3 240	42.5	
78	Suzuki Motor	Automobiles & parts (31)	Japan	544	25.4	34.3	..	15 788	9.1	
79	Sumitomo Chemical	Chemicals (11)	Japan	540	3.3	9.2	12.8	8 317	4.3	
80	Qualcomm	IT hardware (93)	USA	530	37.6	15.9	8.9	3 590	22.9	
81	<i>Fujisawa Pharmaceutical</i>	Pharma & biotech (48)	Japan	529	18.0	9.3	9.8	2 839	3.5	
82	Bridgestone	Automobiles & parts (31)	Japan	523	2.7	4.1	8.6	17 351	4.9	
83	Asea Brown Boveri	Electronic & electrical (25)	Switzerland	508	12.6	11.5	-15.9	15 245	10.2	
84	Yamanouchi Pharm <small>(now Astellas Pharmaceutical)</small>	Pharma & biotech (48)	Japan	503	4.8	2.6	19.4	3 670	0.9	
85	Biogen Idec	Pharma & biotech (48)	USA	498	190.2	156.9	5.3	1 627	225.4	
86	Eisai	Pharma & biotech (48)	Japan	495	15.6	8.5	10.9	3 591	7.2	
87	Mitsubishi Motors	Automobiles & parts (31)	Japan	495	-11.7	..	..	18 089	-35.1	
88	Exxon Mobil	Oil & gas (7)	USA	478	5.0	-2.1	4.6	194 221	23.8	
89	Electronic Arts	Software & computer services (97)	USA	466	23.9	27.4	3.4	2 302	5.8	
90	Serono	Pharma & biotech (48)	Switzerland	451	25.7	36.1	16.1	1 808	32.3	
91	Yamaha Motor	Automobiles & parts (31)	Japan	451	12.1	14.4	14.1	7 325	0.7	
92	Deere	Engineering & machinery (26)	USA	450	5.9	9.4	-10.6	13 002	32.4	
93	ADP	Support services (58)	USA	428	16.4	5.1	-7.7	5 705	8.5	
94	Daiichi Pharmaceutical	Pharma & biotech (48)	Japan	424	10.6	10.0	21.3	2 317	0.2	
95	Boston Scientific	Health (44)	USA	419	25.9	31.8	24.7	4 138	61.8	
96	Fuji Heavy Industries	Automobiles & parts (31)	Japan	413	-4.3	9.5	17.8	10 335	4.9	
97	Broadcom	IT hardware (93)	USA	407	-15.3	-8.5	59.9	1 766	49.0	
98	Pioneer	Electronic & electrical (25)	Japan	401	8.6	13.4	16.2	5 267	4.7	
99	Sumitomo Electric	Electronic & electrical (25)	Japan	397	13.6	0.4	8.2	11 074	3.6	
100	Baxter International	Health (44)	USA	380	-6.5	10.4	17.3	6 996	6.6	

Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
-0.3	-11.6	98 988	-10.2	3.8	4.4	2.7	9.1	10.5	8 189	13.0	2.9	3.7
12.3	-6.1	82 337	4.2	5.0	5.3	2.5	10.9	11.0	3 482	-32.0	4.4	4.0
2.4	3.9	75 100	2.6	6.1	5.2	7.7	10.6	9.1	8 388	-21.0	4.6	4.2
18.2	-0.7	43 203	-6.9	2.5	3.0	10.8	17.4	15.6	34 873	28.0	3.3	3.4
14.7	-23.3	22 700	13.5	12.3	13.3	12.6	32.9	30.6	23 641	21.0	4.5	5.9
-11.5	-31.1	12 191	1.2	12.4	20.6	22.0	59.9	56.2	21 069	-1.0	2.4	5.9
-9.4	-5.9	59 949	-2.2	4.2	4.2	3.1	11.9	12.8	6 728	4.0	4.8	4.7
..	..	22 200	..	16.9	..	4.7	32.0	..	11 972	..	9.1	..
19.7	10.8	130 000	0.0	2.7	2.8	5.7	5.4	5.1	20 605	18.0	2.2	2.2
18.6	19.5	33 000	6.5	9.5	9.4	24.8	21.2	20.2	49 024	11.0	4.5	4.7
13.9	-30.7	15 900	11.2	18.7	27.8	3.8	43.2	43.8	6 067	88.0	28.8	18.6
0.7	-28.4	28 000	-3.4	13.0	17.4	6.3	24.5	26.7	9 442	12.0	1.6	3.4
13.0	-1.5	73 033	5.6	3.1	2.9	10.7	9.3	7.1	27 904	51.0	7.0	7.8
3.7	-5.8	109 000	0.9	3.6	3.3	8.5	6.2	5.1	24 436	3.0	2.5	2.8
-4.0	3.1	70 200	-2.5	4.8	5.1	-2.2	9.4	9.2	947	-3.0	4.4	5.0
15.2	8.3	47 600	7.9	5.6	5.7	4.8	13.4	13.0	5 421	14.0	9.2	8.2
6.0	1.9	33 496	-11.0	4.6	4.8	3.9	19.0	17.4	4 957	29.0	3.4	4.7
12.9	3.9	35 627	-1.5	3.0	3.7	2.5	17.7	17.4	3 567	14.0	1.4	2.6
3.8	-3.0	54 800	-14.2	6.3	5.9	0.3	11.5	9.0	5 462	-2.0	3.4	3.8
3.8	0.7	11 520	0.0	14.5	15.2	13.1	54.1	54.0	3 480	27.0	4.4	2.9
6.2	-2.0	19 536	-9.0	11.1	11.1	6.7	30.5	24.9	8 720	28.0	2.3	3.4
31.6	-14.8	156 000	-5.5	0.9	0.9	16.9	3.8	3.4	102 058	42.0	2.1	2.4
3.2	4.7	258 400	-0.1	2.0	1.8	12.5	2.2	1.9	42 585	-7.0	2.5	3.2
-0.9	-6.8	58 100	-4.9	4.8	5.5	5.9	9.6	10.5	9 770	20.0	1.3	1.3
5.1	5.1	15 300	0.0	21.5	21.6	3.3	36.5	34.0	11 615	9.0	2.0	0.9
11.6	1.6	67 071	-0.0	3.8	4.1	22.9	8.3	8.2	40 730	-14.0	4.7	3.7
19.4	-34.2	17 900	7.8	17.1	21.2	6.1	31.0	29.1	5 036	-16.0	24.5	26.6
20.8	4.3	38 493	..	3.4	3.0	3.4	14.1	..	6 795	-2.0	3.5	3.9
9.1	-2.2	19 036	6.3	6.5	6.6	5.7	28.4	29.2	6 758	33.0	11.5	8.2
30.6	13.4	7 600	2.7	14.8	13.2	41.9	69.7	52.0	48 929	13.0	6.8	5.8
11.9	14.7	..	..	18.6	16.3	16.7	..	..	..	..	3.3	4.1
2.5	5.3	113 699	4.6	3.0	3.1	7.7	4.6	4.7	12 139	7.0	7.4	6.1
2.7	-22.9	102 537	-12.0	3.3	3.3	3.0	5.0	3.9	11 002	34.0	2.6	2.9
5.2	5.1	9 062	-2.3	13.7	13.2	19.3	55.5	51.8	14 597	59.0	2.4	3.6
68.4	47.8	4 266	14.5	30.6	34.3	1.2	116.8	46.1	10 350	-27.0	16.4	44.4
8.1	19.3	7 700	3.6	13.8	12.8	16.7	64.3	57.7	7 885	26.0	4.4	4.7
21.4	-2.3	43 624	-3.6	2.7	2.0	-3.7	11.3	12.4	3 968	..	5.4	4.9
46.7	-22.5	105 200	-0.5	0.2	0.3	15.7	4.5	4.3	283 199	27.0	4.5	6.0
19.2	43.9	6 100	27.1	20.2	17.3	20.9	76.3	78.3	13 372	22.0	4.0	3.0
20.1	12.3	4 902	7.1	24.9	26.2	21.3	91.9	78.4	5 847	11.0	6.1	9.9
7.0	7.1	33 694	5.1	6.2	5.5	7.7	13.4	12.5	4 115	33.0	3.3	3.5
-2.4	4.4	46 500	7.6	3.5	4.3	8.5	9.7	9.8	12 989	13.0	2.1	2.4
13.3	0.7	42 000	2.4	7.5	7.0	18.5	10.2	9.0	19 107	5.0	2.6	1.9
-3.2	4.9	..	..	18.3	16.6	14.4	..	..	4 972	31.0	3.5	3.8
19.0	9.2	17 500	16.7	10.1	13.0	27.7	23.9	22.2	17 083	-27.0	4.9	5.4
0.7	3.9	27 296	-0.7	4.0	4.4	3.4	15.1	15.7	2 502	-20.0	8.7	8.4
48.7	12.6	3 373	23.6	23.1	40.6	11.6	120.8	176.1	8 680	32.0	2.1	3.0
-1.6	6.5	39 362	8.3	7.6	7.3	-0.2	10.2	10.2	2 134	-26.0	8.7	8.3
0.3	0.4	87 415	10.4	3.6	3.3	4.1	4.5	4.4	6 534	27.0	5.4	6.6
9.9	5.8	48 000	-9.6	5.4	6.2	5.6	7.9	7.7	18 452	36.0	5.9	8.8

## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment					Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03	
				<i>units</i> €m	%	%	%	€m	%	
101	Guidant	Health (44)	USA	380	-0.5	18.5	14.7	2 770	1.8	
102	Johnson Controls	Automobiles & parts (31)	USA	379	6.4	10.3	28.7	19 536	17.3	
103	Analog Devices	IT hardware (93)	USA	377	13.7	6.2	-8.8	1 938	28.7	
104	Monsanto	Chemicals (11)	USA	376	-3.0	..	..	4 015	16.8	
105	Northrop Grumman	Aerospace & defence (21)	USA	371	26.0	-1.5	18.7	21 963	13.9	
106	Agere Systems	IT hardware (93)	USA	365	6.2	-32.6	..	1 407	4.0	
107	Mitsubishi Pharma	Pharma & biotech (48)	Japan	363	4.7	40.7	80.5	1 690	-16.2	
108	Raytheon	Aerospace & defence (21)	USA	361	0.8	-17.0	23.6	14 895	11.8	
109	Apple Computer	IT hardware (93)	USA	360	3.8	5.6	3.7	6 091	33.4	
110	Emerson Electric	Electronic & electrical (25)	USA	358	-5.4	-3.0	-10.8	11 488	11.9	
111	Konica Minolta	Media & entertainment (54)	Japan	353	62.0	3.9	9.4	6 178	53.9	
112	Asahi Kasei	Chemicals (11)	Japan	348	-1.8	-0.5	-0.4	9 000	5.0	
113	Schlumberger	Oil & gas (7)	USA	344	-16.0	-14.4	-7.7	8 446	-17.4	
114	Dell	IT hardware (93)	USA	341	40.3	3.5	-0.6	36 201	18.7	
115	Kyocera	IT hardware (93)	Japan	335	-1.4	17.0	15.0	8 191	6.6	
116	Omron	Electronic & electrical (25)	Japan	334	15.6	-2.8	-2.6	4 199	9.3	
117	Komatsu	Engineering & machinery (26)	Japan	334	9.0	9.2	-11.5	10 302	19.9	
118	Tokyo Electron	IT hardware (93)	Japan	317	-11.9	-6.9	1.7	3 803	15.0	
119	LSI Logic	IT hardware (93)	USA	310	-2.6	-5.4	-9.1	1 251	0.4	
120	Alps Electric	Electronic & electrical (25)	Japan	305	12.4	28.3	11.7	4 621	3.9	
121	Chiron	Pharma & biotech (48)	USA	304	5.6	20.1	-2.8	1 268	-2.5	
122	Japan Tobacco	Tobacco (49)	Japan	303	-5.1	-15.5	11.9	33 208	3.0	
123	LG Philips LCD	Electronic & electrical (25)	South Korea	296	49.2	23.4	..	5 916	36.5	
124	Seiko Epson	Electronic & electrical (25)	Japan	295	-3.9	4.4	3.5	10 147	6.9	
125	Google	Software & computer services (97)	USA	291	72.1	467.0	..	2 346	117.4	
126	Taiwan Semiconductor Manufacturing	IT hardware (93)	Taiwan	291	-1.5	8.4	10.1	6 081	26.4	
127	Kao	Personal care & household (47)	Japan	286	3.3	2.1	0.5	6 726	3.8	
128	Yahoo!	Software & computer services (97)	USA	285	87.1	34.0	22.7	2 630	119.9	
129	Hynix Semiconductor	IT hardware (93)	South Korea	281	13.0	-13.6	..	4 168	62.0	
130	Genzyme	Pharma & biotech (48)	USA	279	20.0	7.8	17.7	1 619	28.4	
131	Goodyear	Automobiles & parts (31)	USA	278	7.9	-7.8	1.2	13 515	21.5	
132	Olympus	Electronic & electrical (25)	Japan	278	11.3	14.0	-1.2	4 549	12.3	
133	Applera	Pharma & biotech (48)	USA	277	16.6	-15.3	18.1	1 343	2.7	
134	Cadence Design Systems	Software & computer services (97)	USA	274	9.6	4.2	9.8	881	6.9	
135	Telstra	Telecommunication services (67)	Australia	266	-22.7	7.4	-24.5	12 273	3.8	
136	Tokyo Electric Power	Electricity (72)	Japan	265	-8.4	-15.9	-15.9	34 850	-1.3	
137	JFE	Steel & other metals (18)	Japan	262	10.3	..	..	17 761	1.9	
138	Corning	IT hardware (93)	USA	261	3.2	-28.8	-23.5	2 835	24.7	
139	PetroChina	Oil & gas (7)	China	261	21.8	33.5	-4.7	34 546	27.9	
140	National Semiconductor	IT hardware (93)	USA	260	-19.0	-1.2	1.2	1 459	18.6	
141	Veritas Software	Software & computer services (97)	USA	258	15.4	10.9	13.6	1 502	16.9	
142	Toray Industries	Chemicals (11)	Japan	257	0.2	-4.2	-4.1	7 815	5.4	
143	Korea Electric Power	Electricity (72)	South Korea	256	21.7	-14.3	-26.7	17 025	9.7	
144	Avaya	IT hardware (93)	USA	256	-4.1	-20.9	-14.4	2 994	-6.2	
145	Intuit	Software & computer services (97)	USA	255	35.6	13.8	8.6	1 374	13.2	
146	Allergan	Pharma & biotech (48)	USA	254	13.7	30.4	-7.6	1 505	16.6	
147	Teva Pharmaceutical Industries	Pharma & biotech (48)	Israel	249	58.5	29.4	53.8	3 531	46.5	
148	TDK	Electronic & electrical (25)	Japan	248	8.3	-17.5	4.5	4 731	8.2	
149	Nvidia	IT hardware (93)	USA	247	24.1	20.1	46.1	1 479	10.3	
150	Murata Manufacturing	IT hardware (93)	Japan	245	8.7	-0.5	3.5	2 974	4.9	

Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
14.2	19.6	12 000	0.0	13.7	14.0	21.8	31.6	31.8	17 332	36.0	5.7	6.7
12.7	9.1	123 000	4.2	1.9	2.1	4.9	3.1	3.0	8 243	4.0	3.2	2.9
19.9	-25.0	8 900	6.0	19.4	22.0	26.5	42.3	39.4	10 140	-8.0	5.6	3.3
..	..	12 600	-8.0	9.4	11.3	8.6	29.8	28.3	12 882	..	3.9	4.8
52.3	26.9	125 400	2.3	1.7	1.5	6.7	3.0	2.4	14 444	4.0	2.3	2.4
-15.5	..	6 600	-2.9	25.9	25.4	-6.0	55.3	50.5	1 508	1.0	5.1	6.3
22.6	26.2	6 122	-29.9	21.5	17.2	8.8	59.3	39.7	3 247	-16.0	4.2	4.2
8.1	-0.6	79 000	1.3	2.4	2.7	4.5	4.6	4.6	13 199	27.0	1.8	2.4
8.1	7.1	11 695	7.2	5.9	7.6	3.9	30.8	31.8	28 160	219.0	2.1	2.7
1.0	-10.7	107 800	1.0	3.1	3.7	13.0	3.3	3.5	20 977	11.0	2.6	2.4
3.6	-0.8	34 710	101.8	5.7	5.4	5.0	10.2	12.7	3 902	-22.0	2.9	5.3
-0.2	-5.8	25 011	-2.8	3.9	4.1	3.9	13.9	13.8	5 057	6.0	6.4	5.9
3.1	-2.0	52 500	-31.8	4.1	4.0	16.8	6.6	5.3	37 232	34.0	10.6	7.4
17.1	13.6	55 200	20.0	0.9	0.8	8.6	6.2	5.3	65 264	-1.0	1.1	0.8
3.4	-19.5	57 870	17.1	4.1	4.4	9.9	5.8	6.9	10 173	-5.0	4.4	3.8
0.2	-10.1	24 324	2.4	8.0	7.5	8.5	13.7	12.2	4 040	2.0	6.5	6.4
9.8	5.2	33 008	4.3	3.2	3.6	7.6	10.1	9.7	8 208	94.0	5.1	5.0
10.2	-42.3	8 870	-11.8	8.3	10.9	3.5	35.7	35.8	7 652	20.0	1.4	1.5
-6.8	1.8	4 414	-6.5	24.8	25.5	-25.7	70.3	67.4	2 602	82.0	3.1	4.7
3.0	11.4	32 869	0.9	6.6	6.1	5.3	9.3	8.3	2 078	18.0	6.3	6.2
38.4	65.3	5 400	1.3	24.0	22.1	4.1	56.3	54.0	5 074	-20.0	10.6	7.9
-1.1	0.9	39 243	1.6	0.9	1.0	-0.1	7.7	8.3	10 274	-16.0	1.8	2.3
71.0	52.5	13 173	..	5.0	4.6	21.2	22.5	..	13 176	..	46.7	19.5
3.8	-5.0	84 899	..	2.9	3.2	5.2	3.5	..	..	..	4.6	6.4
234.1	..	3 021	..	12.4	15.7	19.9	96.2	..	59 218	..	10.0	12.1
24.7	29.2	18 597	15.8	4.8	6.1	34.9	15.6	18.4	30 607	41.0	31.0	18.3
4.3	3.1	19 143	-1.0	4.2	4.3	13.0	14.9	14.3	9 647	-7.0	5.4	4.4
70.6	32.8	7 600	38.2	10.8	12.8	34.1	37.5	27.7	35 856	19.0	6.9	7.2
20.7	-24.7	..	..	6.7	9.7	24.6	..	..	7 185	..	30.1	18.2
28.9	8.7	7 000	24.4	17.2	18.4	10.7	39.9	41.3	13 292	56.0	8.5	15.1
9.2	-2.1	84 000	-2.3	2.1	2.3	4.2	3.3	3.0	2 287	62.0	2.8	2.5
6.8	13.2	28 857	20.4	6.1	6.2	9.8	9.6	10.4	4 004	10.0	6.9	5.8
4.5	3.5	5 360	-2.0	20.7	18.2	6.4	51.8	43.5	3 021	-14.0	3.7	8.1
-13.4	-9.6	4 900	2.1	31.1	30.4	7.7	56.0	52.1	3 194	22.0	5.1	7.4
1.5	8.1	38 564	3.8	2.2	2.9	29.8	6.9	9.2	16 195	2.0	13.8	12.7
-5.8	-0.7	51 694	-1.2	0.8	0.8	8.8	5.1	5.5	24 117	6.0	13.3	16.8
..	..	52 557	-2.9	1.5	1.4	8.6	5.0	4.4	12 105	17.0	5.2	5.3
-2.4	-49.5	24 700	19.9	9.2	11.1	-25.0	10.6	12.3	20 946	68.0	22.3	11.8
24.3	2.3	424 175	1.1	0.8	0.8	38.9	0.6	0.5	119 046	85.0	24.5	23.2
11.8	-29.2	9 700	-1.0	17.8	26.1	16.2	26.8	32.7	6 000	33.0	10.8	10.2
16.0	0.9	7 587	16.4	17.2	17.4	27.5	34.0	34.3	..	..	5.8	4.7
1.7	-5.5	32 901	-2.6	3.3	3.5	4.7	7.8	7.6	4 818	-1.0	..	5.9
7.0	8.2	32 557	5.6	1.5	1.4	18.7	7.9	6.8	16 926	118.0	23.7	31.1
-12.5	-27.1	14 900	-11.8	8.6	8.4	8.1	17.2	15.8	3 404	-29.0	2.0	1.4
21.5	7.7	6 700	0.0	18.6	15.5	22.5	38.1	28.1	6 242	16.0	2.8	3.1
26.7	-20.6	5 030	2.0	16.9	17.3	26.2	50.5	45.4	9 100	22.0	4.7	6.3
30.1	21.3	13 800	25.9	7.1	6.5	12.0	18.0	14.3	14 514	6.0	6.5	6.3
5.9	-16.7	36 804	16.1	5.2	5.2	8.9	6.7	7.2	7 164	9.0	6.8	6.8
-4.6	39.4	2 101	15.1	16.7	14.8	5.7	117.3	108.8	3 723	98.0	3.3	7.0
0.1	-32.4	26 469	0.1	8.2	8.0	18.2	9.3	8.5	8 304	-3.0	8.0	4.6

## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment					Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03	
				<i>units</i>	€m	%	%	%	€m	%
151	Symantec	Software & computer services (97)	USA	244	31.7	27.9	20.3	1 900	38.1	
152	General Dynamics	Aerospace & defence (21)	USA	242	16.7	11.5	24.6	14 110	15.4	
153	MedImmune	Pharma & biotech (48)	USA	241	109.4	8.4	73.7	840	8.2	
154	NCR	IT hardware (93)	USA	241	7.9	2.0	1.4	4 403	6.9	
155	Amazon.com	General retailers (52)	USA	241	13.8	3.9	13.4	5 092	31.5	
156	Maxtor	IT hardware (93)	USA	238	-8.7	-11.7	-8.0	2 793	-7.1	
157	Mitsui Chemicals	Chemicals (11)	Japan	236	-11.4	-4.9	6.8	7 823	3.5	
158	Teijin	Chemicals (11)	Japan	236	9.9	-6.2	5.3	6 279	-1.8	
159	Whirlpool	Household goods & textiles (34)	USA	232	-3.1	15.3	22.1	9 726	8.6	
160	Asahi Glass	Construction & building (13)	Japan	232	-11.5	18.1	6.6	10 595	-11.0	
161	Lexmark	IT hardware (93)	USA	230	17.7	7.2	0.7	3 909	11.8	
162	Adobe Systems	Software & computer services (97)	USA	229	12.4	12.6	9.8	1 226	28.6	
163	Xilinx	IT hardware (93)	USA	226	24.2	11.5	8.5	1 157	12.5	
164	Textron	Diversified industrials (24)	USA	226	20.4	23.2	-43.4	7 535	3.9	
165	Maxim Integrated Products	IT hardware (93)	USA	225	12.5	-1.2	-1.7	1 059	24.9	
166	Rohm	IT hardware (93)	Japan	225	-1.4	48.4	2.9	2 553	1.5	
167	PPG Industries	Chemicals (11)	USA	223	4.5	6.2	-3.5	6 999	8.6	
168	Ono Pharmaceutical	Pharma & biotech (48)	Japan	222	1.6	7.3	23.0	1 001	3.3	
169	Siebel Systems	Software & computer services (97)	USA	220	-3.2	-15.7	84.4	986	-1.0	
170	Nikon	IT hardware (93)	Japan	217	9.7	0.7	19.8	3 636	8.0	
171	Unisys	Software & computer services (97)	USA	217	5.1	2.5	-17.6	4 282	-1.5	
172	Danaher	Engineering & machinery (26)	USA	216	42.0	19.0	46.2	5 069	30.1	
173	Forest Laboratories	Pharma & biotech (48)	USA	216	19.1	20.3	29.8	2 246	15.2	
174	Shionogi	Pharma & biotech (48)	Japan	214	-4.7	2.2	4.6	1 439	-30.0	
175	Toyota Industries	Automobiles & parts (31)	Japan	212	-0.5	-0.9	14.5	8 360	8.9	
176	Synopsys	Software & computer services (97)	USA	212	-0.2	27.0	19.7	803	-7.3	
177	Kyowa Hakko Kogyo	Pharma & biotech (48)	Japan	210	-5.6	5.6	1.3	2 505	-2.9	
178	BMC Software	Software & computer services (97)	USA	209	-51.5	19.6	-16.0	1 076	3.1	
179	eBay	General retailers (52)	USA	207	61.3	45.5	59.6	1 955	22.7	
180	St Jude Medical	Health (44)	USA	207	16.9	20.3	22.1	1 688	18.7	
181	Kla-Tencor	IT hardware (93)	USA	207	4.6	-6.7	-19.2	1 101	13.2	
182	Kimberly-Clark	Personal care & household (47)	USA	206	-0.3	-2.9	-2.1	11 097	5.1	
183	Fuji Electric	Electronic & electrical (25)	Japan	205	6.7	-4.6	3.9	6 147	2.8	
184	Kirin Brewery	Beverages (41)	Japan	203	6.4	15.1	-0.2	8 788	5.0	
185	Ajinomoto	Food producers (43)	Japan	202	6.2	-1.8	2.8	7 464	5.2	
186	Cephalon	Pharma & biotech (48)	USA	202	60.9	32.7	52.3	747	42.0	
187	Shin-Etsu Chemical	Chemicals (11)	Japan	201	6.1	-3.5	-3.3	6 946	16.2	
188	Accenture	Support services (58)	Bermuda	200	8.6	6.7	-13.4	11 119	12.8	
189	Tanabe Seiyaku	Pharma & biotech (48)	Japan	200	12.9	4.9	12.2	1 235	-1.0	
190	ATI Technologies	IT hardware (93)	Canada	199	26.7	29.4	10.1	1 469	44.2	
191	Dana	Automobiles & parts (31)	USA	198	6.7	-12.2	10.4	6 679	14.0	
192	POSCO	Steel & other metals (18)	South Korea	197	8.4	26.5	-21.2	17 038	34.8	
193	Millennium Pharmaceuticals	Pharma & biotech (48)	USA	196	-15.9	-6.1	238.5	330	3.4	
194	Marvell Technology	IT hardware (93)	Bermuda	196	22.9	43.8	..	901	49.4	
195	ZTE	IT hardware (93)	China	195	43.0	..	..	1 886	24.6	
196	Rohm & Haas	Chemicals (11)	USA	195	11.3	-8.5	13.0	5 371	13.7	
197	SK Telecom	Telecommunication services (67)	South Korea	194	15.9	21.3	48.7	7 513	2.9	
198	Yokogawa Electric	Electronic & electrical (25)	Japan	194	7.0	31.2	0.3	2 670	13.1	
199	Teradyne	IT hardware (93)	USA	193	2.9	-13.4	1.8	1 318	32.5	
200	Cypress Semiconductor	IT hardware (93)	USA	193	4.1	-12.7	7.6	698	13.3	

Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
32.9	31.3	6 500	22.6	12.9	13.5	31.7	37.6	35.0	19 176	80.0	3.5	6.0
20.2	13.7	70 200	3.8	1.7	1.7	10.2	3.4	3.1	16 950	18.0	1.4	1.4
24.4	46.5	1 823	10.5	28.7	14.8	-5.8	132.1	69.7	5 038	21.0	7.0	10.7
0.2	-5.6	28 500	-1.7	5.5	5.4	4.1	8.4	7.7	4 894	51.0	1.3	1.1
33.8	26.0	9 000	15.4	4.7	5.5	6.3	26.7	27.1	13 395	15.0	0.6	0.3
8.1	-0.5	13 656	0.8	8.5	8.7	-4.1	17.4	19.2	961	13.0	4.5	3.2
10.6	1.4	12 348	-2.5	3.0	3.5	3.1	19.1	21.1	3 667	42.0	4.6	6.6
-3.6	21.3	20 551	-11.7	3.8	3.4	5.3	11.5	9.2	3 590	49.0	5.4	7.5
10.5	6.5	68 125	-0.4	2.4	2.7	5.6	3.4	3.5	4 148	31.0	3.9	3.5
28.0	2.5	56 776	1.9	2.2	2.2	8.4	4.1	4.7	8 386	8.0	10.9	8.7
9.1	5.2	13 400	13.6	5.9	5.6	13.8	17.2	16.6	5 361	-37.0	3.7	2.0
11.2	-5.3	3 142	-10.4	18.7	21.4	35.5	72.9	58.1	9 707	31.0	3.8	3.0
20.9	13.8	3 050	10.1	19.6	17.7	23.5	74.2	65.8	6 942	-8.0	3.9	2.9
-7.5	-13.5	44 000	2.3	3.0	2.6	7.5	5.1	4.4	7 274	17.0	2.9	3.1
12.5	-35.0	7 599	22.5	21.3	23.6	42.1	29.7	32.3	10 299	-11.0	16.1	7.3
9.0	-21.5	18 591	10.4	8.8	9.1	29.3	12.1	13.6	7 945	-14.0	12.7	10.2
8.5	-1.2	31 800	-3.3	3.2	3.3	12.0	7.0	6.5	8 201	10.0	2.6	2.5
1.3	1.9	2 645	..	22.2	22.5	38.0	83.9	..	4 375	3.0	6.8	4.7
-17.2	-20.2	5 032	1.2	22.3	22.8	10.2	43.7	45.7	3 170	9.0	5.3	1.1
-2.9	-0.2	13 636	3.4	6.0	5.9	-0.9	15.9	15.0	3 306	28.0	3.6	4.2
5.4	-6.8	36 400	-2.4	5.1	4.7	-0.1	5.9	5.5	1 606	-37.0	2.4	4.3
15.6	21.0	35 000	16.7	4.3	3.9	16.0	6.2	5.1	12 785	11.0	1.7	1.5
20.1	40.9	5 136	3.4	9.6	9.3	37.4	42.1	36.5	10 025	-23.0	2.9	3.8
-31.9	1.8	5 589	-9.1	14.9	10.9	2.6	38.3	36.5	3 345	-25.0	2.2	3.2
9.1	27.7	27 431	9.6	2.5	2.8	4.4	7.7	8.5	7 001	27.0	6.7	8.1
29.8	33.1	4 378	0.4	26.4	24.5	8.0	48.4	48.7	1 827	-24.0	4.1	4.3
-5.1	0.8	6 294	-6.7	8.4	8.6	0.9	33.3	32.9	2 280	4.0	2.6	3.6
7.0	3.0	6 905	7.4	19.4	41.3	1.6	30.3	67.1	3 282	30.0	3.9	3.5
78.4	62.1	8 100	42.1	10.6	8.1	39.9	25.6	22.6	40 799	34.0	11.0	16.9
21.5	18.1	7 900	6.9	12.3	12.5	23.2	26.3	24.0	12 157	38.0	3.9	2.5
-19.3	-22.2	5 200	6.1	18.8	20.3	19.5	39.7	40.3	6 994	17.0	3.7	10.1
5.8	-6.6	60 000	-3.2	1.9	2.0	16.8	3.4	3.3	22 115	-8.0	3.6	6.1
-0.8	-5.8	24 601	-4.7	3.3	3.2	1.0	8.3	7.4	2 000	51.0	1.4	2.1
2.5	3.3	22 160	-3.0	2.3	2.3	9.1	9.1	8.3	7 073	-1.0	5.6	5.1
4.7	3.8	24 861	0.3	2.7	2.7	4.8	8.1	7.7	4 927	-12.0	4.5	5.5
41.0	90.3	2 173	32.0	27.0	23.8	0.8	92.8	76.1	1 691	-19.0	5.0	5.7
4.4	2.9	18 151	4.4	2.9	3.2	15.7	11.1	10.9	12 564	19.0	9.9	8.2
15.8	-13.3	100 000	23.9	1.8	1.9	11.7	2.0	2.3	10 508	3.0	1.9	1.6
-4.7	-3.9	4 517	..	16.2	14.2	14.9	44.2	..	1 961	20.0	3.6	3.2
35.5	-1.6	2 700	22.7	13.5	15.4	12.5	73.5	71.2	2 190	-23.0	1.0	1.2
-17.0	-7.7	45 900	-22.2	3.0	3.2	1.5	4.3	3.1	1 671	-21.0	3.6	3.8
24.0	9.3	..	..	1.2	1.4	22.5	..	..	14 022	60.0	9.5	7.3
22.7	43.6	1 477	-3.5	59.4	73.1	-57.3	132.7	152.3	2 289	-10.0	11.2	12.2
62.1	..	1 917	14.7	21.7	26.4	13.2	102.0	95.2	9 210	102.0	3.8	11.6
..	..	25 515	..	10.4	9.0	7.9	7.7	..	15 927	..	3.1	2.9
12.1	1.1	16 691	-3.2	3.6	3.7	11.6	11.7	10.2	7 618	18.0	4.4	5.3
10.2	11.4	7 353	17.0	2.6	2.3	22.0	26.4	26.7	11 406	37.0	15.4	16.0
5.7	-11.8	18 364	-1.7	7.3	7.7	0.7	10.6	9.7	2 294	7.0	3.7	2.5
10.7	-15.2	6 200	1.6	14.6	18.8	10.5	31.1	30.7	2 168	-11.0	9.3	2.3
8.1	-5.5	4 500	11.6	27.6	30.0	0.0	42.8	45.9	1 470	43.0	13.9	9.4



## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment					Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03	
				units	€m	%	%	%	€m	%
201	Eaton	Electronic & electrical (25)	USA	192	17.0	9.9	-11.0	7 223	21.8	
202	SEGA	Software & computer services (97)	Japan	192	-3.5	19.2	2.8	1 373	-3.0	
203	Dai Nippon Printing	Media & entertainment (54)	Japan	187	8.1	3.1	-5.3	9 722	3.4	
204	SunGard Data Systems	Software & computer services (97)	USA	187	22.3	19.2	1.1	2 547	20.6	
205	Ciba Specialty Chemicals	Chemicals (11)	Switzerland	186	2.5	-4.4	6.5	4 546	5.7	
206	Novellus Systems	IT hardware (93)	USA	186	10.8	2.3	-18.3	999	46.7	
207	Tellabs	IT hardware (93)	USA	184	-12.5	-14.6	-21.2	906	25.7	
208	Halliburton	Oil & gas (7)	USA	184	5.0	-2.5	4.7	15 056	25.8	
209	Calsonic Kansei	Automobiles & parts (31)	Japan	184	14.2	8.1	6.7	4 446	13.6	
210	Goodrich	Aerospace & defence (21)	USA	183	11.5	27.9	17.0	3 476	7.8	
211	Petroleo Brasileiro	Oil & gas (7)	Brazil	183	23.4	36.7	11.4	27 554	21.6	
212	Atmel	IT hardware (93)	USA	182	-0.1	-2.2	-5.6	1 214	24.0	
213	ChevronTexaco (now Chevron)	Oil & gas (7)	USA	178	1.7	7.7	5.7	110 994	47.7	
214	Cummins	Engineering & machinery (26)	USA	177	20.5	2.6	-4.4	6 208	34.0	
215	Clariant	Chemicals (11)	Switzerland	177	-11.0	-12.5	-13.9	5 519	0.2	
216	Comverse Technology	IT hardware (93)	USA	177	7.4	-8.8	-22.2	706	25.4	
217	Conexant Systems	IT hardware (93)	USA	177	50.6	-50.8	-33.0	664	50.6	
218	Autodesk	Software & computer services (97)	USA	176	14.4	21.0	2.6	908	29.7	
219	Alcan	Steel & other metals (18)	Canada	176	70.7	21.7	-14.8	18 308	82.4	
220	Juniper Networks	IT hardware (93)	USA	175	35.4	8.8	4.1	983	90.5	
221	Taisho Pharmaceutical	Pharma & biotech (48)	Japan	174	-18.1	-8.3	-3.6	2 057	4.5	
222	Becton Dickinson	Health (44)	USA	173	0.2	-22.1	42.4	3 631	9.0	
223	Daikin Industries	Electronic & electrical (25)	Japan	171	-0.4	2.1	-2.6	4 493	9.2	
224	United Microelectronics	IT hardware (93)	Taiwan	171	25.7	-20.5	-17.8	2 999	35.0	
225	DST Systems	Software & computer services (97)	USA	171	26.2	25.3	-26.9	1 787	0.5	
226	McKesson	Food & drug retailers (63)	USA	170	0.5	-30.8	28.0	59 236	15.8	
227	Sekisui Chemical	Construction & building (13)	Japan	170	1.3	3.5	-8.9	5 851	1.9	
228	Cerner	Software & computer services (97)	USA	170	28.1	20.0	31.7	682	10.4	
229	Colgate-Palmolive	Personal care & household (47)	USA	169	11.9	4.2	6.3	7 787	6.9	
230	Kansai Electric Power	Electricity (72)	Japan	167	-14.8	-10.6	3.8	18 238	-2.9	
231	UTStarcom	IT hardware (93)	USA	165	40.7	85.0	44.1	1 989	37.6	
232	Gilead Sciences	Pharma & biotech (48)	USA	165	35.6	22.4	-27.4	975	52.6	
233	Hon Hai Precision Industry	Electronic & electrical (25)	Taiwan	164	47.4	25.1	69.1	12 574	45.8	
234	Toyoda Gosei	Automobiles & parts (31)	Japan	163	..	..	..	2 850	15.1	
235	Yamaha	Household goods & textiles (34)	Japan	162	0.3	-0.4	6.5	3 874	2.8	
236	IHI	Engineering & machinery (26)	Japan	161	1.8	-12.1	10.8	7 520	2.8	
237	Rockwell Collins	Aerospace & defence (21)	USA	160	0.9	-14.6	..	2 156	15.3	
238	Harman International Industries	Electronic & electrical (25)	USA	160	51.6	30.2	23.9	1 995	21.6	
239	Human Genome Sciences	Pharma & biotech (48)	USA	159	17.7	-9.2	51.2	3	-50.0	
240	OKI Electric	IT hardware (93)	Japan	158	36.4	5.9	-32.6	4 944	5.3	
241	Kubota	Engineering & machinery (26)	Japan	158	-5.6	-11.9	-12.5	7 059	5.7	
242	Advantest	IT hardware (93)	Japan	155	-8.4	-11.5	-6.5	1 251	78.2	
243	Stryker	Health (44)	USA	155	17.1	27.4	-0.5	3 136	17.6	
244	Gillette	Personal care & household (47)	USA	154	3.5	9.2	-1.1	7 708	13.2	
245	Brother Industries	Electronic & electrical (25)	Japan	154	1.7	16.3	1.9	3 051	4.0	
246	Toppan Printing	Media & entertainment (54)	Japan	153	5.2	5.8	1.6	9 315	3.7	
247	Navistar International	Engineering & machinery (26)	USA	152	-4.2	-0.9	2.3	6 966	29.0	
248	Ciena	IT hardware (93)	USA	151	-3.4	-16.8	8.2	220	5.8	
249	Mentor Graphics	Software & computer services (97)	USA	149	9.5	12.5	19.2	523	5.2	
250	Western Digital	IT hardware (93)	USA	148	49.2	12.1	-2.0	2 242	12.1	



Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
11.8	-1.2	55 000	7.8	2.7	2.8	8.8	3.5	3.2	7 326	2.0	3.4	3.4
-4.4	-15.1	3 507	1.1	14.0	14.0	5.5	54.6	57.3	..	..	4.8	3.5
-0.2	-2.3	34 514	-1.9	1.9	1.8	7.1	5.4	4.9	8 673	10.0	4.9	5.0
13.4	31.2	13 000	30.0	7.3	7.2	22.6	14.4	15.3	..	..	6.1	6.3
-6.2	-3.8	19 338	3.6	4.1	4.2	7.8	9.6	9.7	3 296	-8.0	4.2	3.5
10.2	-37.3	3 505	20.8	18.6	24.6	15.8	52.9	57.7	2 751	-6.0	2.3	3.4
-25.6	-40.1	4 125	17.4	20.3	29.2	-3.0	44.6	59.9	3 067	13.0	3.3	1.0
30.2	-3.4	97 000	-4.0	1.2	1.5	-3.4	1.9	1.7	21 997	114.0	2.8	3.2
18.4	7.0	15 613	5.5	4.1	4.1	2.7	11.8	10.9	1 185	3.0	3.6	4.8
12.1	-6.6	14 700	-28.6	5.3	5.1	7.5	12.5	8.0	4 401	57.0	3.2	2.9
38.4	-9.4	52 037	6.6	0.7	0.7	26.1	3.5	3.0	45 339	107.0	20.6	21.3
11.5	-18.9	8 800	11.4	15.0	18.6	2.8	20.7	23.1	768	-49.0	14.7	4.8
24.5	-9.3	47 265	-6.6	0.2	0.2	13.8	3.8	3.5	95 489	27.0	4.2	5.9
7.6	3.0	28 100	16.1	2.9	3.2	6.6	6.3	6.1	2 968	35.0	1.8	1.8
-8.7	-5.5	24 769	-8.3	3.2	3.6	5.5	7.2	7.4	2 559	12.0	3.4	3.5
4.1	-42.1	5 050	8.3	25.1	29.3	4.7	35.1	35.4	3 803	55.0	4.8	4.6
-0.5	-43.4	2 400	65.5	26.6	26.6	-30.8	73.6	80.9	599	10.0	2.0	3.4
15.3	-12.9	3 477	-0.5	19.4	22.0	19.3	50.7	44.1	6 178	87.0	3.3	2.7
8.8	-0.7	82 500	37.7	1.0	1.0	4.0	2.1	1.7	9 903	-7.0	5.2	6.5
28.4	-38.4	2 948	89.8	17.8	25.1	14.7	59.5	83.4	9 728	9.0	4.7	2.7
1.0	-0.9	5 477	14.0	8.4	10.8	22.8	31.7	44.1	4 561	-10.0	2.7	4.9
12.3	7.4	25 005	0.9	4.8	5.2	13.4	6.9	7.0	9 987	13.0	5.4	5.8
6.3	1.3	17 077	7.8	3.8	4.2	7.5	10.0	10.8	4 924	7.0	4.8	4.1
32.3	7.0	10 642	18.2	5.7	6.1	14.7	16.1	15.1	10 301	25.0	62.8	25.9
1.4	43.7	11 000	-3.5	9.5	7.6	15.5	15.5	11.9	3 090	8.0	7.5	10.9
21.7	14.2	25 200	2.4	0.3	0.3	-0.2	6.8	6.9	10 655	53.0	0.2	0.2
-5.4	-7.5	16 987	-17.1	2.9	2.9	3.2	10.0	8.2	2 438	-16.0	2.6	2.6
11.8	46.3	5 345	5.3	24.9	21.4	12.3	31.7	26.1	2 161	80.0	6.2	9.9
6.6	-1.4	36 000	-1.6	2.2	2.1	19.8	4.7	4.1	20 178	-3.0	3.3	3.1
-1.4	0.1	33 935	-4.6	0.9	1.0	10.7	4.9	5.5	14 997	15.0	12.3	15.9
100.1	56.6	8 200	49.1	8.3	8.1	2.4	20.1	21.3	713	-53.0	5.0	6.2
86.3	99.4	1 654	16.1	16.9	19.0	47.7	99.4	85.1	14 226	42.0	3.9	18.6
44.1	67.5	..	..	1.3	1.3	6.1	..	..	12 960	..	..	..
13.8	3.5	15 483	14.8	5.7	..	6.2	10.5	..	1 666	..	10.4	8.7
4.0	-2.8	18 842	1.6	4.2	4.3	9.4	8.6	8.7	2 549	13.0	3.5	3.0
-5.8	-2.9	22 768	-3.4	2.1	2.2	-3.7	7.1	6.7	1 552	12.0	..	..
2.0	..	15 800	10.5	7.4	8.5	14.9	10.2	11.1	6 372	43.0	3.2	2.8
22.0	6.4	10 606	-1.6	8.0	6.4	9.0	15.1	9.8	4 096	-2.0	5.0	5.2
100.0	-66.7	840	-23.6	5 290.3	2 247.8	-6 404.3	188.9	122.6	1 288	38.0	2 700.0	833.3
11.7	-3.2	20 410	-2.6	3.2	2.5	3.5	7.7	5.5	1 452	-10.0	4.9	3.7
0.4	-5.1	22 916	3.2	2.2	2.5	9.0	6.9	7.5	6 162	36.0	2.1	2.8
2.6	-65.5	3 544	0.7	12.4	24.2	16.7	43.8	48.2	5 916	37.0	2.9	7.0
20.4	15.7	15 891	7.6	5.0	5.0	17.0	9.8	9.0	15 588	11.0	4.4	4.0
9.5	-5.7	28 700	-2.4	2.0	2.2	23.1	5.4	5.1	38 112	33.0	5.9	4.4
7.4	12.8	17 450	13.2	5.0	5.2	9.0	8.8	9.8	1 672	-3.0	3.2	2.8
-3.4	0.2	32 178	-3.3	1.6	1.6	4.6	4.8	4.4	5 129	-1.0	5.9	7.7
8.5	0.6	14 800	4.2	2.2	2.9	4.6	10.3	11.2	1 735	-5.0	2.4	2.8
-21.8	-77.5	1 651	-9.1	68.7	75.2	-259.9	91.5	86.1	891	-24.0	10.9	10.6
13.2	-0.7	3 856	7.1	28.5	27.4	5.6	38.6	37.8	467	-21.0	3.4	3.4
26.3	10.2	17 376	51.0	6.6	5.0	5.1	8.5	8.6	2 287	114.0	4.3	2.3

## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment					Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03	
				<i>units</i>	€m	%	%	%	€m	%
251	Beckman Coulter	Health (44)	USA	147	2.9	5.7	-3.0	1 772	9.9	
252	Novell	Software & computer services (97)	USA	146	8.1	8.6	-11.7	858	5.5	
253	Lear	Automobiles & parts (31)	USA	145	15.5	-2.8	-11.4	12 478	7.7	
254	Storage Technology	IT hardware (93)	USA	145	-3.7	-5.0	-12.1	1 636	1.9	
255	Japan Radio	Electronic & electrical (25)	Japan	144	-1.3	-10.6	1.5	2 000	7.4	
256	Namco	Software & computer services (97)	Japan	142	35.7	-6.9	46.3	1 239	11.5	
257	Dover	Diversified industrials (24)	USA	139	18.7	-5.8	-4.0	4 038	24.4	
258	Furukawa Electric	Electronic & electrical (25)	Japan	137	-23.4	7.5	25.5	5 312	4.1	
259	Harley-Davidson	Automobiles & parts (31)	USA	137	11.3	8.9	89.8	3 914	8.5	
260	China Petroleum & Chemical	Oil & gas (7)	China	135	-28.1	39.4	16.5	53 643	40.5	
261	Givaudan	Personal care & household (47)	Switzerland	135	-4.2	5.3	3.0	1 734	-1.3	
262	AlCoA	Steel & other metals (18)	USA	134	-6.2	-9.3	5.4	17 273	9.2	
263	Altera	IT hardware (93)	USA	133	1.1	-2.3	7.0	748	22.8	
264	Bandai	Household goods & textiles (34)	Japan	132	23.9	4.0	3.6	1 890	7.4	
265	Baker Hughes	Oil & gas (7)	USA	130	2.0	4.7	27.7	4 491	15.3	
266	International Flavors & Fragrances	Personal care & household (47)	USA	129	10.0	10.6	6.5	1 496	6.9	
267	TRW Automotive	Automobiles & parts (31)	USA	128	5.8	..	..	8 837	6.1	
268	McAfee	Software & computer services (97)	USA	127	-6.4	24.1	1.4	670	-2.8	
269	Compuware	Software & computer services (97)	USA	127	-1.3	13.1	33.7	906	-2.6	
270	Chubu Electric Power	Electricity (72)	Japan	126	-4.3	-8.2	-6.9	15 085	-3.5	
271	Showa Denko	Chemicals (11)	Japan	126	3.5	10.0	-0.0	5 318	7.4	
272	Network Appliance	IT hardware (93)	USA	126	29.7	16.8	-3.3	1 176	36.6	
273	Mattel	Household goods & textiles (34)	USA	126	2.2	4.9	-9.2	3 754	2.9	
274	Lam Research	IT hardware (93)	USA	125	6.2	-10.4	-21.1	689	23.9	
275	Statoil	Oil & gas (7)	Norway	125	2.3	36.4	16.3	36 898	22.2	
276	Barr Pharmaceuticals	Pharma & biotech (48)	USA	124	85.3	20.5	42.2	963	45.0	
277	Eastman Chemical	Chemicals (11)	USA	124	-10.6	6.2	10.6	4 841	13.5	
278	AT&T	Telecommunication services (67)	USA	123	-39.7	9.1	-21.8	22 467	-11.6	
279	Scientific-Atlanta	Media & entertainment (54)	USA	123	6.4	2.1	-0.6	1 257	17.8	
280	Zimmer	Health (44)	USA	123	57.6	31.1	..	2 193	56.8	
281	LG Chem	Chemicals (11)	South Korea	122	119.5	..	..	6 266	27.8	
282	Vale Do Rio Doce	Mining (4)	Brazil	122	76.7	68.2	46.5	7 630	41.7	
283	Kobe Steel	Steel & other metals (18)	Japan	122	-4.9	-19.3	-2.8	8 753	1.2	
284	Shiseido	Personal care & household (47)	Japan	120	-4.7	1.7	1.8	4 594	2.5	
285	Meiji Seika Kaisha	Food producers (43)	Japan	120	-5.9	-5.8	7.0	2 648	4.3	
286	Bausch & Lomb	Health (44)	USA	120	8.4	16.7	5.2	1 642	10.5	
287	Casio Computer	IT hardware (93)	Japan	119	17.1	0.5	0.2	4 014	6.8	
288	Pitney Bowes	Electronic & electrical (25)	USA	119	9.9	4.2	6.1	3 647	8.3	
289	Sepracor	Pharma & biotech (48)	USA	118	-27.4	-9.7	5.4	280	10.7	
290	Unaxis	Diversified industrials (24)	Switzerland	117	16.9	-1.9	-24.5	1 197	14.9	
291	AU Optronics	Electronic & electrical (25)	Taiwan	116	48.0	51.7	20.3	3 903	60.4	
292	General Mills	Food producers (43)	USA	116	6.0	13.7	58.2	8 144	5.4	
293	Hasbro	Household goods & textiles (34)	USA	116	9.8	-6.9	22.4	2 205	-4.5	
294	RF Micro Devices	IT hardware (93)	USA	115	22.1	26.0	36.7	467	-2.5	
295	Sybase	Software & computer services (97)	USA	115	7.9	-3.8	-6.6	580	1.4	
296	ArvinMeritor	Automobiles & parts (31)	USA	115	-6.6	26.5	-2.9	5 910	3.1	
297	ITT Industries	Engineering & machinery (26)	USA	115	28.5	6.3	13.9	4 976	20.2	
298	Dainippon Pharmaceutical	Pharma & biotech (48)	Japan	114	4.7	16.0	4.5	1 227	-0.7	
299	East Japan Railway	Transport (59)	Japan	114	3.4	13.0	1.4	18 253	-0.9	
300	Nintendo	Software & computer services (97)	Japan	114	8.4	-14.1	0.0	3 693	2.1	

Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
6.5	3.8	7 300	-26.3	8.3	8.9	13.9	20.2	14.4	2 463	-2.0	6.6	6.1
-2.6	9.2	6 186	7.9	17.0	16.6	4.3	23.6	23.6	1 665	-19.0	2.3	3.6
9.2	5.9	110 000	-0.9	1.2	1.1	4.3	1.3	1.1	1 980	-29.0	2.5	2.4
7.0	-0.3	7 100	0.0	8.8	9.4	10.0	20.4	21.2	2 902	41.0	2.4	2.0
-0.9	-5.4	8 739	..	7.2	7.8	2.4	16.4	..	402	-4.0	2.4	2.3
1.7	3.8	..	..	11.5	9.4	8.0	..	..	1 212	..	1.1	1.2
5.5	-6.2	28 100	9.3	3.4	3.6	11.2	4.9	4.5	6 153	4.0	2.0	2.2
-7.9	-6.7	25 880	0.4	2.6	3.5	-18.0	5.3	6.9	2 095	6.0	3.6	4.4
14.0	21.4	8 900	1.1	3.5	3.4	25.5	15.4	13.9	10 519	-19.0	4.0	4.6
31.1	12.1	389 451	-2.8	0.3	0.5	10.9	0.3	0.5	30 378	-43.0	0.7	1.1
1.6	11.5	5 901	-1.3	7.8	8.0	18.1	22.8	23.5	3 583	3.0	5.5	5.7
6.1	-11.4	119 000	-0.8	0.8	0.9	9.5	1.1	1.2	19 076	-7.0	4.9	4.0
16.2	-15.2	2 164	8.5	17.8	21.6	31.0	61.4	65.8	6 017	5.0	2.4	1.6
7.5	5.0	2 933	12.9	7.0	6.1	10.0	45.1	41.1	1 644	-7.0	4.2	3.1
5.4	-6.7	26 900	0.9	2.9	3.3	14.1	4.8	4.8	14 675	49.0	5.7	7.7
5.1	-1.8	5 212	-4.4	8.6	8.4	15.0	24.7	21.5	2 566	-1.0	3.5	3.5
..	..	59 900	-1.5	1.4	1.5	3.4	2.1	2.0	2 127	..	4.1	3.7
-10.2	24.9	2 950	-20.3	19.0	19.7	61.8	43.1	36.7	3 534	62.0	2.8	6.4
-8.1	-20.4	7 908	-8.7	14.0	13.8	8.6	16.1	14.9	2 370	65.0	2.3	5.9
-2.4	-1.1	17 416	-3.2	0.8	0.8	13.0	7.3	7.3	13 359	16.0	11.8	14.8
2.3	-4.9	11 166	5.1	2.4	2.5	4.0	11.3	11.5	2 394	29.0	4.1	5.8
31.3	11.8	3 800	33.6	10.7	11.3	15.8	33.1	34.1	6 269	23.0	5.9	4.2
1.5	1.7	25 000	0.0	3.4	3.4	14.8	5.0	4.9	5 290	-3.0	2.8	4.0
-19.9	-37.9	2 200	4.8	18.2	21.2	11.3	57.0	56.2	2 927	25.0	2.6	1.6
2.6	6.5	23 899	23.7	0.3	0.4	21.4	5.2	6.3	38 424	91.0	10.5	9.4
-24.1	133.3	1 500	21.6	12.9	10.1	14.6	82.9	54.4	3 604	37.0	3.6	8.9
9.0	-1.2	12 000	-20.0	2.6	3.2	2.7	10.3	9.2	3 225	27.0	3.8	4.0
-8.7	-28.0	47 600	-22.7	0.5	0.8	-33.6	2.6	3.3	11 718	32.0	6.0	9.1
-13.2	-33.5	7 538	9.4	9.8	10.8	17.1	16.3	16.7	4 047	17.0	1.8	1.7
38.5	..	6 600	1.5	5.6	5.6	25.6	18.6	12.0	14 611	7.0	8.1	8.4
27.0	..	..	..	2.0	1.1	11.7	..	..	2 049	20.0	6.3	8.8
32.5	38.8	36 176	121.4	1.6	1.3	27.6	3.4	4.2	28 241	..	21.8	25.8
0.6	-12.8	26 179	-2.2	1.4	1.5	4.7	4.6	4.8	4 876	61.0	8.4	3.7
0.5	5.3	24 184	-2.6	2.6	2.8	-0.3	5.0	5.1	4 533	16.0	3.1	3.6
-2.3	0.8	..	..	4.5	5.0	1.3	..	..	1 471	22.0	3.2	4.8
11.1	6.2	12 400	6.9	7.3	7.4	12.5	9.6	9.5	3 216	34.0	5.3	4.5
18.8	15.3	12 140	4.3	3.0	2.7	6.4	9.8	8.8	2 857	7.0	3.6	2.6
3.8	7.0	35 183	8.3	3.3	3.2	17.5	3.4	3.3	7 521	4.0	6.4	6.2
43.8	57.1	1 700	72.9	42.0	64.0	-71.8	69.2	164.8	4 211	48.0	2.9	1.2
8.2	-30.0	6 650	2.3	9.7	9.6	-17.8	17.5	15.3	1 527	42.0	6.9	6.0
38.5	101.3	19 907	36.5	3.0	3.2	17.0	5.8	5.4	7 002	74.0	48.7	37.5
32.2	12.3	27 580	1.0	1.4	1.4	18.9	4.2	4.0	12 845	2.0	5.7	6.8
11.4	-1.4	6 000	-13.0	5.2	4.6	9.7	19.3	15.3	2 752	17.0	2.6	2.0
28.1	37.5	2 570	35.6	24.6	19.7	-9.9	44.8	49.8	801	-1.0	18.4	6.1
-6.4	-10.3	3 568	-2.5	19.8	18.6	11.5	32.2	29.1	1 411	38.0	3.8	4.5
13.2	1.1	31 000	-3.1	1.9	2.1	1.2	3.7	3.8	1 037	2.0	1.9	2.5
12.9	6.6	44 000	12.8	2.3	2.2	9.0	2.6	2.3	7 367	36.0	2.4	2.7
4.9	3.2	2 445	-1.4	9.3	8.8	6.5	46.8	44.1	1 410	43.0	2.6	3.7
0.9	-0.1	77 009	-2.2	0.6	0.6	14.7	1.5	1.4	15 685	-5.0	14.7	13.8
-9.1	20.0	2 985	0.0	3.1	2.9	21.7	38.1	35.1	11 215	-2.0	0.4	0.4

## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment					Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03	
				<i>units</i> €m	%	%	%	€m	%	
301	Nitto Denko	Chemicals (11)	Japan	114	14.2	6.1	5.1	3 250	19.5	
302	Kaneka	Chemicals (11)	Japan	113	8.9	3.5	0.8	3 145	9.4	
303	Sumitomo Rubber Industries	Automobiles & parts (31)	Japan	113	11.9	3.4	-3.1	3 379	4.5	
304	Skyworks Solutions	IT hardware (93)	USA	112	0.6	14.4	19.4	577	26.8	
305	Nissan Diesel Motor	Automobiles & parts (31)	Japan	111	13.0	7.4	1.3	3 252	18.8	
306	Winbond Electronic	IT hardware (93)	Taiwan	111	-1.8	-17.6	-25.4	734	5.2	
307	Brocade Communications	IT hardware (93)	USA	110	3.0	9.7	19.4	439	13.7	
308	Ingersoll-Rand	Engineering & machinery (26)	USA	110	-26.8	1.6	-6.8	6 911	-4.9	
309	Kellogg	Food producers (43)	USA	110	17.5	19.1	-3.5	7 073	9.1	
310	JSR	Chemicals (11)	Japan	108	7.7	5.7	155.5	1 975	11.3	
311	BEA Systems	Software & computer services (97)	USA	108	4.0	6.1	9.8	795	6.7	
312	Dainippon Ink & Chemicals	Chemicals (11)	Japan	108	16.1	0.7	6.6	6 999	1.3	
313	Kawasaki Heavy Industries	Engineering & machinery (26)	Japan	106	-4.9	-6.4	-5.7	8 330	-6.4	
314	Terumo	Health (44)	Japan	106	29.1	10.7	15.7	1 545	7.3	
315	Proton Holdings Berhad	Automobiles & parts (31)	Malaysia	105	31.5	..	..	1 253	-30.2	
316	Benq	IT hardware (93)	Taiwan	105	30.4	57.5	34.5	4 057	519.4	
317	Ivax	Pharma & biotech (48)	USA	104	30.7	42.5	-13.6	1 352	29.4	
318	SMC	Engineering & machinery (26)	Japan	104	10.1	2.2	-9.3	1 775	19.5	
319	Tostem Inax (now JS)	Construction & building (13)	Japan	104	6.8	44.8	46.2	6 946	2.6	
320	Celgene	Pharma & biotech (48)	USA	104	31.0	40.0	94.5	278	39.0	
321	American Standard Companies	Engineering & machinery (26)	USA	103	9.4	-27.2	32.3	6 996	11.0	
322	Fanuc	Electronic & electrical (25)	Japan	103	11.5	12.8	-7.3	1 901	23.6	
323	Swatch	Household goods & textiles (34)	Switzerland	102	-3.7	15.5	..	2 576	-0.0	
324	Exelixis	Pharma & biotech (48)	USA	101	7.9	13.9	35.5	39	2.6	
325	Federal-Mogul	Automobiles & parts (31)	USA	101	11.4	11.3	-3.9	4 542	11.3	
326	Nanya Technology	IT hardware (93)	Taiwan	100	23.8	57.2	177.5	942	41.0	
327	NGK Spark Plug	Automobiles & parts (31)	Japan	100	2.1	1.7	7.9	1 643	-0.1	
328	Yokohama Rubber	Automobiles & parts (31)	Japan	99	10.4	1.8	4.0	2 884	0.3	
329	Thermo Electron	Electronic & electrical (25)	USA	99	-8.0	-5.6	-9.6	1 623	5.2	
330	Time Warner	Media & entertainment (54)	USA	99	-3.6	2.2	29.5	30 966	6.4	
331	Dade Behring	Pharma & biotech (48)	USA	99	14.0	2.0	37.6	1 148	8.6	
332	Kuraray	Chemicals (11)	Japan	98	9.3	3.2	-1.0	2 385	3.0	
333	Nektar Therapeutics	Pharma & biotech (48)	USA	98	1.5	-16.4	12.7	84	7.7	
334	Sumitomo Metal	Steel & other metals (18)	Japan	98	0.3	-27.3	-11.1	8 048	-8.5	
335	NTN	Engineering & machinery (26)	Japan	97	10.5	4.7	10.2	2 566	4.3	
336	Brunswick	Household goods & textiles (34)	USA	97	10.9	15.0	7.2	3 847	26.6	
337	Tektronix	IT hardware (93)	USA	96	28.9	-16.6	-20.8	677	16.3	
338	KDDI	Telecommunication services (67)	Japan	96	27.6	16.8	74.8	20 434	2.2	
339	Pliva	Pharma & biotech (48)	Croatia	95	19.7	11.3	29.1	831	4.8	
340	International Game Technology	Leisure & hotels (53)	USA	95	36.2	18.3	28.4	1 828	16.7	
341	NPS Pharmaceuticals	Pharma & biotech (48)	USA	95	19.1	37.5	58.4	10	42.9	
342	Watson Pharmaceuticals	Pharma & biotech (48)	USA	94	29.1	21.6	28.5	1 207	12.6	
343	Air Products and Chemicals	Chemicals (11)	USA	93	4.6	0.4	-1.6	5 453	17.7	
344	ConocoPhillips	Oil & gas (7)	USA	93	-7.4	24.8	147.7	99 377	49.4	
345	Norsk Hydro	Oil & gas (7)	Norway	92	-10.6	4.3	2.4	18 880	-9.5	
346	Symbol Technologies	Electronic & electrical (25)	USA	92	15.0	49.4	18.4	1 274	13.1	
347	SanDisk	IT hardware (93)	USA	92	48.4	33.3	7.2	1 307	64.6	
348	Bombardier	Aerospace & defence (21)	Canada	91	-21.3	-33.9	21.9	9 726	-25.7	
349	Illinois Tool Works	Engineering & machinery (26)	USA	91	15.6	5.4	-0.9	8 631	16.9	
350	BorgWarner	Automobiles & parts (31)	USA	91	4.2	8.3	4.4	2 594	14.9	

Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
11.8	-7.4	13 161	22.3	3.5	3.7	12.3	8.6	9.2	7 269	31.0	6.0	6.5
7.5	4.7	6 649	0.8	3.6	3.6	9.0	17.0	15.7	3 021	26.0	5.8	4.1
0.6	3.1	..	..	3.3	3.1	8.6	..	6.5	2 042	..	7.8	6.5
35.0	75.5	4 200	10.5	19.5	24.5	5.7	26.7	29.4	778	-16.0	7.6	6.6
2.6	-8.1	..	..	3.4	3.6	-9.2	..	..	756	..	4.2	4.3
-9.8	38.2	3 907	6.8	15.1	16.1	8.6	28.3	30.7	1 177	-7.0	14.4	15.0
-6.8	9.8	1 038	-15.6	25.1	27.7	-4.5	106.0	86.8	816	-12.0	9.1	6.0
10.3	-7.5	36 000	-14.3	1.6	2.1	16.2	3.1	3.6	9 995	14.0	1.2	1.1
6.1	-6.2	25 000	-1.0	1.5	1.4	17.4	4.4	3.7	13 770	9.0	2.9	2.8
12.3	-5.1	4 303	0.0	5.5	5.7	11.1	25.2	23.4	3 823	20.0	..	6.5
8.4	-4.3	3 353	7.4	13.6	13.9	18.3	32.2	33.2	2 668	39.0	0.9	1.6
-1.8	-0.2	26 522	-1.8	1.5	1.3	4.3	4.1	3.4	1 810	37.0	4.2	4.2
8.3	7.9	29 306	2.3	1.3	1.3	1.3	3.6	3.9	2 258	44.0	2.8	2.5
7.2	6.3	9 094	3.9	6.8	5.7	16.3	11.6	9.3	4 559	22.0	5.3	6.3
..	..	8 956	-5.4	8.4	4.5	7.5	11.7	8.4	980	..	16.4	11.0
-74.4	87.5	14 375	-3.7	2.6	12.3	4.2	7.3	5.4	1 995	12.0	2.9	17.6
18.6	-1.5	10 100	15.8	7.7	7.6	14.7	10.3	9.1	5 114	50.0	5.4	6.7
12.2	-26.9	11 162	3.0	5.9	6.4	22.2	9.3	8.7	6 273	20.0	2.5	3.0
13.1	16.4	29 050	12.3	1.5	1.4	5.7	3.6	3.8	4 052	..	0.8	3.6
100.0	20.5	766	9.0	37.3	39.6	11.3	135.3	112.5	5 798	84.0	9.4	4.0
9.9	4.4	61 500	2.5	1.5	1.5	4.9	1.7	1.6	6 974	17.0	2.3	2.0
-1.0	-18.0	..	..	5.4	6.0	34.0	..	..	12 818	29.0	4.3	3.4
-2.0	-2.8	20 831	0.6	4.0	4.1	16.4	4.9	5.1	6 822	19.0	7.3	5.1
15.2	10.0	517	-9.8	259.8	247.1	-255.6	196.0	163.9	453	12.0	25.6	26.3
2.3	-0.6	44 700	-0.4	2.2	2.2	-1.5	2.3	2.0	32	83.0	4.3	5.4
-5.7	140.0	3 146	-2.9	10.6	12.1	21.2	31.8	24.9	2 098	..	..	23.4
3.4	-1.2	9 284	-0.2	6.1	5.9	8.7	10.7	10.5	2 303	37.0	4.5	4.5
0.1	3.1	13 264	2.2	3.4	3.1	4.6	7.5	6.9	1 084	11.0	5.9	4.9
0.5	-4.7	9 900	-8.3	6.1	7.0	11.2	10.0	10.0	3 462	10.0	2.3	2.2
-3.4	7.1	84 900	6.1	0.3	0.4	15.6	1.2	1.3	61 822	15.0	7.2	7.3
3.5	12.6	6 000	0.5	8.6	8.2	11.8	16.4	14.5	2 412	54.0	8.5	7.9
5.5	-2.5	6 760	-3.2	4.1	3.9	5.7	14.5	12.9	2 481	16.0	9.7	5.7
11.4	22.8	662	-0.9	117.0	124.1	-64.4	148.4	144.9	783	..	23.8	17.9
-9.2	-9.9	..	..	1.2	1.1	6.6	..	3.8	7 035	85.0	5.6	4.3
5.7	-4.7	11 885	0.6	3.8	3.6	5.8	8.2	7.5	2 043	..	10.2	7.2
11.2	10.1	25 600	10.2	2.5	2.9	8.1	3.8	3.7	3 228	20.0	3.3	3.9
-6.1	-31.8	3 834	-7.4	14.2	12.8	16.2	25.0	18.0	1 461	-23.0	2.1	2.2
-1.7	24.9	13 128	-1.6	0.5	0.4	10.4	7.3	5.6	17 114	11.0	6.9	5.7
-5.4	21.8	6 654	-3.2	11.5	10.0	13.5	14.3	11.6	..	..	4.8	5.3
15.2	54.1	4 900	-7.5	5.2	4.5	36.5	19.4	13.2	6 811	-18.0	8.5	5.6
250.0	-75.0	356	30.9	948.1	1 137.7	-1 157.9	266.3	292.8	291	..	130.0	14.3
19.1	5.4	3 851	-3.3	7.8	6.8	15.2	24.5	18.3	2 666	35.0	4.2	10.4
16.6	-5.5	19 900	7.6	1.7	1.9	13.0	4.7	4.8	9 982	15.0	9.5	9.7
81.5	107.1	35 800	-8.2	0.1	0.2	11.0	2.6	2.6	68 225	72.0	7.0	6.8
5.4	6.6	36 938	-17.2	0.5	0.5	21.4	2.5	2.3	19 752	61.0	11.1	9.3
9.2	-3.6	5 400	1.9	7.2	7.1	8.1	17.1	15.1	1 594	-29.0	5.3	4.0
99.5	48.0	876	16.6	7.0	7.8	23.4	105.0	82.5	4 870	69.0	7.1	4.9
-9.9	9.4	59 556	-1.4	0.9	0.9	0.5	1.5	1.9	3 576	10.0	1.9	1.9
6.0	1.9	49 000	3.2	1.1	1.1	17.5	1.9	1.7	18 207	-12.0	2.4	2.6
12.4	16.1	14 500	1.4	3.5	3.9	9.7	6.2	6.1	2 422	25.0	5.8	5.6

## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment				Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03
				<i>units</i> €m	%	%	%	€m	%
351	NGK Insulators	Diversified industrials (24)	Japan	91	-3.1	-16.4	-8.9	1 804	-16.8
352	Hilti	Construction & building (13)	Liechtenstein	90	1.7	2.0	-0.4	2 134	9.5
353	Protein Design Labs	Pharma & biotech (48)	USA	90	48.1	42.7	11.2	71	44.9
354	Applied Micro Circuits	IT hardware (93)	USA	90	-4.7	-36.9	31.1	187	92.8
355	Medarex	Pharma & biotech (48)	USA	90	27.8	15.5	113.9	9	12.5
356	Rockwell Automation	Electronic & electrical (25)	USA	90	-6.4	-0.8	-22.5	3 245	7.5
357	Celanese	Chemicals (11)	USA	89	13.1	6.8	-22.1	5 101	25.2
358	Osaka Gas	Utilities - other (77)	Japan	89	-9.8	-8.8	-8.7	6 830	0.4
359	Sammy	Leisure & hotels (53)	Japan	89	53.2	24.5	68.8	1 804	..
360	PMC-Sierra	IT hardware (93)	USA	89	0.9	-13.3	-31.5	219	19.0
361	Actelion	Pharma & biotech (48)	Switzerland	88	72.2	32.4	-23.0	305	53.3
362	Hospira	Pharma & biotech (48)	USA	88	..	..	..	1 946	..
363	Amylin Pharmaceuticals	Pharma & biotech (48)	USA	88	87.5	-21.3	63.4	25	-60.3
364	Rieter	Engineering & machinery (26)	Switzerland	88	5.1	-0.1	-10.2	2 053	1.8
365	Molex	Electronic & electrical (25)	USA	88	1.7	4.7	-17.0	1 653	21.9
366	Black & Decker	Household goods & textiles (34)	USA	87	18.1	3.6	-2.0	3 972	20.4
367	Chartered Semiconductor	IT hardware (93)	Singapore	87	-5.0	30.7	20.1	686	69.0
368	UBE Industries	Chemicals (11)	Japan	87	6.1	-12.2	1.1	3 672	-0.4
369	Oji Paper	Forestry & paper (15)	Japan	86	-6.2	..	..	8 475	-2.7
370	Glory	Engineering & machinery (26)	Japan	85	17.3	-11.9	..	1 269	50.7
371	Santen Pharmaceutical	Pharma & biotech (48)	Japan	85	-6.8	4.4	15.9	645	-0.5
372	Funai Electric	Electronic & electrical (25)	Japan	84	26.8	273.2	31.1	2 456	3.2
373	Adaptec	IT hardware (93)	USA	84	10.7	-12.7	-4.4	349	4.8
374	Hyundai Heavy Industries	Engineering & machinery (26)	South Korea	83	15.9	11.0	13.2	8 460	24.6
375	Micronas Semiconductor	IT hardware (93)	Switzerland	83	30.7	12.6	6.8	623	25.6
376	Intersil	IT hardware (93)	USA	83	23.1	-30.4	23.5	394	5.3
377	CR Bard	Health (44)	USA	82	27.7	41.7	15.5	1 218	15.6
378	Harris	IT hardware (93)	USA	82	11.8	-4.1	-8.7	1 853	20.3
379	Electronics For Imaging	IT hardware (93)	USA	82	14.9	7.5	-8.3	290	3.9
380	Kos Pharmaceuticals	Pharma & biotech (48)	USA	82	112.7	18.7	42.0	366	69.4
381	Toto	Construction & building (13)	Japan	82	0.6	-7.8	-4.0	3 360	6.4
382	OSI Pharmaceuticals	Pharma & biotech (48)	USA	81	18.6	3.2	131.2	31	29.2
383	Andrew	IT hardware (93)	USA	81	31.0	45.1	21.3	1 353	81.4
384	Mitsubishi Materials	Steel & other metals (18)	Japan	81	-3.2	-24.6	-0.2	6 808	-1.7
385	Synthes	Health (44)	Switzerland	81	70.1	-0.8	4.4	1 309	45.0
386	Tokyo Gas	Utilities - other (77)	Japan	80	-4.7	..	..	8 270	2.2
387	Silicon Graphics	IT hardware (93)	USA	80	-36.4	-6.0	-23.0	619	-12.6
388	Dainippon Screen Mfg	Engineering & machinery (26)	Japan	80	3.4	7.4	0.7	1 378	14.3
389	Vitesse Semiconductor	IT hardware (93)	USA	80	-1.5	-35.3	24.1	161	40.0
390	Bio-Rad Laboratories	Health (44)	USA	80	14.9	13.7	8.4	802	8.7
391	Lubrizol	Chemicals (11)	USA	80	15.3	0.4	6.7	2 324	54.1
392	Daicel Chemical Industries	Chemicals (11)	Japan	80	-5.6	2.3	-3.0	2 023	3.9
393	Mitsubishi Rayon	Chemicals (11)	Japan	80	2.7	-0.2	0.3	2 223	3.0
394	Parametric Technology	Software & computer services (97)	USA	80	-18.5	-2.6	-8.6	486	-1.6
395	Fujikura	Electronic & electrical (25)	Japan	79	-3.0	-4.6	9.7	2 379	4.6
396	Ebara	Engineering & machinery (26)	Japan	79	-22.3	-18.3	-13.6	3 646	-2.0
397	Abgenix	Pharma & biotech (48)	USA	79	29.3	-24.2	75.6	13	8.3
398	Vertex Pharmaceuticals	Pharma & biotech (48)	USA	79	-23.5	23.6	43.0	76	49.0
399	Kajima	Construction & building (13)	Japan	78	-4.6	-0.2	-10.3	11 644	-13.5
400	Newell Rubbermaid	Household goods & textiles (34)	USA	78	-14.8	42.2	30.4	4 965	-12.9



Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
0.5	-9.5	8 693	-21.5	5.0	4.3	6.9	10.4	8.4	2 705	30.0	6.2	6.7
0.7	-4.2	15 120	3.3	4.2	4.6	8.9	6.0	6.1	..	..	3.7	4.5
44.1	3.0	660	20.2	127.0	124.2	-60.8	136.6	110.9	2 050	..	98.6	136.7
29.3	-33.0	755	4.4	48.0	97.1	-56.4	119.0	130.3	607	-26.0	10.7	10.3
-72.4	-6.5	435	2.8	997.3	877.9	-1 449.3	206.3	166.0	821	134.0	77.8	87.5
5.0	-8.6	21 000	-2.3	2.8	3.2	12.7	4.3	4.4	6 994	38.0	2.2	2.7
-5.8	-15.1	9 100	-9.0	1.8	1.9	2.7	9.8	7.9	2 953	37.0	4.3	7.2
-2.6	2.3	15 276	1.7	1.3	1.4	8.9	5.8	6.6	5 299	11.0	7.2	7.1
..	110.0	1 927	36.1	4.9	..	27.3	46.1	41.0	..	..	3.3	..
15.0	-32.5	951	2.3	40.5	47.8	12.7	93.2	94.5	1 154	-25.0	3.2	4.9
136.9	104.9	850	25.0	28.9	25.7	20.2	103.7	75.3	1 831	19.0	5.2	2.5
..	..	14 000	..	4.5	..	16.2	6.3	..	4 525	..	8.6	..
530.0	..	600	12.2	351.8	74.5	-444.3	146.6	87.7	1 529	10.0	36.0	14.3
4.7	-6.1	13 557	1.8	4.3	4.1	6.6	6.5	6.3	1 029	20.0	3.8	4.1
7.7	-27.6	21 225	22.9	5.3	6.3	9.6	4.1	5.0	3 579	-5.0	8.5	9.3
2.0	1.4	26 200	18.6	2.2	2.2	11.7	3.3	3.3	5 176	25.0	2.2	2.3
22.7	-2.6	..	..	12.7	22.6	3.1	..	..	1 347	..	73.6	39.9
-4.5	0.5	11 397	5.2	2.4	2.2	-1.2	7.6	7.5	1 684	96.0	5.7	6.3
0.8	-3.9	19 417	-6.3	1.0	1.1	4.5	4.4	4.4	4 045	..	..	5.0
-10.9	-13.2	5 038	3.4	6.7	8.6	16.7	16.9	14.9	931	..	2.5	3.7
1.4	0.6	2 335	-6.6	13.2	14.1	14.7	36.4	36.5	1 539	38.0	3.6	7.9
40.0	22.0	3 899	9.2	3.4	2.8	10.5	21.5	18.5	2 575	..	2.2	1.8
11.0	-2.6	1 525	0.9	24.0	22.7	-20.0	54.9	50.0	271	-55.0	3.2	1.8
17.5	9.9	25 958	0.2	1.0	1.1	1.0	3.2	2.8	3 534	222.0	4.4	3.6
8.3	24.8	1 917	9.8	13.3	12.8	18.1	43.2	36.3	1 006	2.0	9.5	8.5
-21.8	35.0	1 481	-7.4	21.0	18.0	3.1	55.8	42.0	2 143	13.0	1.0	12.3
12.5	7.8	8 600	3.6	6.7	6.1	22.2	9.5	7.7	5 073	20.0	4.4	5.0
11.6	-4.0	10 900	6.9	4.4	4.8	7.6	7.5	7.2	3 597	55.0	2.6	3.5
8.1	-32.3	1 424	3.0	28.2	25.5	3.6	57.4	51.5	825	5.0	1.7	1.4
70.1	89.6	1 053	15.5	22.3	17.8	23.5	77.6	42.1	2 465	..	1.9	3.7
3.7	-0.5	17 192	0.8	2.4	2.6	5.7	4.7	4.8	2 114	-19.0	2.6	2.2
50.0	-15.8	452	-5.8	262.0	285.4	-589.2	179.7	142.7	1 482	-15.0	6.5	25.0
17.3	-17.6	7 862	8.8	6.0	8.3	3.9	10.3	8.6	1 324	7.0	3.9	3.1
-7.8	-8.5	20 930	-3.7	1.2	1.2	2.2	3.9	3.8	2 429	44.0	4.0	4.1
-10.6	2.4	5 501	35.9	6.2	5.2	28.8	14.6	11.7	10 506	27.0	7.9	10.0
2.7	1.0	15 578	37.4	1.0	1.0	7.5	5.1	7.4	7 736	4.0	8.8	8.7
-28.3	-27.6	2 655	-28.5	12.9	17.8	-7.0	30.1	33.9	162	-45.0	2.1	2.0
-3.6	-28.2	4 460	-0.2	5.8	6.4	1.8	17.9	17.3	1 297	47.0	0.9	1.1
-3.4	-58.0	778	-2.4	49.6	70.5	-14.0	102.6	101.7	340	-24.0	8.7	12.2
12.3	9.3	5 200	8.3	9.9	9.4	11.0	15.3	14.5	1 089	10.0	5.6	6.9
3.5	7.7	7 800	55.0	3.4	4.6	6.7	10.2	13.7	2 128	62.0	4.2	4.3
3.8	-0.1	5 604	3.5	3.9	4.3	4.9	14.2	15.6	1 551	22.0	7.5	6.2
-1.9	-6.1	8 557	-3.6	3.6	3.6	6.7	9.3	8.7	1 841	19.0	4.7	6.9
-9.5	-20.6	3 042	-13.1	16.3	19.7	5.1	26.1	27.9	1 266	46.0	1.6	3.0
-9.1	-3.1	27 568	15.5	3.3	3.6	-2.7	2.9	3.4	1 636	20.0	7.1	8.5
-7.9	-6.2	15 207	-4.8	2.2	2.7	0.5	5.2	6.3	968	4.0	2.7	3.8
-14.3	-44.0	523	29.8	605.5	507.3	-1 044.8	150.5	151.1	681	10.0	46.2	183.3
-57.1	-3.3	736	2.2	103.4	201.2	-154.1	106.7	142.5	1 192	131.0	11.8	25.5
-9.0	7.9	9 910	-8.7	0.7	0.6	0.2	7.9	7.6	3 103	31.0	1.4	1.4
4.0	7.9	31 100	-22.3	1.6	1.6	1.5	2.5	2.3	5 033	15.0	1.8	3.9



## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment					Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03	
				units	€m	%	%	%	€m	%
401	Cognos	Software & computer services (97)	Canada	78	16.2	16.8	25.4	607	20.7	
402	Asustek Computer	IT hardware (93)	Taiwan	77	44.3	25.1	29.9	5 805	27.6	
403	Linear Technology	IT hardware (93)	USA	77	14.5	14.5	-22.1	594	33.2	
404	Kyushu Electric Power	Electricity (72)	Japan	77	-2.5	-10.0	-6.4	9 992	3.0	
405	CV Therapeutics	Pharma & biotech (48)	USA	77	49.6	-18.9	15.1	15	87.5	
406	Integrated Device Technology	IT hardware (93)	USA	76	5.3	-23.7	-0.0	287	13.0	
407	AGCO	Engineering & machinery (26)	USA	76	45.2	24.8	15.3	3 880	50.9	
408	Paccar	Engineering & machinery (26)	USA	76	27.3	44.8	-24.3	8 384	39.1	
409	Mitsubishi Gas Chemical	Chemicals (11)	Japan	76	-8.9	-3.1	-4.5	2 446	9.1	
410	Saurer	Engineering & machinery (26)	Switzerland	75	0.7	1.9	-5.6	1 614	-7.6	
411	Delta Electronics	Electronic & electrical (25)	Taiwan	75	2.6	13.6	18.8	1 311	15.0	
412	Research In Motion	IT hardware (93)	Canada	74	61.5	12.0	49.3	994	127.5	
413	Cell Therapeutics	Pharma & biotech (48)	USA	74	13.0	52.4	31.6	22	22.2	
414	Tosoh	Chemicals (11)	Japan	74	-1.0	6.1	2.1	3 478	2.7	
415	Chunghwa Picture Tubes	Electronic & electrical (25)	Taiwan	74	5.3	40.9	13.4	2 719	31.6	
416	Schindler	Engineering & machinery (26)	Switzerland	74	-18.0	7.8	3.2	5 351	8.4	
417	Georg Fischer	Engineering & machinery (26)	Switzerland	74	1.8	-8.2	-10.3	2 290	7.4	
418	Engelhard	Chemicals (11)	USA	74	7.3	5.6	4.6	3 065	12.1	
419	Gazprom	Utilities - other (77)	Russia	73	31.4	10.5	..	26 825	19.7	
420	JDS Uniphase	IT hardware (93)	USA	73	-35.3	-39.7	-21.8	468	-5.8	
421	KT	Telecommunication services (67)	South Korea	73	-64.1	4.2	-27.5	12 130	47.5	
422	Sumitomo Bakelite	Chemicals (11)	Japan	73	-0.9	4.7	20.3	1 222	6.2	
423	Macromedia	Software & computer services (97)	USA	72	7.9	-7.4	-10.6	321	18.0	
424	Maytag	Household goods & textiles (34)	USA	72	-8.2	-3.3	30.3	3 474	-1.4	
425	Tekelec	IT hardware (93)	USA	72	33.9	22.7	-16.8	292	50.5	
426	Quantum	IT hardware (93)	USA	71	-6.6	-7.6	-11.6	584	-1.8	
427	Anritsu	IT hardware (93)	Japan	71	-25.2	-13.1	-1.1	563	-0.2	
428	Hyperion Solutions	Software & computer services (97)	USA	71	30.5	1.3	-10.8	458	21.8	
429	Hoya	Electronic & electrical (25)	Japan	71	43.9	24.2	-24.1	1 949	10.2	
430	Kissei Pharmaceutical	Pharma & biotech (48)	Japan	71	-24.8	0.2	13.3	418	-2.1	
431	Qlogic	IT hardware (93)	USA	71	9.2	8.0	16.6	421	9.4	
432	Endress & Hauser	Electronic & electrical (25)	Switzerland	70	15.2	..	..	785	6.8	
433	Sanken Electric	Electronic & electrical (25)	Japan	70	12.6	2.4	-0.7	1 057	0.8	
434	3Com	IT hardware (93)	USA	70	-15.8	-60.4	-46.7	514	-25.1	
435	SEI Investments	Support services (58)	USA	70	67.8	-0.5	-7.6	509	8.8	
436	Avid Technology	IT hardware (93)	USA	70	11.0	3.9	-4.4	434	25.1	
437	Leica Geosystems	Electronic & electrical (25)	Switzerland	70	-0.6	1.2	-3.3	500	12.1	
438	Parker Hannifin	Engineering & machinery (26)	USA	70	1.6	-14.6	-5.1	5 229	10.9	
439	Nippon Oil	Oil & gas (7)	Japan	70	-3.5	-3.9	2.3	30 728	35.8	
440	ON Semiconductor	IT hardware (93)	USA	70	10.4	25.9	-16.1	932	18.4	
441	Minebea	Electronic & electrical (25)	Japan	69	-1.0	..	..	1 928	-1.3	
442	SIG	Support services (58)	Switzerland	69	-9.2	8.6	56.8	1 694	-10.7	
443	FMC	Chemicals (11)	USA	69	6.9	6.6	-17.8	1 509	6.7	
444	Ranbaxy Laboratories	Pharma & biotech (48)	India	69	67.6	43.7	157.6	936	13.6	
445	Openwave Systems	Software & computer services (97)	USA	69	-19.0	-20.1	-47.0	214	8.6	
446	Toyo Tire	Automobiles & parts (31)	Japan	69	4.8	3.3	3.2	1 839	0.4	
447	Tohoku Electric Power	Electricity (72)	Japan	69	-10.9	-7.0	-5.5	11 220	-1.9	
448	Microchip Technology	IT hardware (93)	USA	69	9.0	-2.9	7.7	623	21.2	
449	Campbell Soup	Food producers (43)	USA	68	5.7	14.3	22.2	5 230	6.5	
450	Reynolds and Reynolds	Software & computer services (97)	USA	68	5.4	-0.1	-3.3	723	-2.6	

Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation	Capital expenditures		
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
24.2	12.2	3 297	13.5	12.8	13.3	19.2	23.6	23.1	2 397	..	2.1	3.8
70.8	34.0	..	..	1.3	1.2	6.2	..	..	5 848	..	1.1	3.5
18.3	-47.3	3 050	16.7	13.0	15.1	54.1	25.2	25.7	8 489	-5.0	2.5	1.1
-7.4	0.7	19 284	1.2	0.8	0.8	13.6	4.0	4.1	7 657	15.0	15.2	19.7
100.0	-20.0	265	1.5	509.7	639.0	-728.6	288.5	195.9	853	177.0	20.0	37.5
0.4	-9.3	2 955	-6.2	26.6	28.5	0.3	25.8	23.0	857	-4.0	17.8	8.3
19.6	15.0	14 300	26.5	2.0	2.0	6.1	5.3	4.6	1 393	0.0	1.5	0.4
13.5	18.6	20 500	20.6	0.9	1.0	14.4	3.7	3.5	8 974	16.0	5.6	4.5
13.2	-14.7	4 537	-4.1	3.1	3.7	5.5	16.6	17.5	2 078	49.0	4.1	7.2
8.4	3.5	8 852	-13.9	4.7	4.3	4.9	8.5	7.3	802	42.0	3.8	2.9
1.0	11.7	40 000	..	5.7	6.4	10.2	1.9	..	2 415	72.0	4.0	2.5
93.4	4.6	3 555	61.6	7.5	10.5	2.5	20.9	20.9	9 686	..	8.1	3.7
50.0	140.0	402	8.1	338.2	365.9	-813.8	185.1	177.1	127	-36.0	13.6	11.1
10.4	0.3	9 196	0.3	2.1	2.2	4.3	8.0	8.1	1 849	28.0	4.2	2.8
15.5	28.1	21 334	..	2.7	3.4	10.2	3.5	..	2 319	..	21.6	..
-3.2	-2.1	39 269	-1.2	1.4	1.8	6.3	1.9	2.3	3 857	42.0	1.0	1.1
-4.7	-11.3	12 324	-7.0	3.2	3.4	4.6	6.0	5.5	877	44.0	5.2	4.4
-1.1	-26.3	6 500	0.3	2.4	2.5	7.5	11.3	10.6	2 537	-6.0	3.0	3.1
37.6	4.3	332 800	11.0	0.3	0.2	30.7	0.2	0.2	60 537	..	16.6	19.3
-38.5	-66.0	6 041	10.1	15.6	22.8	-30.7	12.1	20.6	1 652	-57.0	10.5	7.0
-29.4	2.8	43 218	13.2	0.6	2.5	12.5	1.7	5.3	8 271	29.0	17.4	18.0
3.6	-17.3	..	..	6.0	6.4	7.0	..	..	1 151	8.0	3.8	6.6
9.7	3.8	1 445	19.1	22.6	24.7	13.0	50.1	55.3	2 095	101.0	16.8	7.0
2.7	7.9	16 900	-18.1	2.1	2.2	0.7	4.3	3.8	1 117	-6.0	2.0	4.2
1.0	-16.5	1 502	41.0	24.7	27.8	4.6	48.1	50.7	927	4.0	4.5	2.6
-7.2	-19.9	2 500	38.2	12.2	12.8	-1.2	28.5	42.1	382	18.0	2.6	2.7
-40.3	-17.3	3 568	-4.1	12.6	16.8	3.6	19.9	25.5	520	-8.0	1.6	3.5
3.9	-4.7	2 473	11.2	15.5	14.4	11.0	28.6	24.4	1 303	10.0	3.7	4.0
4.7	-0.8	18 092	29.0	3.6	2.8	21.9	3.9	3.5	11 052	31.0	8.6	5.8
-0.7	1.4	1 677	0.7	16.9	22.0	16.4	42.1	56.4	809	-4.0	3.1	2.1
18.8	28.1	847	3.4	16.8	16.8	39.3	83.3	78.8	2 248	35.0	4.5	4.2
1.0	-1.0	6 294	3.6	8.9	8.3	8.5	11.2	10.0	..	..	5.9	5.4
4.3	-11.8	9 915	..	6.6	5.9	7.3	7.1	..	1 065	..	5.8	4.1
-36.9	-47.6	1 925	-41.7	13.6	12.1	-50.2	36.4	25.2	970	-31.0	2.3	2.8
2.4	-5.6	2 032	6.1	13.7	8.9	36.9	34.4	21.7	2 787	..	2.0	3.6
12.7	-3.8	2 014	27.3	16.1	18.1	11.5	34.7	39.8	1 043	-3.0	2.5	1.7
-6.3	-6.9	2 398	-2.6	13.9	15.7	9.3	29.1	28.5	710	..	3.2	2.7
4.2	2.8	48 447	3.5	1.3	1.5	7.9	1.4	1.5	5 833	16.0	2.0	2.5
7.2	-27.9	14 347	3.4	0.2	0.3	-3.1	4.8	5.2	8 536	24.0	2.8	2.7
-1.4	-10.7	10 325	2.7	7.5	8.0	11.8	6.7	6.3	1 002	34.0	6.4	5.6
-2.6	-2.7	43 839	1.9	3.6	3.6	6.2	1.6	1.6	1 243	..	7.0	6.0
1.0	20.9	6 671	-26.0	4.1	4.0	-7.0	10.3	8.4	1 131	24.0	7.1	7.5
3.7	-4.6	5 100	-3.8	4.6	4.5	9.6	13.5	12.1	2 031	78.0	4.2	4.5
22.6	38.3	9 224	5.0	7.3	5.0	15.4	7.4	4.7	3 377	..	5.4	4.2
-26.5	-60.9	1 265	-13.1	32.1	43.0	-7.1	54.2	58.2	845	57.0	2.3	3.1
0.5	2.6	6 263	-0.3	3.7	3.6	2.5	11.0	10.4	645	39.0	10.2	7.9
-6.1	-1.2	18 289	-2.1	0.6	0.7	9.8	3.7	4.1	7 766	27.0	13.0	15.0
7.3	14.1	3 943	7.2	11.0	12.2	30.7	17.4	17.1	4 736	7.0	7.5	9.1
8.9	-8.0	24 000	-4.0	1.3	1.3	15.5	2.9	2.6	9 223	19.0	4.1	4.2
1.6	-1.2	4 380	-3.1	9.5	8.8	15.4	15.6	14.4	1 326	20.0	3.5	5.8

## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment					Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03	
				units	€m	%	%	%	€m	%
451	Compal Electronics	Electronic & electrical (25)	Taiwan	68	12.0	69.7	49.9	5 335	29.8	
452	Quanta Computer	Electronic & electrical (25)	Taiwan	68	15.8	34.0	41.0	7 662	10.8	
453	Valeant Pharmaceuticals	Pharma & biotech (48)	USA	68	104.2	-8.6	62.5	502	-0.6	
454	Citizen Watch	Household goods & textiles (34)	Japan	68	12.6	-20.8	-6.8	2 698	12.5	
455	International Rectifier	IT hardware (93)	USA	68	16.8	13.1	0.2	780	22.6	
456	Taisei	Construction & building (13)	Japan	68	-4.8	0.0	-1.0	11 477	-2.8	
457	Cell Genesys	Pharma & biotech (48)	USA	68	8.0	13.5	48.1	8	-38.5	
458	Polycom	IT hardware (93)	USA	68	26.8	-5.4	29.3	397	28.5	
459	Nippon Shokubai	Chemicals (11)	Japan	68	2.1	0.7	0.4	1 219	3.5	
460	Ballard Power Systems	Automobiles & parts (31)	Canada	68	-11.7	-8.7	37.6	60	-31.8	
461	McData	IT hardware (93)	USA	67	3.0	49.7	20.7	294	-4.5	
462	Lattice Semiconductor	IT hardware (93)	USA	67	4.4	1.5	19.7	166	7.8	
463	National Instruments	Software & computer services (97)	USA	66	11.5	26.0	5.3	378	20.8	
464	Yue Yuen Industrial	Household goods & textiles (34)	Hong Kong	66	6.1	39.3	9.4	2 001	8.4	
465	Incyte	Pharma & biotech (48)	USA	65	-24.1	-23.7	-28.6	10	-71.4	
466	Toyobo	Household goods & textiles (34)	Japan	65	3.2	-2.5	-2.8	2 679	-0.9	
467	Mylan Laboratories	Pharma & biotech (48)	USA	65	-12.8	16.2	47.4	922	-8.8	
468	Pentax	Media & entertainment (54)	Japan	64	12.5	16.9	9.6	966	24.3	
469	PerkinElmer	IT hardware (93)	USA	64	4.7	-3.8	6.3	1 241	9.9	
470	Chi Mei Optoelectronic	Electronic & electrical (25)	Taiwan	64	35.2	35.4	..	2 820	45.7	
471	Edwards Lifesciences	Health (44)	USA	64	19.5	11.7	18.6	685	8.2	
472	China Motor	Automobiles & parts (31)	Taiwan	64	15.5	11.3	39.0	1 661	30.8	
473	Activision	Software & computer services (97)	USA	64	-11.6	71.8	39.1	1 034	48.4	
474	Akebono Brake Industry	Automobiles & parts (31)	Japan	64	1.9	-9.2	2.6	1 015	11.7	
475	Citrix Systems	Software & computer services (97)	USA	64	34.0	-6.5	1.8	545	25.9	
476	Isis Pharmaceuticals	Pharma & biotech (48)	USA	63	27.2	59.6	-25.2	31	-16.2	
477	Chugoku Electric Power	Electricity (72)	Japan	63	1.8	-13.6	20.1	6 943	-4.2	
478	American Power Conversion	Electronic & electrical (25)	USA	63	26.6	12.6	9.9	1 251	16.1	
479	Hamamatsu Photonics	Electronic & electrical (25)	Japan	63	0.4	11.0	5.2	506	15.8	
480	Tokuyama	IT hardware (93)	Japan	63	12.5	-4.2	7.3	1 575	-2.7	
481	Nidec	IT hardware (93)	Japan	63	28.2	19.2	-19.3	1 992	19.6	
482	Take-Two Interactive Software	Software & computer services (97)	USA	63	239.1	117.8	86.4	830	9.1	
483	NSK	Engineering & machinery (26)	Japan	63	5.0	3.4	-13.3	3 749	-0.1	
484	Nissan Chemical Industries	Chemicals (11)	Japan	62	15.8	11.5	8.1	1 119	2.7	
485	Creo	IT hardware (93)	Canada	62	6.9	7.7	-7.2	468	10.1	
486	Transkaryotic Therapies	Pharma & biotech (48)	USA	62	13.6	-8.9	23.3	57	32.6	
487	Clorox	Personal care & household (47)	USA	62	10.5	13.4	0.0	3 181	4.3	
488	Weatherford International	Oil & gas (7)	USA	62	0.8	4.2	71.1	2 304	20.8	
489	Nippon Kayaku	Chemicals (11)	Japan	61	0.0	-1.9	4.8	919	3.7	
490	Mettler-Toledo International	Engineering & machinery (26)	Switzerland	61	6.7	10.5	9.3	1 033	7.6	
491	Huntsman	Chemicals (11)	USA	61	26.5	175.6	..	8 450	62.2	
492	Zeon	Chemicals (11)	Japan	61	19.2	11.7	1.3	1 531	1.1	
493	Denki Kagaku Kogyo	Chemicals (11)	Japan	61	-2.5	5.8	1.3	1 803	3.0	
494	Theravance	Pharma & biotech (48)	USA	61	31.2	-9.8	..	7	133.3	
495	Avery Dennison	Chemicals (11)	USA	61	10.0	0.4	6.6	3 929	12.1	
496	Fairchild Semiconductor	IT hardware (93)	USA	60	9.6	-9.0	-1.0	1 179	14.8	
497	Advanced Semiconductor Engineering	IT hardware (93)	Taiwan	60	9.8	86.5	-16.1	1 897	81.5	
498	Alpharma	Pharma & biotech (48)	USA	60	28.8	-5.8	37.0	985	3.3	
499	InterMune	Pharma & biotech (48)	USA	60	-32.2	-7.5	149.0	111	-1.8	
500	Asahi Breweries	Beverages (41)	Japan	60	12.2	7.1	..	6 394	4.2	

Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
51.1	49.0	20 060	..	1.3	1.5	4.1	3.4	..	2 818	..	1.4	1.7
108.8	27.9	..	..	0.9	0.9	3.7	..	..	4 526	..	2.5	4.1
-6.8	-14.1	4 307	-2.9	13.6	6.6	-3.6	15.8	7.5	1 338	..	4.0	2.6
2.0	-13.4	17 987	7.4	2.5	2.5	9.9	3.8	3.6	1 958	-14.0	4.3	3.9
20.0	-26.4	5 800	5.5	8.7	9.1	11.3	11.7	10.6	2 048	7.0	8.1	8.3
-1.7	-4.4	..	..	0.6	0.6	-0.7	..	..	2 881	30.0	0.8	1.2
-55.2	38.1	377	8.3	847.0	482.7	-754.4	179.7	180.3	195	-8.0	50.0	153.8
-9.9	21.6	1 437	21.5	17.1	17.3	7.8	47.1	45.2	1 140	-15.0	3.5	3.6
2.7	-0.5	2 658	-10.4	5.6	5.6	8.0	25.5	22.3	1 348	25.0	3.1	1.8
31.3	148.1	..	..	112.5	86.8	-222.6	..	69.5	449	-27.0	8.3	4.5
27.3	-4.3	1 008	-1.4	22.9	21.2	-6.5	66.8	63.9	544	23.0	4.1	4.2
-8.9	-22.1	1 008	-3.8	40.3	41.6	-24.8	66.4	61.1	369	-10.0	4.8	4.5
8.7	1.8	3 465	12.6	17.5	18.9	11.8	19.1	19.3	1 606	-4.0	2.4	4.2
29.5	8.9	252 000	4.1	3.3	3.4	10.6	0.3	0.3	3 727	26.0	5.5	6.8
-53.3	-53.4	186	-59.0	649.4	244.3	-1 065.3	349.1	188.4	444	38.0	10.0	20.0
-1.7	-4.9	..	..	2.4	2.3	1.3	..	6.4	1 244	-3.0	3.7	5.0
8.2	15.0	3 000	7.1	7.0	7.3	24.9	21.6	26.5	2 877	-2.0	7.3	8.6
2.9	1.6	5 130	-5.6	6.7	7.4	4.2	12.5	10.5	358	-25.0	3.1	2.4
2.0	13.1	10 000	0.0	5.2	5.4	10.4	6.4	6.1	1 950	18.0	1.1	1.1
39.7	..	12 326	61.6	2.3	2.4	15.1	5.2	6.2	5 121	..	50.5	41.4
22.2	1.8	5 200	4.0	9.3	8.5	4.7	12.3	10.7	1 938	26.0	4.5	4.4
-25.2	27.0	..	..	3.8	4.4	..	..	..	999	..	..	1.3
9.6	9.8	1 728	30.5	6.2	10.3	13.1	36.8	54.4	2 941	96.0	1.1	1.3
0.0	0.1	4 600	1.0	6.3	6.9	6.3	13.8	13.7	502	38.0	3.7	5.1
11.6	-10.8	2 656	40.9	11.7	11.0	21.8	23.9	25.2	2 941	34.0	3.3	1.8
-37.3	51.3	303	-33.7	203.8	134.2	-288.4	208.5	108.7	237	..	9.7	16.2
-1.2	-2.3	14 495	-1.0	0.9	0.9	11.0	4.4	4.2	5 432	15.0	10.5	12.7
12.8	-9.4	6 455	1.4	5.0	4.6	12.6	9.8	7.8	3 812	72.0	1.8	1.5
0.2	-3.1	3 131	3.8	12.4	14.4	11.8	20.1	20.8	1 074	17.0	9.9	9.4
-0.6	-7.1	4 568	-1.0	4.0	3.5	6.2	13.8	12.1	1 608	76.0	6.7	6.7
20.0	-22.4	68 000	..	3.2	2.9	8.1	0.9	..	6 137	..	8.1	9.4
30.3	75.9	1 435	..	7.5	2.4	8.4	43.7	..	1 310	..	1.9	1.4
8.7	-9.8	19 772	-2.8	1.7	1.6	4.5	3.2	2.9	2 132	20.0	4.1	4.7
9.9	1.6	..	..	5.6	4.9	9.1	..	..	1 664	58.0	3.2	7.1
7.1	-17.8	3 960	-2.9	13.3	13.7	1.9	15.7	14.2	..	..	2.6	3.5
59.3	440.0	400	13.6	108.6	126.7	-96.2	154.8	154.8	..	..	17.5	25.6
2.0	4.1	8 600	-3.4	1.9	1.8	19.9	7.2	6.3	6 492	-17.0	4.0	5.0
11.3	0.0	18 400	10.2	2.7	3.2	13.2	3.3	3.7	6 735	48.0	9.9	11.7
3.3	-1.3	3 934	6.9	6.7	6.9	7.1	15.6	16.7	977	35.0	4.4	5.3
7.5	5.7	8 700	0.6	5.9	6.0	11.9	7.0	6.6	1 562	15.0	2.0	2.1
166.1	..	11 300	..	0.7	0.9	2.3	5.4	..	3 560	..	2.0	2.7
10.3	-1.5	2 840	-1.0	4.0	3.4	3.1	21.5	17.8	1 524	34.0	5.3	4.3
1.3	-11.6	..	..	3.4	3.6	6.0	..	..	1 352	18.0	5.4	10.0
..	..	246	..	869.0	1 545.0	-1 190.1	247.3	..	799	..	28.6	33.3
13.2	10.6	21 400	5.4	1.5	1.6	8.1	2.8	2.7	4 551	-8.0	3.4	4.2
-1.2	0.3	9 024	-7.4	5.1	5.4	7.9	6.7	5.7	1 442	12.0	11.9	9.7
-11.6	32.7	34 649	41.8	3.2	5.2	5.5	1.7	2.2	2 285	..	34.9	38.9
4.7	27.1	4 200	-10.6	6.1	4.9	-14.2	14.3	9.9	606	25.0	3.7	3.3
37.8	182.8	326	25.4	53.9	78.0	-33.4	183.5	339.2	361	31.0	0.9	0.9
1.7	-3.1	15 749	7.5	0.9	0.9	10.2	3.8	3.6	4 341	9.0	4.1	..

## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment					Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03	
				units	€m	%	%	%	€m	%
501	Federated Department Stores	General retailers (52)	USA	60	35.0	1.7	63.9	11 499	2.4	
502	Nippon Shinyaku	Pharma & biotech (48)	Japan	59	4.8	12.3	6.1	369	-2.9	
503	Credence Systems	IT hardware (93)	USA	59	9.5	-13.9	-1.3	324	141.8	
504	Mindspeed Technologies	IT hardware (93)	USA	59	..	..	..	88	..	
505	Macronix International	IT hardware (93)	Taiwan	59	-6.9	-28.9	-0.4	533	31.9	
506	Zoran	IT hardware (93)	USA	58	96.0	82.9	-4.9	279	75.5	
507	Yamatake	Electronic & electrical (25)	Japan	58	-8.8	1.3	1.1	1 220	1.2	
508	Quest Software	Software & computer services (97)	USA	58	16.1	13.5	-0.2	287	28.1	
509	Toyo Ink Manufacturing	Chemicals (11)	Japan	58	0.5	1.7	..	1 554	-0.3	
510	FileNET	Software & computer services (97)	USA	58	1.6	7.4	4.2	292	9.0	
511	Chunghwa Telecom	Telecommunication services (67)	Taiwan	58	-4.1	-16.8	-7.4	4 299	1.5	
512	Silicon Image	IT hardware (93)	USA	57	79.8	8.0	15.6	127	67.1	
513	Trimble Navigation	Electronic & electrical (25)	USA	57	14.6	10.5	-2.6	492	23.6	
514	Convergys	Support services (58)	USA	57	-17.8	-17.1	-1.9	1 830	8.7	
515	AMIS	IT hardware (93)	USA	57	9.9	34.8	23.8	381	14.1	
516	Praxair	Chemicals (11)	USA	57	2.7	8.7	4.5	4 851	17.5	
517	Showa	Automobiles & parts (31)	Japan	56	11.2	2.5	13.7	1 576	11.6	
518	ECl Telecom	IT hardware (93)	Israel	56	-8.9	-10.3	-24.6	365	17.7	
519	Valspar	Chemicals (11)	USA	56	8.9	5.7	13.5	1 796	8.6	
520	JohnsonDiversey	Chemicals (11)	USA	55	0.2	16.7	73.1	2 332	7.5	
521	Nippon Sheet Glass	Construction & building (13)	Japan	55	-13.6	8.8	29.7	1 932	-3.9	
522	Shimizu	Construction & building (13)	Japan	55	3.0	-10.1	11.8	10 196	-8.4	
523	Silicon Laboratories	IT hardware (93)	USA	55	55.1	50.9	10.4	336	40.6	
524	Affymetrix	Pharma & biotech (48)	USA	55	12.5	-7.8	12.7	255	15.4	
525	Energizer	Electronic & electrical (25)	USA	54	43.7	38.8	-20.0	2 069	26.0	
526	MeadWestvaco	Support services (58)	USA	54	4.2	-22.0	91.6	6 053	8.9	
527	Logitech International	IT hardware (93)	Switzerland	54	20.6	9.1	11.2	1 091	16.9	
528	Yaskawa Electric	IT hardware (93)	Japan	54	9.0	-9.6	..	1 889	16.3	
529	Enterasys Networks	IT hardware (93)	USA	54	-12.3	-1.0	-21.1	263	-13.8	
530	Mercury Interactive	Software & computer services (97)	USA	54	31.9	47.6	0.4	504	35.1	
531	Emulex	IT hardware (93)	USA	54	19.5	28.8	76.1	268	18.1	
532	Sealed Air	Support services (58)	USA	54	6.1	16.4	6.3	2 794	7.5	
533	Invitrogen	Health (44)	USA	54	33.9	62.0	-11.7	753	31.6	
534	Thq	Software & computer services (97)	USA	54	98.0	-5.3	84.1	557	18.3	
535	Meiji Dairies	Food producers (43)	Japan	53	7.4	..	..	5 183	-1.4	
536	Nippon Paint	Chemicals (11)	Japan	53	9.4	..	..	1 426	0.4	
537	Varian Medical Systems	Health (44)	USA	53	21.8	22.2	11.1	909	18.7	
538	ICOS	Pharma & biotech (48)	USA	53	-16.3	41.4	6.3	55	0.0	
539	L-3 Communications	IT hardware (93)	USA	52	34.9	51.5	-67.6	5 074	36.3	
540	Fair Isaac	Software & computer services (97)	USA	52	5.2	66.6	43.2	520	12.3	
541	I2 Technologies	Software & computer services (97)	USA	52	-12.5	-53.3	-40.4	286	-21.4	
542	Cooper Industries	Electronic & electrical (25)	USA	52	11.4	17.4	-3.2	3 283	9.9	
543	Sasol	Oil & gas (7)	South Africa	52	-41.0	-34.6	125.8	7 855	-6.8	
544	Shimadzu	Engineering & machinery (26)	Japan	52	9.6	-17.7	0.1	1 565	6.7	
545	Amada	Engineering & machinery (26)	Japan	51	12.9	4.7	9.7	1 182	13.2	
546	Telenor	Telecommunication services (67)	Norway	51	-8.3	-13.2	-42.0	7 380	14.9	
547	Creative Technology	IT hardware (93)	Singapore	51	18.3	53.7	-29.2	600	16.3	
548	Nippon Unipac (now Nippon Paper)	Forestry & paper (15)	Japan	51	5.9	-9.3	24.8	8 563	2.3	
549	palmOne	IT hardware (93)	USA	51	-37.3	-21.6	-12.0	699	8.9	
550	Taiwan Power	Electricity (72)	Taiwan	51	6.6	-11.5	-42.2	7 788	4.1	

Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
-1.1	-1.4	112 000	0.9	0.5	0.4	9.0	0.5	0.4	9 394	..	3.0	3.3
4.7	-0.8	..	..	16.1	14.9	6.5	..	30.6	420	49.0	2.4	10.3
10.7	-45.5	1 886	81.0	18.3	40.4	-13.8	31.4	51.9	653	3.0	5.6	8.2
..	..	633	..	66.5	..	-77.5	92.5	..	113	..	4.5	..
8.3	-25.7	3 761	9.5	11.0	15.6	2.6	15.6	18.3	546	-50.0	12.0	14.9
44.5	39.2	932	15.1	20.9	18.7	-12.4	62.5	36.7	459	..	2.2	3.1
0.5	-6.1	6 691	-5.7	4.8	5.3	3.8	8.7	9.0	967	75.0	1.1	0.8
17.9	5.0	2 257	30.1	20.1	22.2	8.5	25.5	28.6	965	18.0	8.0	2.2
-2.4	..	6 039	..	3.7	3.7	3.7	9.5	..	817	11.0	6.6	6.0
5.1	4.1	1 607	-6.6	19.7	21.2	7.1	35.8	33.0	874	64.0	2.4	2.6
3.6	-3.3	28 518	-1.7	1.3	1.4	33.5	2.0	2.1	13 236	..	12.4	17.7
26.7	57.9	337	34.8	45.2	42.0	0.0	170.4	127.8	542	..	3.2	5.3
16.0	-2.0	2 160	0.5	11.6	12.5	11.8	26.4	23.1	1 431	38.0	1.8	2.0
0.1	-1.5	66 300	17.3	3.1	4.1	7.4	0.9	1.2	1 454	-15.0	6.3	7.6
31.5	5.8	2 578	0.4	14.9	15.5	16.6	22.1	20.1	717	..	6.3	6.0
9.5	-0.6	27 020	6.2	1.2	1.3	16.9	2.1	2.2	12 222	30.0	10.1	17.5
10.8	14.7	7 556	11.2	3.6	3.6	6.5	7.4	7.4	800	19.0	3.0	4.0
-34.7	-27.6	2 638	7.2	15.3	19.8	1.1	21.2	25.0	669	35.0	4.9	2.6
5.7	10.8	7 500	7.1	3.1	3.1	11.1	7.4	7.3	1 838	-1.0	2.5	2.3
34.2	100.0	12 000	..	2.4	2.5	4.8	4.6	..	..	..	3.0	3.4
-2.4	-6.7	11 392	-15.0	2.9	3.2	4.1	4.9	4.8	1 371	14.0	4.7	4.3
-2.2	-7.5	..	..	0.5	0.5	3.2	..	..	3 076	28.0	0.6	0.6
78.4	148.1	588	21.0	16.4	14.9	23.9	93.7	73.1	1 123	..	4.5	3.3
3.8	29.1	907	4.1	21.4	21.9	17.3	60.1	55.7	2 157	79.0	6.3	4.1
28.3	2.7	12 955	-11.3	2.6	2.3	13.8	4.2	2.6	3 254	..	4.3	3.3
4.3	84.0	29 400	0.0	0.9	0.9	-4.5	1.9	1.8	3 904	-13.0	4.9	5.2
15.3	16.6	6 898	17.7	5.0	4.8	11.6	7.9	7.7	2 760	..	2.8	1.9
1.6	..	7 635	-1.1	2.9	3.1	4.1	7.1	6.5	1 214	37.0	2.3	2.7
-14.6	-2.7	1 150	-17.9	20.6	20.3	-24.4	47.2	44.2	175	-33.0	2.3	4.6
26.9	10.5	2 659	14.5	10.8	11.0	13.0	20.4	17.7	2 441	..	4.8	3.5
21.4	3.9	522	32.2	20.1	19.9	-136.8	103.2	114.1	1 178	..	13.4	6.2
10.2	4.4	17 600	0.0	1.9	2.0	12.6	3.1	2.9	3 250	10.0	2.7	3.5
19.9	3.0	3 800	26.9	7.1	7.0	13.2	14.2	13.4	3 347	..	3.9	4.2
139.1	-29.4	1 300	63.3	9.6	5.8	9.8	41.3	34.1	1 072	..	2.2	1.3
..	..	7 482	-3.5	1.0	0.9	2.3	7.1	6.4	1 231	..	2.3	3.5
2.8	-3.8	4 301	..	3.7	3.4	5.9	12.4	..	736	..	2.6	3.4
19.3	12.8	3 283	12.2	5.8	5.7	20.7	16.2	14.9	3 810	..	2.0	1.8
-19.1	7.9	675	0.0	96.0	114.7	-265.1	78.3	93.5	1 133	4.0	7.3	7.3
26.2	70.9	44 200	14.2	1.0	1.0	10.9	1.2	1.0	6 681	..	1.2	1.6
60.2	19.4	3 058	29.9	10.1	10.7	24.9	17.1	21.1	1 873	26.0	3.3	2.8
-45.5	-7.9	2 044	-16.6	18.2	16.3	3.3	25.4	24.2	344	42.0	0.7	0.3
2.5	-5.9	26 863	-1.2	1.6	1.6	11.1	1.9	1.7	4 397	-29.0	2.3	2.0
4.8	49.1	30 910	-0.8	0.7	1.0	15.4	1.7	2.8	17 142	112.0	17.4	16.1
6.4	-4.0	7 930	0.6	3.3	3.2	5.8	6.5	6.0	1 286	..	2.0	2.1
-11.6	-14.0	4 793	16.0	4.4	4.4	2.7	10.7	11.0	2 219	..	2.3	3.1
8.7	19.9	21 300	-2.1	0.7	0.9	11.3	2.4	2.6	11 020	23.0	19.0	10.6
-13.0	-34.4	..	..	8.5	8.4	5.4	..	11.1	453	..	2.0	2.3
-2.3	28.2	13 774	-12.1	0.6	0.6	4.2	3.7	3.1	2 961	-26.0	5.6	6.6
-15.3	-33.9	699	-28.8	7.3	12.7	-1.7	73.0	82.9	1 131	-15.0	0.6	1.2
5.8	-33.2	22 378	-17.8	0.7	0.6	13.3	2.3	1.8	..	..	38.2	40.0



## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment					Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03	
				<i>units</i>	€m	%	%	%	€m	%
551	Intergraph	Software & computer services (97)	USA	51	0.1	9.3	-0.9	405	4.4	
552	Cae	Electronic & electrical (25)	Canada	51	3.8	-3.6	-21.0	606	-9.7	
553	Fortune Brands	Diversified industrials (24)	USA	51	18.2	3.9	3.0	5 386	17.8	
554	American Axle & Manufacturing	Automobiles & parts (31)	USA	51	13.0	12.4	4.4	2 648	-2.3	
555	Borland Software	Software & computer services (97)	USA	50	6.0	26.5	8.1	228	5.1	
556	NetIQ	Software & computer services (97)	USA	50	-4.3	16.5	67.8	192	-15.8	
557	International Paper	Forestry & paper (15)	USA	50	-6.9	-5.2	-16.3	18 796	1.5	
558	King Pharmaceuticals	Pharma & biotech (48)	USA	50	54.1	9.7	71.0	960	-10.2	
559	Varian Semiconductor Equipment	IT hardware (93)	USA	50	11.9	16.7	4.1	390	46.1	
560	LTX	IT hardware (93)	USA	50	2.4	-7.1	7.7	188	113.6	
561	Nihon Unisys	Software & computer services (97)	Japan	50	4.6	2.8	-35.7	2 222	0.2	
562	ADTRAN	IT hardware (93)	USA	50	15.9	3.3	-4.5	334	14.4	
563	Verisign	Software & computer services (97)	USA	50	20.7	15.4	-38.1	858	10.6	
564	Smith International	Oil & gas (7)	USA	49	20.9	9.9	-0.4	3 251	22.9	
565	Estee Lauder	Personal care & household (47)	USA	49	10.5	-0.8	-1.4	4 260	13.1	
566	Brooks Automation	IT hardware (93)	USA	49	-7.9	-2.9	23.3	397	56.9	
567	Elbit Systems	Aerospace & defence (21)	Israel	49	21.7	-3.6	-5.2	692	4.7	
568	Cirrus Logic	IT hardware (93)	USA	49	-12.3	-20.1	-21.7	143	-0.7	
569	IDX Systems	Software & computer services (97)	USA	49	20.4	5.5	15.4	383	30.3	
570	Aspen Technology	Software & computer services (97)	USA	49	-8.7	-11.8	19.6	240	1.3	
571	CuraGen	Pharma & biotech (48)	USA	49	15.2	-9.1	49.6	5	0.0	
572	Meidensha	Diversified industrials (24)	Japan	49	-3.1	-20.0	4.7	1 304	-1.7	
573	CheckFree	Software & computer services (97)	USA	49	16.3	-4.3	-1.6	446	9.9	
574	Tokyo Ohka Kogyo	Chemicals (11)	Japan	48	11.9	3.9	22.5	597	15.0	
575	Newmarket	Chemicals (11)	USA	48	14.8	12.8	-12.3	658	18.3	
576	Waters	Health (44)	USA	48	7.1	17.4	11.4	813	15.3	
577	Zarlink Semiconductor	IT hardware (93)	Canada	48	-13.2	-15.4	6.3	158	8.2	
578	Alkermes	Pharma & biotech (48)	USA	48	-20.2	52.2	41.1	56	93.1	
579	Eclipsys	Software & computer services (97)	USA	48	-15.0	39.0	25.3	227	21.4	
580	Biomet	Health (44)	USA	48	17.3	9.0	18.0	1 188	16.1	
581	Lawson Software	Software & computer services (97)	USA	48	9.8	-11.6	27.2	267	5.5	
582	Avon Products	Personal care & household (47)	USA	47	28.6	2.5	5.4	5 700	13.9	
583	Arris	IT hardware (93)	USA	47	0.8	-3.0	18.9	361	13.2	
584	Axcelis Technologies	IT hardware (93)	USA	47	-0.1	-12.2	-5.8	374	57.8	
585	Yakult Honsha	Food producers (43)	Japan	46	11.3	12.3	10.5	1 715	-1.6	
586	MGI PHARMA	Pharma & biotech (48)	USA	46	24.9	55.6	-10.8	144	300.0	
587	Millipore	Pharma & biotech (48)	USA	46	7.0	11.5	14.3	650	10.5	
588	Coherent	IT hardware (93)	USA	46	23.1	-3.5	-0.6	364	21.7	
589	Lonza	Chemicals (11)	Switzerland	46	-13.4	-19.6	8.5	1 412	-2.7	
590	Finisar	IT hardware (93)	USA	46	3.2	10.9	61.4	137	12.3	
591	Unova	Diversified industrials (24)	USA	46	9.5	6.2	-19.5	597	-27.7	
592	Kaken Pharmaceutical	Pharma & biotech (48)	Japan	46	11.7	8.4	5.5	522	-1.7	
593	RSA Security	Software & computer services (97)	USA	46	15.4	-2.6	-5.6	226	18.3	
594	Garmin	IT hardware (93)	Cayman Islands	45	40.9	35.9	14.2	561	32.9	
595	Ecolab	Chemicals (11)	USA	45	15.6	6.7	50.6	3 079	11.2	
596	Sumitomo Heavy Industries	Engineering & machinery (26)	Japan	45	8.0	..	..	3 466	0.3	
597	Tibco Software	Software & computer services (97)	USA	45	-5.4	-10.7	-20.5	285	46.9	
598	Disco	Engineering & machinery (26)	Japan	45	135.8	22.8	-11.4	433	25.1	
599	Leapfrog Enterprises	IT hardware (93)	USA	45	5.9	5.9	41.8	471	-5.8	
600	Georgia-Pacific	Forestry & paper (15)	USA	45	-4.7	-1.5	..	14 461	-3.0	



Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
5.2	-5.6	3 500	-5.4	12.5	13.1	41.7	14.5	13.7	845	17.0	1.2	1.8
-3.3	0.3	5 000	-13.0	8.4	7.3	-40.3	10.2	8.5	1 246	44.0	11.9	8.6
15.8	-5.5	31 851	2.8	0.9	0.9	16.0	1.6	1.4	9 867	..	3.3	3.1
5.8	12.0	10 900	-7.6	1.9	1.6	7.3	4.6	3.8	1 037	..	6.7	6.2
20.6	10.4	1 361	0.2	22.0	21.8	6.0	36.8	34.8	343	-29.0	0.9	2.3
11.2	66.7	1 322	-3.1	26.1	22.9	-73.6	37.9	38.4	430	10.0	2.6	4.8
1.8	-6.2	80 000	-3.6	0.3	0.3	3.8	0.6	0.6	11 299	-27.0	4.9	4.6
28.8	29.3	2 758	-8.1	5.2	3.0	-17.2	18.1	10.8	2 437	..	4.3	3.6
8.1	-46.9	1 444	10.1	12.8	16.7	16.1	34.5	34.0	1 176	..	2.3	3.7
-1.1	-63.4	635	10.2	26.5	55.3	2.1	78.4	84.4	257	-30.0	6.9	14.8
0.3	-1.4	8 729	1.7	2.2	2.1	-1.4	5.7	5.5	775	..	2.9	5.6
15.0	-10.9	1 593	-0.6	14.8	14.7	22.7	31.1	26.7	1 418	..	1.5	1.7
-13.7	24.2	3 206	28.2	5.8	5.3	11.0	15.5	16.4	4 561	..	7.9	10.2
13.4	-10.8	13 235	10.6	1.5	1.5	9.9	3.7	3.4	5 337	..	2.5	2.8
7.9	3.0	22 200	11.0	1.2	1.2	10.5	2.2	2.2	3 699	..	3.6	3.2
13.5	-17.7	1 900	0.0	12.4	21.2	5.6	26.0	28.2	500	6.0	1.5	4.0
8.5	8.4	5 782	5.1	7.1	6.1	7.9	8.5	7.3	696	..	5.6	6.8
-25.4	-37.1	603	-21.4	34.4	38.9	-19.6	81.5	73.1	458	21.0	2.1	1.4
-13.0	20.7	2 409	17.6	12.8	13.9	8.4	20.4	19.9	720	..	4.7	7.1
0.4	3.1	1 550	-11.3	20.4	22.6	-3.5	31.5	30.6	172	1.0	0.8	1.3
-61.5	-23.5	454	38.8	977.0	848.0	-1 474.4	107.6	129.7	180	-2.0	160.0	100.0
-7.7	1.6	7 278	-2.5	3.7	3.8	2.6	6.7	6.7	456	..	2.4	4.7
12.5	13.2	3 000	11.1	10.9	10.3	3.2	16.3	15.5	2 584	..	3.8	4.4
-1.3	-12.2	1 467	-16.2	8.1	8.3	10.5	33.0	24.7	783	..	6.4	11.0
15.1	-9.4	1 135	3.2	7.3	7.5	7.0	42.4	38.1	202	..	1.7	1.6
7.6	3.6	4 200	7.7	5.9	6.4	25.7	11.4	11.5	3 767	..	..	3.5
2.1	-12.3	962	-7.2	30.4	37.8	-17.3	49.9	53.3	125	-62.0	1.9	2.7
-17.1	-12.5	528	7.8	85.5	206.9	-91.3	90.7	122.5	1 045	..	23.2	37.9
16.9	-8.1	1 983	5.6	21.1	30.1	-11.1	24.1	30.0	594	..	4.8	6.4
16.6	15.5	5 330	-23.9	4.0	4.0	30.9	9.0	5.8	6 990	..	3.8	4.3
-19.7	8.6	1 579	-5.7	17.9	17.2	3.3	30.2	26.0	419	..	1.5	1.6
10.3	3.7	47 700	3.9	0.8	0.7	15.4	1.0	0.8	11 191	..	3.2	2.4
-33.5	-12.7	728	-8.0	12.9	14.5	-4.3	64.0	58.5	781	191.0	1.9	1.3
3.9	-15.2	1 595	4.0	12.4	19.6	15.7	29.2	30.4	459	-29.0	1.1	1.7
5.7	2.2	14 428	7.6	2.7	2.4	10.1	3.2	3.1	2 616	..	3.3	4.3
71.4	-12.5	282	25.3	32.0	102.4	-43.3	163.4	163.9	1 376	..	0.7	2.8
13.5	7.2	4 500	4.7	7.1	7.3	15.6	10.2	10.0	2 312	..	7.2	9.0
2.4	-17.1	2 218	3.8	12.6	12.5	5.7	20.7	17.5	717	..	9.3	6.4
-11.6	35.7	..	..	3.3	3.7	9.7	..	8.9	2 125	30.0	10.8	18.7
13.0	-22.3	2 826	38.5	33.4	36.4	-47.3	16.2	21.7	212	..	7.3	11.5
-14.5	-14.1	4 456	-7.2	7.7	5.1	-4.5	10.3	8.7	1 240	..	1.3	1.8
1.0	4.2	..	..	8.7	7.7	7.6	..	..	508	..	1.5	1.9
11.7	-17.8	1 144	9.1	20.1	20.7	15.3	39.8	37.6	665	..	3.5	1.6
23.4	25.7	2 484	22.9	8.1	7.6	35.5	18.2	15.9	4 461	..	10.2	5.7
10.5	44.6	21 300	..	1.5	1.4	12.8	2.1	..	6 315	..	6.6	5.6
-6.9	0.6	11 318	-3.9	1.3	1.2	4.5	4.0	3.5	2 496	105.0	2.3	2.5
-2.5	-15.3	1 360	52.0	15.8	24.5	17.6	33.1	53.1	1 126	11.0	1.8	1.0
29.6	22.5	1 678	0.5	10.4	5.5	15.1	26.8	11.4	990	..	18.9	6.4
27.9	69.3	921	6.0	9.5	8.5	-2.2	48.7	48.8	326	..	3.2	2.4
-13.0	-7.0	55 000	-9.8	0.3	0.3	7.8	0.8	0.8	6 289	..	3.6	3.5

## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment					Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03	
				<i>units</i>	€m	%	%	%	€m	%
601	GTECH	IT hardware (93)	USA	45	6.4	33.7	26.9	925	19.7	
602	Snap-On	Engineering & machinery (26)	USA	45	1.7	4.7	4.6	1 714	4.3	
603	Triquint Semiconductor	IT hardware (93)	USA	45	-6.5	11.1	13.0	255	10.9	
604	Wind River Systems	Software & computer services (97)	USA	45	7.1	-24.4	-16.3	173	15.3	
605	Polaris Industries	Automobiles & parts (31)	USA	45	17.3	13.6	27.6	1 305	10.5	
606	Nabi Biopharmaceuticals	Pharma & biotech (48)	USA	45	109.0	37.7	37.6	132	1.5	
607	Progress Software	Software & computer services (97)	USA	45	19.8	20.3	0.9	267	17.6	
608	Basilea Pharmaceuticals	Pharma & biotech (48)	Switzerland	45	37.8	-12.5	..	0	..	
609	Diebold	IT hardware (93)	USA	44	-0.7	-5.4	7.2	1 752	12.9	
610	Shimano	Household goods & textiles (34)	Japan	44	-0.9	5.1	-30.7	1 215	17.8	
611	Eyetechnics Pharmaceuticals	Pharma & biotech (48)	USA	44	-16.7	78.9	79.0	36	20.0	
612	ADC Telecommunications	IT hardware (93)	USA	44	-45.6	-38.4	-36.7	577	1.4	
613	CSG Systems International	Support services (58)	USA	43	-6.2	-14.6	41.1	390	-2.7	
614	West Japan Railway	Transport (59)	Japan	43	-1.0	13.1	7.8	8 729	4.3	
615	Taiheiyō Cement	Diversified industrials (24)	Japan	43	-19.4	0.0	-1.3	6 315	-5.2	
616	Mitsui	Construction & building (13)	Japan	43	76.3	15.8	73.7	21 398	6.9	
617	Analogic	Electronic & electrical (25)	USA	43	0.0	41.3	-7.4	262	-24.5	
618	USEC	Mining (4)	USA	43	30.6	40.0	153.9	1 043	-2.9	
619	Cymer	IT hardware (93)	USA	43	0.4	-21.0	31.8	308	56.3	
620	Veeco Instruments	Electronic & electrical (25)	USA	43	19.4	-9.3	-9.8	287	39.3	
621	AvtoVAZ	Automobiles & parts (31)	Russia	43	13.2	-42.9	115.7	3 471	9.5	
622	ImClone Systems	Pharma & biotech (48)	USA	43	-34.5	-29.3	32.9	286	384.7	
623	Kansai Paint	Chemicals (11)	Japan	43	2.7	-4.0	-6.8	1 334	3.2	
624	Extreme Networks	IT hardware (93)	USA	43	0.2	-5.7	6.2	259	-3.0	
625	SPX	Electronic & electrical (25)	USA	43	-39.5	-19.0	8.7	3 217	-14.0	
626	Swisscom	Telecommunication services (67)	Switzerland	43	-27.5	46.8	-36.1	6 507	-31.0	
627	Novelis	Steel & other metals (18)	Canada	43	-6.4	-7.5	..	5 705	24.6	
628	Ishihara Sangyo Kaisha	Chemicals (11)	Japan	43	4.7	-10.7	..	673	-2.2	
629	NACCO Industries	Diversified industrials (24)	USA	43	3.4	10.5	-2.5	2 047	12.5	
630	Shikoku Electric Power	Electricity (72)	Japan	43	-5.3	-15.8	-6.6	4 034	-3.9	
631	Mitsui Mining & Smelting	Steel & other metals (18)	Japan	42	98.7	25.6	3.0	3 146	11.2	
632	Pall	Engineering & machinery (26)	USA	42	9.7	-4.7	-2.3	1 303	9.8	
633	MKS Instruments	IT hardware (93)	USA	42	19.6	3.6	21.2	408	64.5	
634	Imation	IT hardware (93)	USA	42	-0.2	12.7	-19.3	897	4.8	
635	Encysive Pharmaceuticals	Pharma & biotech (48)	USA	42	120.1	67.1	31.9	10	11.1	
636	Bookham Technology (now Bookham)	IT hardware (93)	USA	42	-17.5	-10.1	4.3	124	-1.6	
637	Redback Networks	IT hardware (93)	USA	42	-14.5	-26.9	-36.6	85	7.6	
638	Sekisui House	Construction & building (13)	Japan	42	10.1	-4.8	-26.9	9 852	3.5	
639	Nalco	Chemicals (11)	USA	42	..	..	..	2 232	..	
640	Cardinal Health	Food & drug retailers (63)	USA	42	-0.7	-12.6	21.0	47 861	28.9	
641	NOF	Chemicals (11)	Japan	41	0.9	6.5	-6.5	987	0.8	
642	Hillenbrand Industries	Health (44)	USA	41	0.0	11.1	17.2	1 346	-10.4	
643	Cubist Pharmaceuticals	Pharma & biotech (48)	USA	41	3.6	21.5	-9.9	50	1 566.7	
644	FEI	IT hardware (93)	USA	41	20.6	9.0	2.4	343	28.9	
645	Daiwa House Industry	Construction & building (13)	Japan	41	1.0	2.5	-1.1	8 793	3.4	
646	Alexion Pharmaceuticals	Pharma & biotech (48)	USA	41	-21.3	31.2	97.6	3	200.0	
647	BE Aerospace	Aerospace & defence (21)	USA	41	23.3	9.2	-5.9	540	17.6	
648	Kureha Chemical Industry	Chemicals (11)	Japan	41	-10.4	3.2	6.4	969	-1.9	
649	Weyerhaeuser	Forestry & paper (15)	USA	41	7.8	-1.9	-5.4	16 675	14.1	
650	Reebok International	Household goods & textiles (34)	USA	40	7.9	13.1	7.5	2 785	8.6	

Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
7.4	-3.1	5 300	..	4.9	5.5	24.8	8.5	..	2 504	..	20.5	26.8
5.9	0.6	11 500	-7.3	2.6	2.7	6.2	3.9	3.5	1 522	..	1.6	1.3
16.8	-19.9	2 072	1.3	17.5	20.8	-7.8	21.6	23.4	369	-9.0	7.5	9.1
-18.0	-29.1	1 112	3.2	25.8	27.8	4.3	40.2	38.7	988	..	2.3	29.3
5.5	0.6	3 600	5.9	3.4	3.2	9.8	12.4	11.2	1 691	..	5.0	3.8
-9.7	-16.8	727	3.4	33.8	16.4	-21.9	61.4	30.4	620	..	12.9	4.6
12.9	4.1	1 552	11.6	16.7	16.4	12.8	28.8	26.8	864	..	3.0	2.2
..	..	..	..	..	..	-26 338.2	..	..	426	..	..	..
8.8	10.2	14 376	7.3	2.5	2.9	11.6	3.1	3.3	2 510	..	2.1	2.3
6.6	7.3	7 059	..	3.6	4.3	16.8	6.2	..	2 510	..	4.4	3.8
..	..	322	102.5	120.8	174.0	-211.1	135.1	328.2	426	..	25.0	10.0
-26.2	-56.4	7 500	31.6	7.5	14.0	1.5	5.8	14.0	2 041	43.0	1.4	9.0
-10.7	27.9	2 549	3.2	11.1	11.5	15.9	17.0	18.7	691	8.0	1.8	1.7
-2.1	-0.4	..	..	0.5	0.5	11.0	..	..	5 016	..	11.7	11.8
-5.3	-2.2	18 098	-3.6	0.7	0.8	4.1	2.4	2.9	2 246	35.0	3.7	3.8
11.9	5.0	39 735	5.3	0.2	0.1	2.9	1.1	0.7	12 261	..	3.8	4.4
50.2	-12.8	1 700	-5.6	16.5	12.4	1.9	25.4	24.0	498	..	6.1	3.5
3.2	-0.8	2 871	7.4	4.1	3.1	5.2	15.0	12.3	964	..	1.4	2.9
-7.5	7.6	770	0.5	14.0	21.7	14.8	55.8	55.9	858	..	4.5	23.4
-6.4	-33.5	1 261	2.9	15.0	17.5	-3.0	34.0	29.3	420	..	3.8	2.9
5.8	35.6	..	..	1.2	1.2	4.2	..	..	583	..	8.8	8.4
34.1	83.3	866	48.8	15.0	110.8	32.2	49.4	112.3	1 955	-40.0	27.3	91.5
2.5	-5.1	5 886	-3.7	3.2	3.2	7.8	7.3	6.8	1 342	..	2.2	2.3
-17.8	-10.0	831	-6.6	16.5	16.0	0.0	51.4	47.9	385	..	1.9	4.1
0.7	22.6	23 800	7.2	1.3	1.9	2.4	1.8	3.2	2 412	5.0	0.9	1.4
0.4	2.5	15 664	-20.9	0.7	0.6	27.3	2.7	3.0	15 366	..	10.3	7.4
5.6	..	13 500	..	0.7	1.0	3.5	3.2	..	1 251	..	2.1	3.0
3.6	..	1 776	-2.1	6.3	5.9	6.6	24.0	22.4	575	..	4.9	3.8
-2.6	-2.9	11 600	-0.1	2.1	2.3	3.6	3.7	3.5	551	..	2.1	2.4
-4.3	-0.5	8 264	..	1.1	1.1	10.7	5.1	..	3 890	..	12.6	11.6
4.1	1.4	9 701	3.2	1.3	0.8	9.6	4.4	2.3	2 174	..	7.5	5.5
24.9	4.5	10 300	-1.9	3.2	3.2	12.3	4.1	3.7	2 710	..	3.5	3.9
6.9	10.0	2 319	8.2	10.3	14.1	11.8	18.1	16.4	710	..	3.2	2.0
9.1	-9.4	2 550	-8.9	4.7	4.9	4.0	16.4	15.0	1 052	..	2.9	6.4
12.5	14.3	117	27.2	416.7	210.3	-396.7	356.2	205.8	508	..	10.0	0.0
157.1	58.1	1 877	5.2	33.6	40.1	-231.2	22.2	28.3	109	-55.0	8.9	13.5
-14.1	-44.9	447	-7.5	49.0	61.7	-48.4	93.2	100.8	372	83.0	2.4	6.3
2.0	-0.4	19 926	..	0.4	0.4	0.6	2.1	..	5 554	..	2.6	1.1
..	..	10 500	..	1.9	..	4.6	4.0	..	1 919	..	3.1	..
13.7	-7.4	55 000	10.0	0.1	0.1	3.5	0.8	0.8	18 675	..	0.6	0.8
2.0	-7.8	1 632	..	4.2	4.2	4.5	25.4	..	575	..	6.8	4.3
-3.2	0.1	10 400	5.1	3.1	2.7	12.6	4.0	4.2	2 295	..	6.8	5.7
-62.5	-11.1	300	3.4	82.3	1 323.7	-95.0	137.2	136.9	671	..	10.0	66.7
12.7	-14.8	1 691	5.4	12.0	12.8	6.3	24.3	21.2	518	..	3.2	8.3
-1.1	17.9	17 814	..	0.5	0.5	5.8	2.3	..	4 936	..	1.8	2.2
-80.0	-44.4	204	6.8	1 354.3	5 162.0	-1 528.5	199.2	270.3	558	..	66.7	200.0
3.1	-11.2	3 500	5.5	7.5	7.2	8.8	11.6	9.9	711	..	2.0	1.7
-2.0	-3.2	3 866	-3.6	4.2	4.6	5.2	10.5	11.3	599	..	6.3	..
8.4	26.1	53 646	-2.8	0.2	0.3	10.4	0.8	0.7	12 025	..	2.7	3.9
11.4	4.5	9 102	17.3	1.4	1.5	7.6	4.4	4.8	2 475	..	1.5	1.3

## II.1.5. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year

Rank	Company	FTSE Sector (Code)	Country	R&D Investment					Net	
				2004	change 04/03	change 03/02	change 02/01	2004	change 04/03	
				units	€m	%	%	%	€m	%
651	Nissin Kogyo	Automobiles & parts (31)	Japan	40	21.1	29.0	..	897	9.5	
652	WebMD	Health (44)	USA	40	26.0	-2.0	10.7	854	20.5	
653	Sysmex	Pharma & biotech (48)	Japan	40	11.7	20.3	17.1	474	15.3	
654	Ariba	Software & computer services (97)	USA	40	0.5	-16.7	-28.9	181	4.0	
655	Tokyo Seimitsu	IT hardware (93)	Japan	40	68.0	-32.3	52.5	447	31.9	
656	Varco International <i>(now National Oilwell Varco)</i>	Oil & gas (7)	USA	40	-12.5	7.8	22.4	1 154	8.3	
657	Centillum Communications	IT hardware (93)	USA	40	16.4	-9.1	-14.0	52	-43.5	
658	Central Glass	Construction & building (13)	Japan	39	-2.5	19.1	-0.4	1 306	1.3	
659	Cabot	Chemicals (11)	USA	39	-17.2	33.4	0.0	1 423	7.7	
660	Tsumura	Pharma & biotech (48)	Japan	39	2.1	19.0	-2.8	590	0.9	
661	JDA Software	Software & computer services (97)	USA	39	8.8	16.0	21.6	160	4.6	
662	Kongsberg Gruppen	Aerospace & defence (21)	Norway	39	5.0	-5.0	12.8	782	-3.2	
663	Realnetworks	Software & computer services (97)	USA	38	9.1	-3.6	-11.4	196	31.5	
664	Sauer-Danfoss	Engineering & machinery (26)	USA	38	19.5	15.0	-0.7	1 033	24.6	
665	Vignette	Software & computer services (97)	USA	38	26.4	-22.0	-22.8	114	-1.7	
666	<i>Computer Network Technology</i>	IT hardware (93)	USA	38	20.9	59.0	14.6	269	1.1	
667	Advanced Energy Industries	IT hardware (93)	USA	38	-0.2	5.4	8.5	291	50.8	
668	Informatica	Software & computer services (97)	USA	38	8.6	3.6	-1.4	162	7.3	
669	Interdigital Communications	IT hardware (93)	USA	38	11.5	-1.6	4.9	76	-9.5	
670	WR Grace	Chemicals (11)	USA	38	-1.7	0.6	17.2	1 663	14.1	
671	Vishay Intertechnology	Electronic & electrical (25)	USA	38	12.4	22.4	22.9	1 776	11.2	
672	Micro-Star International	IT hardware (93)	Taiwan	38	20.5	47.7	36.3	1 594	4.1	
673	Endo Pharmaceuticals	Pharma & biotech (48)	USA	37	-0.9	-10.2	45.7	453	3.4	
674	Xoma	Pharma & biotech (48)	Bermuda	37	-2.9	76.1	14.4	3	-83.3	
675	FMC Technologies	Oil & gas (7)	USA	37	11.3	-5.2	-12.9	2 036	20.0	
676	Toyama Chemical	Pharma & biotech (48)	Japan	37	1.5	4.0	-18.7	121	-48.9	
677	Timken	Engineering & machinery (26)	USA	37	-5.5	0.0	-1.9	3 321	19.2	
678	Horiba	Electronic & electrical (25)	Japan	37	26.8	-6.7	-12.2	611	8.3	
679	Biovail	Pharma & biotech (48)	Canada	37	-30.8	265.3	-45.6	652	7.6	
680	Aeroflex	IT hardware (93)	USA	37	60.7	31.3	25.3	305	41.9	
681	Biomarin Pharmaceutical	Pharma & biotech (48)	USA	37	16.5	..	..	14	55.6	
682	S1	Software & computer services (97)	USA	37	10.1	14.7	-29.1	177	-4.8	
683	Crompton	Chemicals (11)	USA	37	-3.7	-37.1	-0.6	1 876	16.7	
684	Medicines	Pharma & biotech (48)	USA	36	37.2	-5.4	15.8	106	68.3	
685	Nippon Soda	Chemicals (11)	Japan	36	..	..	..	971	-0.7	
686	Ichikoh Industries	Automobiles & parts (31)	Japan	36	-3.8	12.4	12.1	852	1.2	
687	Toagosei	Chemicals (11)	Japan	36	-4.3	-1.3	-0.8	1 036	8.9	
688	Koor Industries	IT hardware (93)	Israel	36	-4.2	-15.3	-2.1	1 572	20.0	
689	Geac Computer	Software & computer services (97)	Canada	36	-37.6	-26.8	8.0	273	-28.7	
690	Directv	Media & entertainment (54)	USA	36	..	..	..	8 358	..	
691	Lenovo	IT hardware (93)	Hong Kong	36	-24.1	59.0	164.6	2 135	-2.7	
692	Varian	Electronic & electrical (25)	USA	36	6.7	14.4	12.0	674	8.0	
693	Sycamore Networks	IT hardware (93)	USA	36	-12.6	-53.6	-38.3	33	17.9	
694	NOVA Chemicals	Chemicals (11)	Canada	35	6.6	15.4	-2.5	3 877	33.5	
695	Orbotech	Electronic & electrical (25)	Israel	35	21.6	-6.5	-15.7	232	38.1	
696	Reynolds American	Tobacco (49)	USA	35	-11.1	-34.9	29.7	4 736	22.2	
697	Yulon Motor	Automobiles & parts (31)	Taiwan	35	-8.3	10.0	-14.4	1 194	8.4	
698	Fiserv	Support services (58)	USA	35	-8.8	16.7	22.6	2 744	22.9	
699	York International	Engineering & machinery (26)	USA	35	12.8	0.2	-8.7	3 318	10.6	
700	Bucher Industries	Engineering & machinery (26)	Switzerland	35	7.1	-10.9	-0.2	1 062	6.9	

Sales		Employees		R&D/Sales ratio		Operating Profit	R&D per employee		Market Capitalisation		Capital expenditures	
change 03/02	change 02/01	2004	change 04/03	2004	2003	2004	2004	2003	2004	change 04/03	2004	2003
%	%	#	%	%	%	% of Net Sales	€K	€K	€K	%	% of Net Sales	
14.4	..	..	..	4.4	4.0	10.0	..	..	597	..	6.9	7.6
4.1	31.0	5 940	5.4	4.7	4.5	3.9	6.7	5.6	2 652	..	3.4	2.0
20.5	22.2	2 907	36.6	8.4	8.7	9.4	13.7	16.8	1 155	..	3.0	2.7
3.0	-43.9	1 686	99.5	22.0	22.8	-11.7	23.6	46.9	293	..	1.1	1.2
38.4	-53.3	1 100	-0.1	8.9	7.0	-9.6	36.1	21.5	1 235	..	2.7	6.8
8.6	5.3	10 572	25.1	3.4	4.2	11.7	3.7	5.4	7 663	..	3.3	4.6
19.5	-34.2	340	-5.8	76.0	36.9	-61.8	116.3	94.1	81	..	5.8	2.2
-0.8	-2.6	..	..	3.0	3.1	11.7	..	..	998	..	5.6	4.7
15.3	-6.8	4 300	-2.3	2.7	3.6	10.3	9.1	10.7	1 552	-11.0	6.2	7.2
8.7	1.3	..	..	6.6	6.5	12.8	..	14.5	1 029	..	3.9	7.0
-5.0	5.9	1 156	-10.5	24.3	23.3	-0.2	33.6	27.7	296	..	5.6	5.2
-4.7	13.1	4 097	-2.3	4.9	4.5	2.4	9.4	8.8	367	..	2.8	3.3
11.2	-3.6	819	10.7	19.5	23.6	-10.1	46.8	47.5	656	..	3.6	4.7
18.3	11.4	8 300	15.3	3.7	3.9	6.4	4.6	4.4	703	..	5.6	5.3
1.8	-47.7	730	-9.3	33.4	26.0	-166.7	52.2	37.4	327	..	3.5	4.3
70.5	13.0	1 011	-16.8	14.1	11.8	-28.7	37.6	25.9	..	..	4.1	2.3
9.7	23.9	1 651	..	13.0	19.7	-0.1	23.0	..	260	..	3.4	7.8
4.9	-0.7	837	4.6	23.3	23.0	-49.0	45.1	43.5	714	..	5.6	1.3
29.2	66.7	325	..	49.6	40.2	-6.1	115.9	..	727	..	3.9	3.6
9.0	5.4	6 500	3.2	2.3	2.6	-11.5	5.8	6.1	450	..	2.8	4.4
19.1	10.1	25 700	2.0	2.1	2.1	3.6	1.5	1.3	1 730	..	6.6	5.8
14.8	43.2	..	..	2.4	2.0	0.2	..	..	433	..	2.4	..
49.0	58.9	549	11.6	8.2	8.6	37.8	67.7	76.3	2 715	..	1.5	2.1
-18.2	69.2	220	-2.7	1 239.7	212.9	-2 134.3	169.1	169.6	102	..	66.7	11.1
11.4	7.5	9 000	4.7	1.8	2.0	6.0	4.1	3.9	2 031	..	1.8	2.8
16.7	-19.1	911	-44.3	30.6	15.4	-30.4	40.7	22.3	544	..	0.8	0.8
48.6	4.2	25 931	-0.3	1.1	1.4	5.5	1.4	1.5	1 913	..	3.4	3.1
5.4	-4.3	3 808	3.2	6.0	5.1	6.4	9.7	7.9	709	..	3.1	3.4
4.5	35.2	2 291	17.0	5.6	8.8	23.5	16.1	27.2	2 131	..	3.2	4.5
44.3	-12.9	2 398	..	12.1	10.6	6.7	15.3	..	500	..	2.6	2.3
..	..	359	32.0	261.6	349.2	-962.2	102.0	115.6	436	..	128.6	44.4
2.2	-11.2	1 666	33.8	20.7	17.9	2.6	22.0	26.7	231	..	4.5	2.7
-14.2	-6.3	4 773	-13.5	1.9	2.4	0.5	7.6	6.9	3 112	..	2.6	4.0
125.0	180.0	220	15.8	34.2	41.9	10.8	164.8	139.1	797	..	0.9	1.6
..	..	2 601	..	3.7	..	1.9	13.9	..	323	..	4.9	4.2
9.6	-6.0	3 688	..	4.2	4.5	-0.2	9.8	..	196	..	6.9	8.4
1.1	-3.3	2 597	-5.1	3.5	4.0	7.3	13.9	13.8	1 007	..	5.2	4.7
6.3	1.3	6 559	3.7	2.3	2.9	12.4	5.5	6.0	631	..	2.3	2.6
-13.3	-13.8	2 300	..	13.2	15.1	15.9	15.7	..	637	..	0.7	0.5
..	..	11 800	..	0.4	..	-22.4	3.1	..	16 520	..	9.0	..
14.6	-3.0	9 682	..	1.7	2.2	3.8	3.7	..	2 509	..	0.3	0.4
8.7	4.2	4 400	2.3	5.3	5.4	9.9	8.1	7.8	860	..	2.5	3.2
-41.7	-82.6	353	-5.4	108.0	145.7	-136.5	101.0	109.4	715	..	9.1	10.7
27.7	-3.2	4 100	-4.7	0.9	1.1	7.5	8.6	7.7	2 160	..	4.6	3.3
5.7	-28.4	1 520	10.0	15.2	17.3	9.8	23.2	21.0	582	..	1.7	1.8
-15.2	-27.6	9 400	34.3	0.7	1.0	14.5	3.8	5.7	8 951	..	1.4	1.3
12.7	2.3	..	..	3.0	3.5	14.3	..	..	1 187	..	..	..
18.1	35.9	22 000	1.4	1.3	1.7	17.7	1.6	1.8	6 447	..	..	4.7
6.1	-2.2	23 200	4.0	1.1	1.0	3.0	1.5	1.4	1 303	..	1.8	2.1
4.5	-1.4	5 795	-2.7	3.3	3.3	5.6	6.0	5.5	517	..	2.3	2.5

## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year by countries

Explanations of the terms in the header are to be found in Volume II, page nr. 195, Glossary of Definitions

No.	Company	Rank	FTSE Sector (Code)	NACE Sector [closest corresponding sector to FTSE classification - provisional]
<b>USA</b>				
				<i>number of companies for calculation</i>
1	Pfizer	1	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
2	Ford Motor	2	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
3	General Motors	4	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
4	Microsoft	5	Software (977)	Computer & related activities (720)
5	IBM	7	Computer services (972)	Computer & related activities (720)
6	Johnson & Johnson	8	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
7	Intel	10	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
8	Merck	15	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
9	Hewlett-Packard	17	Computer hardware (932)	Manufacture of office machinery & computers (300)
10	Cisco Systems	20	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
11	General Electric	22	Diversified industrials (24)	Financial intermediation except insurance & pension funding (650)
12	Motorola	23	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
13	Eli Lilly	24	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
14	Bristol-Myers Squibb	27	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
15	Wyeth	28	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
16	Delphi	30	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
17	Amgen	32	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
18	Texas Instruments	33	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
19	Sun Microsystems	35	Computer hardware (932)	Manufacture of office machinery & computers (300)
20	Boeing	36	Aerospace & defence (21)	Manufacture of other transport equipment (350)
21	Procter & Gamble	38	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
22	Abbott Laboratories	39	Health (44)	Manufacture of chemicals & chemical products (240)
23	Schering-Plough	41	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
24	Oracle	42	Software (977)	Computer & related activities (720)
25	El du Pont de Nemours	46	Chemicals (11)	Manufacture of chemicals & chemical products (240)
26	Lucent Technologies	47	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
27	United Technologies	49	Diversified industrials (24)	Manufacture of machinery & equipment n e c (290)
28	Dow Chemical	54	Chemicals (11)	Manufacture of rubber & plastic products (250)
29	EMC	55	Computer hardware (932)	Manufacture of office machinery & computers (300)
30	Applied Materials	56	Semiconductors (936)	Manufacture of machinery & equipment n e c (290)
31	Freescall Semiconductor	58	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
32	Lockheed Martin	59	Aerospace & defence (21)	Manufacture of other transport equipment (350)
33	Medtronic	60	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
34	Advanced Micro Devices	61	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
35	Agilent Technologies	62	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
36	Caterpillar	63	Commercial vehicles & trucks (263)	Manufacture of machinery & equipment n e c (290)
37	Honeywell	64	Aerospace & defence (21)	Manufacture of other transport equipment (350)
38	Visteon	65	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
39	Eastman Kodak	69	Media & entertainment (54)	Manufacture of medical/precision/optical instruments & watches (330)
40	Altria	72	Tobacco (49)	Manufacture of tobacco products (160)
41	Xerox	74	Computer hardware (932)	Manufacture of office machinery & computers (300)
42	Computer Associates	75	Software (977)	Computer & related activities (720)
43	3M	76	Diversified industrials (24)	Manufacture of chemicals & chemical products (240)
44	Micron Technology	77	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
45	Qualcomm	80	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
46	Biogen Idec	85	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
47	Exxon Mobil	88	Oil & gas (7)	Manufacture of coke, refined petroleum products & nuclear fuel (230)
48	Electronic Arts	89	Software (977)	Computer & related activities (720)
49	Deere	92	Commercial vehicles & trucks (263)	Manufacture of machinery & equipment n e c (290)
50	ADP	93	Support services (58)	Computer & related activities (720)



R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
117 364	6.7	4.6	2 606 972	14.7	7.8	8 895 390	-0.0	-0.8	4.5	4.8	11.3	9.8	13.2	12.4	4 459 173	9.0
398	393	383	398	393	384	398	383	372	398	393	398	393	398	383	393	286
5 653	7.8	16.6	38 637	16.2	17.6	115 000	-5.7	8.5	14.6	15.8	26.8	7.0	49.2	43.0	141 853	-22.0
5 444	-1.3	0.0	126 287	4.5	1.9	324 864	-0.8	-2.9	4.3	4.6	6.2	4.8	16.8	16.8	13 584	-29.0
4 782	14.0	1.6	142 373	4.3	3.0	324 000	-0.6	-3.9	3.4	3.1	6.4	5.8	14.8	12.9	14 524	-18.0
4 550	-20.5	12.8	29 273	8.0	11.9	61 000	7.0	6.5	15.5	21.1	38.1	24.5	74.6	100.4	215 020	-5.0
4 167	11.8	7.0	70 844	8.0	3.9	329 001	3.1	0.9	5.9	5.7	13.3	12.9	12.7	11.7	96 496	-11.0
3 828	11.1	13.2	34 835	13.1	12.8	109 900	-0.6	2.6	11.0	11.2	27.1	24.7	34.8	31.2	139 050	15.0
3 515	9.6	8.0	25 168	13.5	8.8	85 000	6.7	0.6	14.0	14.5	29.7	24.1	41.4	40.2	117 943	-1.0
2 950	26.2	17.7	16 876	2.0	-21.7	63 000	-0.3	-6.9	17.5	14.1	33.9	41.4	46.8	37.0	49 348	-34.0
2 579	-4.0	9.5	58 787	9.4	20.9	151 000	6.3	20.5	4.4	5.0	5.2	3.9	17.1	18.9	51 028	12.0
2 348	1.8	-6.6	16 219	16.8	-0.4	34 000	0.0	-3.6	14.5	16.6	28.2	23.1	69.1	67.8	83 643	-21.0
2 274	16.4	16.0	112 096	14.7	6.6	307 000	0.7	-0.3	2.0	2.0	21.0	22.4	7.4	6.4	269 147	8.0
2 251	-18.9	-10.8	23 045	15.8	1.4	68 000	-22.7	-15.1	9.8	13.9	10.2	3.8	33.1	31.5	38 681	38.0
1 980	14.5	6.4	10 195	10.1	6.3	44 500	-3.5	2.7	19.4	18.7	21.6	26.4	44.5	37.5	43 985	-17.0
1 839	9.7	4.6	14 258	-7.2	2.2	43 000	-2.3	-2.2	12.9	10.9	22.3	23.4	42.8	38.1	35 701	9.0
1 810	17.5	9.6	12 771	9.5	7.1	27 617	-47.3	-19.2	14.2	13.2	0.4	8.7	65.6	29.4	44 876	29.0
1 545	5.0	7.3	21 058	1.9	3.1	185 200	-2.5	-1.7	7.3	7.1	-1.5	0.1	8.3	7.7	2 239	-43.0
1 492	22.5	32.8	7 762	26.3	38.0	14 400	11.6	23.3	19.2	19.8	31.7	37.0	103.6	94.4	72 973	38.0
1 455	13.2	7.4	9 255	27.9	15.3	35 472	3.9	0.7	15.7	17.8	18.3	9.1	41.0	37.7	37 961	41.0
1 417	4.8	-1.5	8 229	-2.2	-15.1	32 600	-9.7	-9.3	17.2	16.1	3.1	-24.3	43.5	37.4	9 597	-1.0
1 382	13.8	-1.0	38 593	3.9	-3.4	159 000	1.3	-5.4	3.6	3.3	4.3	2.7	8.7	7.7	29 354	-6.0
1 326	8.2	0.6	37 821	18.5	9.4	110 000	12.2	1.2	3.5	3.8	19.4	18.1	12.1	12.5	98 277	-3.0
1 248	-2.1	2.5	14 479	0.0	6.5	60 600	-16.1	-5.3	8.6	8.8	22.2	20.0	20.6	17.7	53 224	18.0
1 182	9.4	7.0	6 086	-0.7	-5.5	30 500	0.0	0.8	19.4	17.6	-0.9	-0.2	38.8	35.4	23 636	13.0
1 097	16.7	11.5	8 681	16.2	6.8	49 872	19.7	5.9	12.6	12.6	33.9	38.4	22.0	22.6	50 323	24.0
981	-1.2	-5.7	20 114	1.3	3.4	60 000	-25.9	-8.8	4.9	5.0	7.2	1.5	16.3	12.3	30 584	-3.0
934	-14.7	-28.8	6 655	6.8	-24.8	31 800	-7.8	-25.5	14.0	17.6	15.1	-8.2	29.4	31.7	9 647	0.0
924	22.3	0.1	27 549	20.7	10.9	210 000	3.3	11.4	3.4	3.3	11.9	12.4	4.4	3.7	38 925	11.0
752	4.2	-1.6	29 547	23.1	13.0	43 203	-6.9	-6.4	2.5	3.0	10.8	7.6	17.4	15.6	34 873	28.0
746	21.9	3.0	6 055	31.9	5.1	22 700	13.5	4.1	12.3	13.3	12.6	6.2	32.9	30.6	23 641	21.0
730	7.7	-6.1	5 895	79.0	2.9	12 191	1.2	-11.1	12.4	20.6	22.0	-7.0	59.9	56.2	21 069	-1.0
710	..	..	4 205	..	..	22 200	..	..	16.9	..	4.7	..	32.0	..	11 972	..
708	6.5	16.6	26 137	11.6	14.0	130 000	0.0	1.3	2.7	2.8	5.7	5.6	5.4	5.1	20 605	18.0
700	11.7	13.8	7 397	10.6	16.2	33 000	6.5	6.0	9.5	9.4	24.8	30.8	21.2	20.2	49 024	11.0
688	9.7	12.8	3 680	62.9	8.7	15 900	11.2	2.5	18.7	27.8	3.8	-7.3	43.2	43.8	6 067	88.0
686	-11.2	-11.6	5 283	18.6	-5.1	28 000	-3.4	-11.9	13.0	17.4	6.3	-15.8	24.5	26.7	9 442	12.0
683	38.7	10.1	22 256	32.9	13.9	73 033	5.6	1.1	3.1	2.9	10.7	7.4	9.3	7.1	27 904	51.0
675	22.1	3.3	18 835	10.8	2.7	109 000	0.9	-1.8	3.6	3.3	8.5	8.7	6.2	5.1	24 436	3.0
659	-0.8	-7.1	13 726	5.6	1.5	70 200	-2.5	-3.9	4.8	5.1	-2.2	-6.1	9.4	9.2	947	-3.0
628	9.3	3.1	9 945	1.5	0.7	54 800	-14.2	-10.0	6.3	5.9	0.3	2.3	11.5	9.0	5 462	-2.0
595	6.2	7.7	65 927	9.5	7.1	156 000	-5.5	-3.8	0.9	0.9	16.9	19.4	3.8	3.4	102 058	42.0
559	-12.4	-8.7	11 567	0.1	-2.6	58 100	-4.9	-9.7	4.8	5.5	5.9	2.0	9.6	10.5	9 770	20.0
559	7.6	1.3	2 597	7.8	6.0	15 300	0.0	-2.7	21.5	21.6	3.3	0.1	36.5	34.0	11 615	9.0
558	1.3	0.6	14 722	9.8	7.6	67 071	-0.0	-2.2	3.8	4.1	22.9	20.4	8.3	8.2	40 730	-14.0
555	15.0	15.5	3 240	42.5	3.8	17 900	7.8	-0.4	17.1	21.2	6.1	-37.0	31.0	29.1	5 036	-16.0
530	37.6	20.2	3 590	22.9	22.1	7 600	2.7	5.4	14.8	13.2	41.9	29.8	69.7	52.0	48 929	13.0
498	190.2	98.7	1 627	225.4	100.8	4 266	14.5	83.4	30.6	34.3	1.2	-132.2	116.8	46.1	10 350	-27.0
478	5.0	2.5	194 221	23.8	12.1	105 200	-0.5	2.4	0.2	0.3	15.7	14.2	4.5	4.3	283 199	27.0
466	23.9	17.8	2 302	5.8	22.0	6 100	27.1	20.3	20.2	17.3	20.9	26.1	76.3	78.3	13 372	22.0
450	5.9	1.2	13 002	32.4	10.5	46 500	7.6	1.1	3.5	4.3	8.5	5.6	9.7	9.8	12 989	13.0
428	16.4	4.2	5 705	8.5	7.4	42 000	2.4	0.8	7.5	7.0	18.5	21.2	10.2	9.0	19 107	5.0



## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year by countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>USA continued</b>				
51	Boston Scientific	95	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
52	Broadcom	97	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
53	Baxter International	100	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
54	Guidant	101	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
55	Johnson Controls	102	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
56	Analog Devices	103	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
57	Monsanto	104	Chemicals (11)	Manufacture of chemicals & chemical products (240)
58	Northrop Grumman	105	Aerospace & defence (21)	Manufacture of medical/precision/optical instruments & watches (330)
59	Agere Systems	106	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
60	Raytheon	108	Aerospace & defence (21)	Manufacture of medical/precision/optical instruments & watches (330)
61	Apple Computer	109	Computer hardware (932)	Manufacture of office machinery & computers (300)
62	Emerson Electric	110	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
63	Schlumberger	113	Oil & gas (7)	Extraction of crude petroleum/natural gas & incidental services (111)
64	Dell	114	Computer hardware (932)	Manufacture of office machinery & computers (300)
65	LSI Logic	119	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
66	Chiron	121	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
67	Google	125	Internet (974)	Computer & related activities (720)
68	Yahoo!	128	Internet (974)	Computer & related activities (720)
69	Genzyme	130	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
70	Goodyear	131	Automobiles & parts (31)	Manufacture of rubber & plastic products (250)
71	Appera	133	Biotechnology (482)	Manufacture of medical/precision/optical instruments & watches (330)
72	Cadence Design Systems	134	Software (977)	Computer & related activities (720)
73	Corning	138	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
74	National Semiconductor	140	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
75	Veritas Software	141	Software (977)	Computer & related activities (720)
76	Avaya	144	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
77	Intuit	145	Software (977)	Computer & related activities (720)
78	Allergan	146	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
79	Nvidia	149	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
80	Symantec	151	Software (977)	Computer & related activities (720)
81	General Dynamics	152	Aerospace & defence (21)	Manufacture of machinery & equipment n e c (290)
82	MedImmune	153	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
83	NCR	154	Computer hardware (932)	Manufacture of office machinery & computers (300)
84	Amazon com	155	General retailers (52)	Retail trade except motor vehicles; repair of household goods (520)
85	Maxtor	156	Computer hardware (932)	Manufacture of office machinery & computers (300)
86	Whirlpool	159	Household goods & textiles (34)	Manufacture of machinery & equipment n e c (290)
87	Lexmark	161	Computer hardware (932)	Manufacture of office machinery & computers (300)
88	Adobe Systems	162	Software (977)	Computer & related activities (720)
89	Xilinx	163	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
90	Textron	164	Diversified industrials (24)	Manufacture of other transport equipment (350)
91	Maxim Integrated Products	165	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
92	PPG Industries	167	Chemicals (11)	Manufacture of chemicals & chemical products (240)
93	Siebel Systems	169	Software (977)	Computer & related activities (720)
94	Unisys	171	Computer services (972)	Computer & related activities (720)
95	Danaher	172	Engineering - general (267)	Manufacture of medical/precision/optical instruments & watches (330)
96	Forest Laboratories	173	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
97	Synopsys	176	Software (977)	Computer & related activities (720)
98	BMC Software	178	Software (977)	Computer & related activities (720)
99	eBay	179	General retailers (52)	Wholesale & commission trade except motor vehicles (510)
100	St Jude Medical	180	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)

R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
419	25.9	27.4	4 138	61.8	28.1	17 500	16.7	6.7	10.1	13.0	27.7	19.8	23.9	22.2	17 083	-27.0
407	-15.3	7.4	1 766	49.0	35.6	3 373	23.6	7.3	23.1	40.6	11.6	-58.5	120.8	176.1	8 680	32.0
380	-6.5	6.6	6 996	6.6	7.5	48 000	-9.6	0.0	5.4	6.2	5.6	14.0	7.9	7.7	18 452	36.0
380	-0.5	10.6	2 770	1.8	11.6	12 000	0.0	-0.2	13.7	14.0	21.8	10.4	31.6	31.8	17 332	36.0
379	6.4	14.7	19 536	17.3	13.0	123 000	4.2	3.2	1.9	2.1	4.9	4.9	3.1	3.0	8 243	4.0
377	13.7	3.3	1 938	28.7	5.0	8 900	6.0	-0.4	19.4	22.0	26.5	18.2	42.3	39.4	10 140	-8.0
376	-3.0	..	4 015	16.8	..	12 600	-8.0	..	9.4	11.3	8.6	-36.9	29.8	28.3	12 882	..
371	26.0	13.8	21 963	13.9	30.1	125 400	2.3	9.0	1.7	1.5	6.7	6.1	3.0	2.4	14 444	4.0
365	6.2	..	1 407	4.0	..	6 600	-2.9	..	25.9	25.4	-6.0	-14.4	55.3	50.5	1 508	1.0
361	0.8	1.1	14 895	11.8	6.3	79 000	1.3	-3.2	2.4	2.7	4.5	6.0	4.6	4.6	13 199	27.0
360	3.8	4.4	6 091	33.4	15.6	11 695	7.2	6.8	5.9	7.6	3.9	0.2	30.8	31.8	28 160	219.0
358	-5.4	-6.5	11 488	11.9	0.3	107 800	1.0	-4.7	3.1	3.7	13.0	12.3	3.3	3.5	20 977	11.0
344	-16.0	-12.8	8 446	-17.4	-5.8	52 500	-31.8	-13.5	4.1	4.0	16.8	5.2	6.6	5.3	37 232	34.0
341	40.3	13.0	36 201	18.7	16.4	55 200	20.0	16.8	0.9	0.8	8.6	8.5	6.2	5.3	65 264	-1.0
310	-2.6	-5.7	1 251	0.4	-1.6	4 414	-6.5	-13.1	24.8	25.5	-25.7	-16.5	70.3	67.4	2 602	82.0
304	5.6	7.2	1 268	-2.5	30.7	5 400	1.3	13.1	24.0	22.1	4.1	16.6	56.3	54.0	5 074	-20.0
291	72.1	..	2 346	117.4	..	3 021	..	..	12.4	15.7	19.9	23.6	96.2	..	59 218	..
285	87.1	45.4	2 630	119.9	70.8	7 600	38.2	36.3	10.8	12.8	34.1	20.7	37.5	27.7	35 856	19.0
279	20.0	15.1	1 619	28.4	21.6	7 000	24.4	10.4	17.2	18.4	10.7	1.0	39.9	41.3	13 292	56.0
278	7.9	0.2	13 515	21.5	9.1	84 000	-2.3	-4.5	2.1	2.3	4.2	-2.4	3.3	3.0	2 287	62.0
277	16.6	5.3	1 343	2.7	3.5	5 360	-2.0	-1.1	20.7	18.2	6.4	3.4	51.8	43.5	3 021	-14.0
274	9.6	7.8	881	6.9	-5.7	4 900	2.1	-4.4	31.1	30.4	7.7	-2.8	56.0	52.1	3 194	22.0
261	3.2	-17.4	2 835	24.7	-15.0	24 700	19.9	-8.0	9.2	11.1	-25.0	-14.5	10.6	12.3	20 946	68.0
260	-19.0	-6.8	1 459	18.6	-2.1	9 700	-1.0	-2.0	17.8	26.1	16.2	-2.3	26.8	32.7	6 000	33.0
258	15.4	13.3	1 502	16.9	11.0	7 587	16.4	10.6	17.2	17.4	27.5	21.6	34.0	34.3	..	..
256	-4.1	-13.4	2 994	-6.2	-15.7	14 900	-11.8	-13.5	8.6	8.4	8.1	2.1	17.2	15.8	3 404	-29.0
255	35.6	18.8	1 374	13.2	14.0	6 700	0.0	3.2	18.6	15.5	22.5	22.2	38.1	28.1	6 242	16.0
254	13.7	11.1	1 505	16.6	5.4	5 030	2.0	-7.9	16.9	17.3	26.2	-1.3	50.5	45.4	9 100	22.0
247	24.1	29.6	1 479	10.3	13.6	2 101	15.1	23.2	16.7	14.8	5.7	5.2	117.3	108.8	3 723	98.0
244	31.7	26.5	1 900	38.1	34.1	6 500	22.6	18.6	12.9	13.5	31.7	28.1	37.6	35.0	19 176	80.0
242	16.7	17.5	14 110	15.4	16.4	70 200	3.8	10.7	1.7	1.7	10.2	8.9	3.4	3.1	16 950	18.0
241	109.4	58.0	840	8.2	25.4	1 823	10.5	27.6	28.7	14.8	-5.8	23.2	132.1	69.7	5 038	21.0
241	7.9	3.7	4 403	6.9	0.4	28 500	-1.7	-3.2	5.5	5.4	4.1	1.6	8.4	7.7	4 894	51.0
241	13.8	10.3	5 092	31.5	30.4	9 000	15.4	4.9	4.7	5.5	6.3	2.6	26.7	27.1	13 395	15.0
238	-8.7	-9.5	2 793	-7.1	-0.0	13 656	0.8	11.7	8.5	8.7	-4.1	3.2	17.4	19.2	961	13.0
232	-3.1	10.9	9 726	8.6	8.5	68 125	-0.4	4.7	2.4	2.7	5.6	6.1	3.4	3.5	4 148	31.0
230	17.7	8.3	3 909	11.8	8.6	13 400	13.6	1.8	5.9	5.6	13.8	12.5	17.2	16.6	5 361	-37.0
229	12.4	11.6	1 226	28.6	10.6	3 142	-10.4	1.2	18.7	21.4	35.5	29.4	72.9	58.1	9 707	31.0
226	24.2	14.5	1 157	12.5	15.7	3 050	10.1	5.3	19.6	17.7	23.5	23.4	74.2	65.8	6 942	-8.0
226	20.4	-5.7	7 535	3.9	-6.0	44 000	2.3	-4.8	3.0	2.6	7.5	6.3	5.1	4.4	7 274	17.0
225	12.5	3.0	1 059	24.9	-3.0	7 599	22.5	6.4	21.3	23.6	42.1	38.8	29.7	32.3	10 299	-11.0
223	4.5	2.3	6 999	8.6	5.2	31 800	-3.3	-3.1	3.2	3.3	12.0	10.7	7.0	6.5	8 201	10.0
220	-3.2	14.6	986	-1.0	-13.2	5 032	1.2	-12.1	22.3	22.8	10.2	-2.8	43.7	45.7	3 170	9.0
217	5.1	-3.9	4 282	-1.5	-1.1	36 400	-2.4	-2.2	5.1	4.7	-0.1	7.6	5.9	5.5	1 606	-37.0
216	42.0	35.2	5 069	30.1	22.1	35 000	16.7	15.0	4.3	3.9	16.0	16.0	6.2	5.1	12 785	11.0
216	19.1	23.0	2 246	15.2	24.9	5 136	3.4	11.2	9.6	9.3	37.4	34.5	42.1	36.5	10 025	-23.0
212	-0.2	14.9	803	-7.3	17.0	4 378	0.4	10.7	26.4	24.5	8.0	18.2	48.4	48.7	1 827	-24.0
209	-51.5	-21.3	1 076	3.1	4.3	6 905	7.4	2.9	19.4	41.3	1.6	-2.0	30.3	67.1	3 282	30.0
207	61.3	55.3	1 955	22.7	52.5	8 100	42.1	46.8	10.6	8.1	39.9	28.8	25.6	22.6	40 799	34.0
207	16.9	19.8	1 688	18.7	19.4	7 900	6.9	12.4	12.3	12.5	23.2	23.6	26.3	24.0	12 157	38.0

## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year by countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>USA continued</b>				
101	Kla-Tencor	181	Semiconductors (936)	Manufacture of medical/precision/optical instruments & watches (330)
102	Kimberly-Clark	182	Personal care & household (47)	Manufacture of pulp paper & paper products (211)
103	Cephalon	186	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
104	Dana	191	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
105	Millennium Pharmaceuticals	193	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
106	Rohm & Haas	196	Chemicals (11)	Manufacture of rubber & plastic products (250)
107	Teradyne	199	Computer hardware (932)	Manufacture of medical/precision/optical instruments & watches (330)
108	Cypress Semiconductor	200	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
109	Eaton	201	Electrical equipment (252)	Manufacture of machinery & equipment n e c (290)
110	SunGard Data Systems	204	Computer services (972)	Computer & related activities (720)
111	Novellus Systems	206	Semiconductors (936)	Manufacture of machinery & equipment n e c (290)
112	Tellabs	207	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
113	Halliburton	208	Oil & gas (7)	Construction (450)
114	Goodrich	210	Aerospace & defence (21)	Manufacture of other transport equipment (350)
115	Atmel	212	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
116	ChevronTexaco (now Chevron)	213	Oil & gas (7)	Manufacture of coke, refined petroleum products & nuclear fuel (230)
117	Cummins	214	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
118	Comverse Technology	216	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
119	Conexant Systems	217	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
120	Autodesk	218	Software (977)	Computer & related activities (720)
121	Juniper Networks	220	Computer hardware (932)	Computer & related activities (720)
122	Becton Dickinson	222	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
123	DST Systems	225	Computer services (972)	Computer & related activities (720)
124	McKesson	226	Food & drug retailers (63)	Wholesale & commission trade except motor vehicles (510)
125	Cerner	228	Software (977)	Computer & related activities (720)
126	Colgate-Palmolive	229	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
127	UTStarcom	231	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
128	Gilead Sciences	232	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
129	Rockwell Collins	237	Aerospace & defence (21)	Manufacture of other transport equipment (350)
130	Harman International Industries	238	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
131	Human Genome Sciences	239	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
132	Stryker	243	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
133	Gillette	244	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
134	Navistar International	247	Commercial vehicles & trucks (263)	Manufacture of motor vehicles trailers & semi-trailers (340)
135	Ciena	248	Telecommunications equipment (938)	Manufacture of medical/precision/optical instruments & watches (330)
136	Mentor Graphics	249	Software (977)	Computer & related activities (720)
137	Western Digital	250	Computer hardware (932)	Manufacture of office machinery & computers (300)
138	Beckman Coulter	251	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
139	Novell	252	Software (977)	Computer & related activities (720)
140	Lear	253	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
141	Storage Technology	254	Computer hardware (932)	Computer & related activities (720)
142	Dover	257	Diversified industrials (24)	Manufacture of machinery & equipment n e c (290)
143	Harley-Davidson	259	Automobiles & parts (31)	Manufacture of other transport equipment (350)
144	AlCoA	262	Steel & other metals (18)	Manufacture of basic metals (270)
145	Altera	263	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
146	Baker Hughes	265	Oil & gas (7)	Manufacture of machinery & equipment n e c (290)
147	International Flavors & Fragrances	266	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
148	TRW Automotive	267	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
149	McAfee	268	Software (977)	Computer & related activities (720)
150	Compuware	269	Software (977)	Computer & related activities (720)

R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
207	4.6	-7.6	1 101	13.2	-10.7	5 200	6.1	-6.7	18.8	20.3	19.5	10.4	39.7	40.3	6 994	17.0
206	-0.3	-1.8	11 097	5.1	1.3	60 000	-3.2	-2.2	1.9	2.0	16.8	16.1	3.4	3.3	22 115	-8.0
202	60.9	48.2	747	42.0	56.2	2 173	32.0	24.5	27.0	23.8	0.8	22.1	92.8	76.1	1 691	-19.0
198	6.7	1.1	6 679	14.0	-4.4	45 900	-22.2	-13.0	3.0	3.2	1.5	6.0	4.3	3.1	1 671	-21.0
196	-15.9	38.8	330	3.4	22.2	1 477	-3.5	-8.1	59.4	73.1	-57.3	-111.9	132.7	152.3	2 289	-10.0
195	11.3	4.8	5 371	13.7	8.8	16 691	-3.2	-2.9	3.6	3.7	11.6	8.4	11.7	10.2	7 618	18.0
193	2.9	-3.2	1 318	32.5	7.5	6 200	1.6	-9.6	14.6	18.8	10.5	-13.3	31.1	30.7	2 168	-11.0
193	4.1	-0.7	698	13.3	5.0	4 500	11.6	3.0	27.6	30.0	0.0	-1.0	42.8	45.9	1 470	43.0
192	17.0	4.6	7 223	21.8	10.4	55 000	7.8	3.9	2.7	2.8	8.8	9.1	3.5	3.2	7 326	2.0
187	22.3	13.8	2 547	20.6	21.5	13 000	30.0	14.3	7.3	7.2	22.6	21.6	14.4	15.3	..	..
186	10.8	-2.5	999	46.7	0.5	3 505	20.8	1.9	18.6	24.6	15.8	-10.1	52.9	57.7	2 751	-6.0
184	-12.5	-16.2	906	25.7	-17.6	4 125	17.4	-17.5	20.3	29.2	-3.0	-28.3	44.6	59.9	3 067	13.0
184	5.0	2.4	15 056	25.8	16.5	97 000	-4.0	4.5	1.2	1.5	-3.4	-3.0	1.9	1.7	21 997	114.0
183	11.5	18.6	3 476	7.8	4.1	14 700	-28.6	-15.1	5.3	5.1	7.5	6.4	12.5	8.0	4 401	57.0
182	-0.1	-2.6	1 214	24.0	3.9	8 800	11.4	2.4	15.0	18.6	2.8	-5.2	20.7	23.1	768	-49.0
178	1.7	5.0	110 994	47.7	18.6	47 265	-6.6	-5.4	0.2	0.2	13.8	13.2	3.8	3.5	95 489	27.0
177	20.5	5.7	6 208	34.0	14.1	28 100	16.1	4.1	2.9	3.2	6.6	2.8	6.3	6.1	2 968	35.0
177	7.4	-8.7	706	25.4	-8.9	5 050	8.3	-3.7	25.1	29.3	4.7	-2.8	35.1	35.4	3 803	55.0
177	50.6	-20.8	664	50.6	-5.3	2 400	65.5	-29.7	26.6	26.6	-30.8	-125.6	73.6	80.9	599	10.0
176	14.4	12.4	908	29.7	9.2	3 477	-0.5	-1.6	19.4	22.0	19.3	11.3	50.7	44.1	6 178	87.0
175	35.4	15.3	983	90.5	14.6	2 948	89.8	33.9	17.8	25.1	14.7	9.3	59.5	83.4	9 728	9.0
173	0.2	3.6	3 631	9.0	9.5	25 005	0.9	0.3	4.8	5.2	13.4	16.5	6.9	7.0	9 987	13.0
171	26.2	5.0	1 787	0.5	13.5	11 000	-3.5	-0.6	9.5	7.6	15.5	14.4	15.5	11.9	3 090	8.0
170	0.5	-3.8	59 236	15.8	17.2	25 200	2.4	1.6	0.3	0.3	-0.2	1.4	6.8	6.9	10 655	53.0
170	28.1	26.5	682	10.4	21.7	5 345	5.3	8.6	24.9	21.4	12.3	9.4	31.7	26.1	2 161	80.0
169	11.9	7.4	7 787	6.9	3.9	36 000	-1.6	-2.2	2.2	2.1	19.8	23.0	4.7	4.1	20 178	-3.0
165	40.7	55.4	1 989	37.6	62.8	8 200	49.1	..	8.3	8.1	2.4	13.6	20.1	21.3	713	-53.0
165	35.6	6.4	975	52.6	78.3	1 654	16.1	18.3	16.9	19.0	47.7	-18.3	99.4	85.1	14 226	42.0
160	0.9	..	2 156	15.3	..	15 800	10.5	..	7.4	8.5	14.9	14.5	10.2	11.1	6 372	43.0
160	51.6	34.7	1 995	21.6	16.5	10 606	-1.6	-0.2	8.0	6.4	9.0	7.5	15.1	9.8	4 096	-2.0
159	17.7	17.4	3	-50.0	-30.7	840	-23.6	-6.0	5 290.3	2 247.8	-6 404.3	-2 783.3	188.9	122.6	1 288	38.0
155	17.1	14.1	3 136	17.6	17.9	15 891	7.6	7.4	5.0	5.0	17.0	18.5	9.8	9.0	15 588	11.0
154	3.5	3.8	7 708	13.2	5.3	28 700	-2.4	-3.1	2.0	2.2	23.1	21.8	5.4	5.1	38 112	33.0
152	-4.2	-1.0	6 966	29.0	12.1	14 800	4.2	-3.6	2.2	2.9	4.6	1.2	10.3	11.2	1 735	-5.0
151	-3.4	-4.5	220	5.8	-42.9	1 651	-9.1	-24.1	68.7	75.2	-259.9	-131.3	91.5	86.1	891	-24.0
149	9.5	13.7	523	5.2	5.8	3 856	7.1	7.4	28.5	27.4	5.6	2.0	38.6	37.8	467	-21.0
148	49.2	17.9	2 242	12.1	16.0	17 376	51.0	30.0	6.6	5.0	5.1	7.0	8.5	8.6	2 287	114.0
147	2.9	1.8	1 772	9.9	6.7	7 300	-26.3	-10.2	8.3	8.9	13.9	15.2	20.2	14.4	2 463	-2.0
146	8.1	1.2	858	5.5	3.9	6 186	7.9	-4.1	17.0	16.6	4.3	-7.3	23.6	23.6	1 665	-19.0
145	15.5	-0.2	12 478	7.7	7.6	110 000	-0.9	-1.8	1.2	1.1	4.3	4.5	1.3	1.1	1 980	-29.0
145	-3.7	-7.0	1 636	1.9	2.8	7 100	0.0	-3.1	8.8	9.4	10.0	8.8	20.4	21.2	2 902	41.0
139	18.7	2.4	4 038	24.4	7.2	28 100	9.3	1.8	3.4	3.6	11.2	10.2	4.9	4.5	6 153	4.0
137	11.3	32.0	3 914	8.5	14.5	8 900	1.1	1.0	3.5	3.4	25.5	23.3	15.4	13.9	10 519	-19.0
134	-6.2	-3.6	17 273	9.2	0.9	119 000	-0.8	-2.7	0.8	0.9	9.5	8.2	1.1	1.2	19 076	-7.0
133	1.1	1.9	748	22.8	6.6	2 164	8.5	2.9	17.8	21.6	31.0	24.0	61.4	65.8	6 017	5.0
130	2.0	10.9	4 491	15.3	4.3	26 900	0.9	0.1	2.9	3.3	14.1	7.1	4.8	4.8	14 675	49.0
129	10.0	9.0	1 496	6.9	3.3	5 212	-4.4	-4.2	8.6	8.4	15.0	14.9	24.7	21.5	2 566	-1.0
128	5.8	..	8 837	6.1	..	59 900	-1.5	..	1.4	1.5	3.4	3.0	2.1	2.0	2 127	..
127	-6.4	5.6	670	-2.8	3.0	2 950	-20.3	-6.9	19.0	19.7	61.8	7.1	43.1	36.7	3 534	62.0
127	-1.3	14.3	906	-2.6	-10.7	7 908	-8.7	-8.0	14.0	13.8	8.6	4.4	16.1	14.9	2 370	65.0

## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year by countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>USA continued</b>				
151	Network Appliance	272	Computer hardware (932)	Manufacture of office machinery & computers (300)
152	Mattel	273	Household goods & textiles (34)	Manufacture of furniture (361)
153	Lam Research	274	Semiconductors (936)	Manufacture of machinery & equipment n e c (290)
154	Barr Pharmaceuticals	276	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
155	Eastman Chemical	277	Chemicals (11)	Manufacture of rubber & plastic products (250)
156	AT&T	278	Telecommunication services (67)	Post & telecommunications (640)
157	Scientific-Atlanta	279	Media & entertainment (54)	Manufacture of radio TV & communication equip & apparatus (320)
158	Zimmer	280	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
159	Bausch & Lomb	286	Health (44)	Manufacture of chemicals & chemical products (240)
160	Pitney Bowes	288	Electronic equipment (253)	Manufacture of office machinery & computers (300)
161	Sepracor	289	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
162	General Mills	292	Food producers (43)	Manufacture of food products & beverages (150)
163	Hasbro	293	Household goods & textiles (34)	Manufacture of furniture (361)
164	RF Micro Devices	294	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
165	Sybase	295	Software (977)	Computer & related activities (720)
166	ArvinMeritor	296	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
167	ITT Industries	297	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
168	Skyworks Solutions	304	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
169	Brocade Communications	307	Computer hardware (932)	Computer & related activities (720)
170	Ingersoll-Rand	308	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
171	Kellogg	309	Food producers (43)	Manufacture of food products & beverages (150)
172	BEA Systems	311	Software (977)	Computer & related activities (720)
173	Ivax	317	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
174	Celgene	320	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
175	American Standard Companies	321	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
176	Exelixis	324	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
177	Federal-Mogul	325	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
178	Thermo Electron	329	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
179	Time Warner	330	Media & entertainment (54)	Recreational cultural & sporting activities (920)
180	Dade Behring	331	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
181	Nektar Therapeutics	333	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
182	Brunswick	336	Household goods & textiles (34)	Manufacture of other transport equipment (350)
183	Tektronix	337	Computer hardware (932)	Manufacture of medical/precision/optical instruments & watches (330)
184	International Game Technology	340	Leisure & hotels (53)	Manufacture of furniture (361)
185	NPS Pharmaceuticals	341	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
186	Watson Pharmaceuticals	342	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
187	Air Products and Chemicals	343	Chemicals (11)	Manufacture of chemicals & chemical products (240)
188	ConocoPhillips	344	Oil & gas (7)	Manufacture of coke, refined petroleum products & nuclear fuel (230)
189	Symbol Technologies	346	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
190	SanDisk	347	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
191	Illinois Tool Works	349	Engineering fabricators (266)	Manufacture of fabricated metal products (not machinery & equip) (280)
192	BorgWarner	350	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
193	Protein Design Labs	353	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
194	Applied Micro Circuits	354	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
195	Medarex	355	Biotechnology (482)	Research & development (730)
196	Rockwell Automation	356	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
197	Celanese	357	Chemicals (11)	Manufacture of chemicals & chemical products (240)
198	PMC-Sierra	360	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
199	Hospira	362	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
200	Amylin Pharmaceuticals	363	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)



R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
126	29.7	13.6	1 176	36.6	26.1	3 800	33.6	18.6	10.7	11.3	15.8	13.4	33.1	34.1	6 269	23.0
126	2.2	-0.9	3 754	2.9	2.0	25 000	0.0	-2.5	3.4	3.4	14.8	15.7	5.0	4.9	5 290	-3.0
125	6.2	-9.1	689	23.9	-14.9	2 200	4.8	-11.3	18.2	21.2	11.3	-1.3	57.0	56.2	2 927	25.0
124	85.3	47.0	963	45.0	36.9	1 500	21.6	31.6	12.9	10.1	14.6	28.6	82.9	54.4	3 604	37.0
124	-10.6	1.6	4 841	13.5	6.9	12 000	-20.0	-8.8	2.6	3.2	2.7	-4.4	10.3	9.2	3 225	27.0
123	-39.7	-19.9	22 467	-11.6	-16.6	47 600	-22.7	-26.1	0.5	0.8	-33.6	11.4	2.6	3.3	11 718	32.0
123	6.4	2.6	1 257	17.8	-12.1	7 538	9.4	-2.6	9.8	10.8	17.1	9.0	16.3	16.7	4 047	17.0
123	57.6	..	2 193	56.8	..	6 600	1.5	..	5.6	5.6	25.6	26.6	18.6	12.0	14 611	7.0
120	8.4	10.0	1 642	10.5	9.3	12 400	6.9	2.2	7.3	7.4	12.5	11.6	9.6	9.5	3 216	34.0
119	9.9	6.7	3 647	8.3	6.3	35 183	8.3	2.4	3.3	3.2	17.5	19.4	3.4	3.3	7 521	4.0
118	-27.4	-11.6	280	10.7	35.7	1 700	72.9	22.3	42.0	64.0	-71.8	-30.4	69.2	164.8	4 211	48.0
116	6.0	24.0	8 144	5.4	16.1	27 580	1.0	35.8	1.4	1.4	18.9	18.4	4.2	4.0	12 845	2.0
116	9.8	7.8	2 205	-4.5	1.6	6 000	-13.0	-9.1	5.2	4.6	9.7	10.0	19.3	15.3	2 752	17.0
115	22.1	28.1	467	-2.5	19.7	2 570	35.6	24.7	24.6	19.7	-9.9	6.1	44.8	49.8	801	-1.0
115	7.9	-1.0	580	1.4	-5.2	3 568	-2.5	-8.4	19.8	18.6	11.5	13.5	32.2	29.1	1 411	38.0
115	-6.6	4.7	5 910	3.1	5.7	31 000	-3.1	-2.1	1.9	2.1	1.2	4.0	3.7	3.8	1 037	2.0
115	28.5	15.9	4 976	20.2	13.1	44 000	12.8	5.0	2.3	2.2	9.0	9.5	2.6	2.3	7 367	36.0
112	0.6	11.2	577	26.8	44.3	4 200	10.5	..	19.5	24.5	5.7	-69.5	26.7	29.4	778	-16.0
110	3.0	10.5	439	13.7	5.2	1 038	-15.6	-0.9	25.1	27.7	-4.5	-26.7	106.0	86.8	816	-12.0
110	-26.8	-11.5	6 911	-4.9	-1.0	36 000	-14.3	-13.6	1.6	2.1	16.2	9.5	3.1	3.6	9 995	14.0
110	17.5	10.6	7 073	9.1	2.8	25 000	-1.0	-1.8	1.5	1.4	17.4	17.5	4.4	3.7	13 770	9.0
108	4.0	6.6	795	6.7	3.5	3 353	7.4	2.5	13.6	13.9	18.3	17.3	32.2	33.2	2 668	39.0
104	30.7	17.2	1 352	29.4	14.8	10 100	15.8	8.1	7.7	7.6	14.7	15.4	10.3	9.1	5 114	50.0
104	31.0	52.8	278	39.0	49.6	766	9.0	26.0	37.3	39.6	11.3	-1.0	135.3	112.5	5 798	84.0
103	9.4	1.7	6 996	11.0	8.4	61 500	2.5	0.8	1.5	1.5	4.9	7.6	1.7	1.6	6 974	17.0
101	7.9	18.5	39	2.6	9.1	517	-9.8	-3.3	259.8	247.1	-255.6	-184.2	196.0	163.9	453	12.0
101	11.4	6.0	4 542	11.3	4.2	44 700	-0.4	-3.0	2.2	2.2	-1.5	-0.7	2.3	2.0	32	83.0
99	-8.0	-7.8	1 623	5.2	0.3	9 900	-8.3	-6.2	6.1	7.0	11.2	8.7	10.0	10.0	3 462	10.0
99	-3.6	8.5	30 966	6.4	3.3	84 900	6.1	-1.7	0.3	0.4	15.6	14.8	1.2	1.3	61 822	15.0
99	14.0	17.0	1 148	8.6	8.2	6 000	0.5	..	8.6	8.2	11.8	10.3	16.4	14.5	2 412	54.0
98	1.5	-1.5	84	7.7	13.8	662	-0.9	-1.6	117.0	124.1	-64.4	-32.1	148.4	144.9	783	..
97	10.9	11.0	3 847	26.6	15.8	25 600	10.2	7.3	2.5	2.9	8.1	5.9	3.8	3.7	3 228	20.0
96	28.9	-5.2	677	16.3	-9.4	3 834	-7.4	-7.9	14.2	12.8	16.2	-0.3	25.0	18.0	1 461	-23.0
95	36.2	27.4	1 828	16.7	27.5	4 900	-7.5	7.0	5.2	4.5	36.5	32.3	19.4	13.2	6 811	-18.0
95	19.1	37.4	10	42.9	7.7	356	30.9	34.6	948.1	1 137.7	-1 157.9	-1 371.4	266.3	292.8	291	..
94	29.1	26.4	1 207	12.6	12.2	3 851	-3.3	4.1	7.8	6.8	15.2	20.5	24.5	18.3	2 666	35.0
93	4.6	1.1	5 453	17.7	9.0	19 900	7.6	3.8	1.7	1.9	13.0	10.8	4.7	4.8	9 982	15.0
93	-7.4	42.0	99 377	49.4	77.8	35 800	-8.2	-2.6	0.1	0.2	11.0	10.1	2.6	2.6	68 225	72.0
92	15.0	26.7	1 274	13.1	6.0	5 400	1.9	0.9	7.2	7.1	8.1	0.7	17.1	15.1	1 594	-29.0
92	48.4	28.5	1 307	64.6	69.4	876	16.6	15.7	7.0	7.8	23.4	22.2	105.0	82.5	4 870	69.0
91	15.6	6.5	8 631	16.9	8.1	49 000	3.2	-2.0	1.1	1.1	17.5	16.3	1.9	1.7	18 207	-12.0
91	4.2	5.6	2 594	14.9	14.5	14 500	1.4	3.7	3.5	3.9	9.7	9.5	6.2	6.1	2 422	25.0
90	48.1	32.9	71	44.9	29.1	660	20.2	22.1	127.0	124.2	-60.8	-193.9	136.6	110.9	2 050	..
90	-4.7	-7.6	187	92.8	18.6	755	4.4	-12.6	48.0	97.1	-56.4	-113.4	119.0	130.3	607	-26.0
90	27.8	46.7	9	12.5	-33.8	435	2.8	13.6	997.3	877.9	-1 449.3	-1 187.5	206.3	166.0	821	134.0
90	-6.4	-10.4	3 245	7.5	1.0	21 000	-2.3	-3.1	2.8	3.2	12.7	8.7	4.3	4.4	6 994	38.0
89	13.1	-2.0	5 101	25.2	0.0	9 100	-9.0	-10.0	1.8	1.9	2.7	3.3	9.8	7.9	2 953	37.0
89	0.9	-15.7	219	19.0	-2.6	951	2.3	-5.9	40.5	47.8	12.7	-7.1	93.2	94.5	1 154	-25.0
88	..	..	1 946	..	..	14 000	..	..	4.5	..	16.2	..	6.3	..	4 525	..
88	87.5	34.1	25	-60.3	..	600	12.2	40.8	351.8	74.5	-444.3	-144.4	146.6	87.7	1 529	10.0

## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year by countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>USA continued</b>				
201	Molex	365	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
202	Black & Decker	366	Household goods & textiles (34)	Manufacture of machinery & equipment n e c (290)
203	Adaptec	373	Computer hardware (932)	Computer & related activities (720)
204	Intersil	376	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
205	CR Bard	377	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
206	Harris	378	Telecommunications equipment (938)	Manufacture of medical/precision/optical instruments & watches (330)
207	Electronics For Imaging	379	Computer hardware (932)	Manufacture of electrical machinery & apparatus n e c (310)
208	Kos Pharmaceuticals	380	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
209	OSI Pharmaceuticals	382	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
210	Andrew	383	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
211	Silicon Graphics	387	Computer hardware (932)	Manufacture of office machinery & computers (300)
212	Vitesse Semiconductor	389	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
213	Bio-Rad Laboratories	390	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
214	Lubrizol	391	Chemicals (11)	Manufacture of chemicals & chemical products (240)
215	Parametric Technology	394	Software (977)	Computer & related activities (720)
216	Abgenix	397	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
217	Vertex Pharmaceuticals	398	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
218	Newell Rubbermaid	400	Household goods & textiles (34)	Manufacture of rubber & plastic products (250)
219	Linear Technology	403	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
220	CV Therapeutics	405	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
221	Integrated Device Technology	406	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
222	AGCO	407	Commercial vehicles & trucks (263)	Manufacture of machinery & equipment n e c (290)
223	Paccar	408	Commercial vehicles & trucks (263)	Manufacture of motor vehicles trailers & semi-trailers (340)
224	Cell Therapeutics	413	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
225	Engelhard	418	Chemicals (11)	Manufacture of basic metals (270)
226	JDS Uniphase	420	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
227	Macromedia	423	Software (977)	Computer & related activities (720)
228	Maytag	424	Household goods & textiles (34)	Manufacture of machinery & equipment n e c (290)
229	Tekelec	425	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
230	Quantum	426	Computer hardware (932)	Manufacture of office machinery & computers (300)
231	Hyperion Solutions	428	Software (977)	Computer & related activities (720)
232	Qlogic	431	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
233	3Com	434	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
234	SEI Investments	435	Support services (58)	Activities auxilliary to financial intermediation (670)
235	Avid Technology	436	Computer hardware (932)	Manufacture of medical/precision/optical instruments & watches (330)
236	Parker Hannifin	438	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
237	ON Semiconductor	440	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
238	FMC	443	Chemicals (11)	Manufacture of chemicals & chemical products (240)
239	Openwave Systems	445	Software (977)	Computer & related activities (720)
240	Microchip Technology	448	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
241	Campbell Soup	449	Food producers (43)	Manufacture of food products & beverages (150)
242	Reynolds and Reynolds	450	Software (977)	Computer & related activities (720)
243	Valeant Pharmaceuticals	453	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
244	International Rectifier	455	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
245	Cell Genesys	457	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
246	Polycom	458	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
247	McData	461	Computer hardware (932)	Manufacture of electrical machinery & apparatus n e c (310)
248	Lattice Semiconductor	462	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
249	National Instruments	463	Software (977)	Computer & related activities (720)
250	Incyte	465	Pharmaceuticals (486)	Research & development (730)



R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
88	1.7	-4.0	1 653	21.9	-1.7	21 225	22.9	8.0	5.3	6.3	9.6	5.5	4.1	5.0	3 579	-5.0
87	18.1	6.2	3 972	20.4	7.6	26 200	18.6	4.9	2.2	2.2	11.7	9.7	3.3	3.3	5 176	25.0
84	10.7	-2.6	349	4.8	4.3	1 525	0.9	-3.8	24.0	22.7	-20.0	6.0	54.9	50.0	271	-55.0
83	23.1	1.9	394	5.3	3.6	1 481	-7.4	-10.1	21.0	18.0	3.1	15.8	55.8	42.0	2 143	13.0
82	27.7	27.9	1 218	15.6	11.9	8 600	3.6	3.8	6.7	6.1	22.2	16.0	9.5	7.7	5 073	20.0
82	11.8	-0.7	1 853	20.3	8.8	10 900	6.9	2.6	4.4	4.8	7.6	3.2	7.5	7.2	3 597	55.0
82	14.9	4.2	290	3.9	-8.7	1 424	3.0	15.8	28.2	25.5	3.6	9.0	57.4	51.5	825	5.0
82	112.7	53.1	366	69.4	76.1	1 053	15.5	22.0	22.3	17.8	23.5	22.2	77.6	42.1	2 465	..
81	18.6	41.4	31	29.2	17.7	452	-5.8	5.7	262.0	285.4	-589.2	-558.3	179.7	142.7	1 482	-15.0
81	31.0	32.1	1 353	81.4	20.6	7 862	8.8	15.1	6.0	8.3	3.9	1.2	10.3	8.6	1 324	7.0
80	-36.4	-22.8	619	-12.6	-23.2	2 655	-28.5	-23.6	12.9	17.8	-7.0	-13.7	30.1	33.9	162	-45.0
80	-1.5	-7.5	161	40.0	-17.1	778	-2.4	-15.6	49.6	70.5	-14.0	-104.3	102.6	101.7	340	-24.0
80	14.9	12.3	802	8.7	10.1	5 200	8.3	6.5	9.9	9.4	11.0	14.6	15.3	14.5	1 089	10.0
80	15.3	7.3	2 324	54.1	19.8	7 800	55.0	19.9	3.4	4.6	6.7	7.2	10.2	13.7	2 128	62.0
80	-18.5	-10.2	486	-1.6	-10.9	3 042	-13.1	-12.5	16.3	19.7	5.1	-12.8	26.1	27.9	1 266	46.0
79	29.3	19.8	13	8.3	-19.6	523	29.8	17.3	605.5	507.3	-1 044.8	-1 233.3	150.5	151.1	681	10.0
79	-23.5	10.6	76	49.0	-14.8	736	2.2	-9.7	103.4	201.2	-154.1	-382.4	106.7	142.5	1 192	131.0
78	-14.8	16.4	4 965	-12.9	-0.8	31 100	-22.3	-14.3	1.6	1.6	1.5	0.8	2.5	2.3	5 033	15.0
77	14.5	0.7	594	33.2	-6.0	3 050	16.7	-1.5	13.0	15.1	54.1	48.7	25.2	25.7	8 489	-5.0
77	49.6	11.8	15	87.5	44.2	265	1.5	6.1	509.7	639.0	-728.6	1 025.0	288.5	195.9	853	177.0
76	5.3	-7.1	287	13.0	0.9	2 955	-6.2	-7.2	26.6	28.5	0.3	-2.0	25.8	23.0	857	-4.0
76	45.2	27.9	3 880	50.9	27.5	14 300	26.5	8.2	2.0	2.0	6.1	5.0	5.3	4.6	1 393	0.0
76	27.3	11.7	8 384	39.1	23.2	20 500	20.6	8.6	0.9	1.0	14.4	12.4	3.7	3.5	8 974	16.0
74	13.0	31.3	22	22.2	63.9	402	8.1	19.1	338.2	365.9	-813.8	-500.0	185.1	177.1	127	-36.0
74	7.3	5.8	3 065	12.1	-6.5	6 500	0.3	-0.2	2.4	2.5	7.5	8.6	11.3	10.6	2 537	-6.0
73	-35.3	-32.7	468	-5.8	-41.8	6 041	10.1	-32.8	15.6	22.8	-30.7	-141.1	12.1	20.6	1 652	-57.0
72	7.9	-3.7	321	18.0	10.3	1 445	19.1	5.9	22.6	24.7	13.0	13.2	50.1	55.3	2 095	101.0
72	-8.2	5.0	3 474	-1.4	3.0	16 900	-18.1	-8.1	2.1	2.2	0.7	4.6	4.3	3.8	1 117	-6.0
72	33.9	11.0	292	50.5	8.3	1 502	41.0	12.4	24.7	27.8	4.6	4.1	48.1	50.7	927	4.0
71	-6.6	-8.6	584	-1.8	-10.0	2 500	38.2	-6.9	12.2	12.8	-1.2	-2.2	28.5	42.1	382	18.0
71	30.5	5.7	458	21.8	6.4	2 473	11.2	1.6	15.5	14.4	11.0	9.8	28.6	24.4	1 303	10.0
71	9.2	11.2	421	9.4	18.5	847	3.4	8.2	16.8	16.8	39.3	37.9	83.3	78.8	2 248	35.0
70	-15.8	-43.8	514	-25.1	-37.2	1 925	-41.7	-38.2	13.6	12.1	-50.2	-32.1	36.4	25.2	970	-31.0
70	67.8	15.6	509	8.8	1.7	2 032	6.1	2.4	13.7	8.9	36.9	34.8	34.4	21.7	2 787	..
70	11.0	3.3	434	25.1	10.7	2 014	27.3	9.3	16.1	18.1	11.5	8.4	34.7	39.8	1 043	-3.0
70	1.6	-6.3	5 229	10.9	5.9	48 447	3.5	1.5	1.3	1.5	7.9	5.9	1.4	1.5	5 833	16.0
70	10.4	5.3	932	18.4	1.4	10 325	2.7	3.3	7.5	8.0	11.8	-0.1	6.7	6.3	1 002	34.0
69	6.9	-2.2	1 509	6.7	1.8	5 100	-3.8	-5.3	4.6	4.5	9.6	5.7	13.5	12.1	2 031	78.0
69	-19.0	-30.0	214	8.6	-32.1	1 265	-13.1	-16.8	32.1	43.0	-7.1	-79.7	54.2	58.2	845	57.0
69	9.0	4.5	623	21.2	14.1	3 943	7.2	9.1	11.0	12.2	30.7	24.7	17.4	17.1	4 736	7.0
68	5.7	13.9	5 230	6.5	2.2	24 000	-4.0	0.0	1.3	1.3	15.5	16.1	2.9	2.6	9 223	19.0
68	5.4	0.6	723	-2.6	-0.7	4 380	-3.1	-2.8	9.5	8.8	15.4	19.4	15.6	14.4	1 326	20.0
68	104.2	44.8	502	-0.6	-7.3	4 307	-2.9	-28.9	13.6	6.6	-3.6	3.4	15.8	7.5	1 338	..
68	16.8	9.8	780	22.6	2.7	5 800	5.5	-0.8	8.7	9.1	11.3	-14.5	11.7	10.6	2 048	7.0
68	8.0	22.0	8	-38.5	-27.5	377	8.3	12.9	847.0	482.7	-754.4	-530.8	179.7	180.3	195	-8.0
68	26.8	15.7	397	28.5	12.1	1 437	21.5	4.2	17.1	17.3	7.8	5.5	47.1	45.2	1 140	-15.0
67	3.0	23.0	294	-4.5	5.1	1 008	-1.4	4.4	22.9	21.2	-6.5	-1.9	66.8	63.9	544	23.0
67	4.4	8.3	166	7.8	-8.5	1 008	-3.8	0.1	40.3	41.6	-24.8	-44.8	66.4	61.1	369	-10.0
66	11.5	14.0	378	20.8	10.1	3 465	12.6	6.7	17.5	18.9	11.8	9.9	19.1	19.3	1 606	-4.0
65	-24.1	-25.5	10	-71.4	-60.4	186	-59.0	-31.7	649.4	244.3	-1 065.3	-331.4	349.1	188.4	444	38.0

## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year by countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>USA continued</b>				
251	Mylan Laboratories	467	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
252	PerkinElmer	469	Computer hardware (932)	Manufacture of medical/precision/optical instruments & watches (330)
253	Edwards Lifesciences	471	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
254	Activision	473	Software (977)	Computer & related activities (720)
255	Citrix Systems	475	Software (977)	Computer & related activities (720)
256	Isis Pharmaceuticals	476	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
257	American Power Conversion	478	Electronic equipment (253)	Manufacture of electrical machinery & apparatus n e c (310)
258	Take-Two Interactive Software	482	Software (977)	Computer & related activities (720)
259	Transkaryotic Therapies	486	Biotechnology (482)	Research & development (730)
260	Clorox	487	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
261	Weatherford International	488	Oil & gas (7)	Manufacture of machinery & equipment n e c (290)
262	Huntsman	491	Chemicals (11)	Manufacture of chemicals & chemical products (240)
263	Theravance	494	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
264	Avery Dennison	495	Chemicals (11)	Manufacture of chemicals & chemical products (240)
265	Fairchild Semiconductor	496	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
266	Alpharma	498	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
267	InterMune	499	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
268	Federated Department Stores	501	General retailers (52)	Retail trade except motor vehicles; repair of household goods (520)
269	Credence Systems	503	Semiconductors (936)	Manufacture of medical/precision/optical instruments & watches (330)
270	Mindspeed Technologies	504	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
271	Zoran	506	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
272	Quest Software	508	Software (977)	Computer & related activities (720)
273	FileNET	510	Software (977)	Computer & related activities (720)
274	Silicon Image	512	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
275	Trimble Navigation	513	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
276	Convergys	514	Support services (58)	Other business activities (740)
277	AMIS	515	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
278	Praxair	516	Chemicals (11)	Manufacture of chemicals & chemical products (240)
279	Valspar	519	Chemicals (11)	Manufacture of chemicals & chemical products (240)
280	JohnsonDiversey	520	Chemicals (11)	Manufacture of chemicals & chemical products (240)
281	Silicon Laboratories	523	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
282	Affymetrix	524	Biotechnology (482)	Manufacture of medical/precision/optical instruments & watches (330)
283	Energizer	525	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
284	MeadWestvaco	526	Support services (58)	Manufacture of pulp paper & paper products (211)
285	Enterasys Networks	529	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
286	Mercury Interactive	530	Software (977)	Computer & related activities (720)
287	Emulex	531	Computer hardware (932)	Manufacture of radio TV & communication equip & apparatus (320)
288	Sealed Air	532	Support services (58)	Manufacture of rubber & plastic products (250)
289	Invitrogen	533	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
290	Thq	534	Software (977)	Computer & related activities (720)
291	Varian Medical Systems	537	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
292	ICOS	538	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
293	L-3 Communications	539	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
294	Fair Isaac	540	Software (977)	Computer & related activities (720)
295	I2 Technologies	541	Software (977)	Computer & related activities (720)
296	Cooper Industries	542	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
297	palmOne	549	Computer hardware (932)	Manufacture of office machinery & computers (300)
298	Intergraph	551	Software (977)	Computer & related activities (720)
299	Fortune Brands	553	Diversified industrials (24)	Other business activities (740)
300	American Axle & Manufacturing	554	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)

R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
65	-12.8	14.3	922	-8.8	4.3	3 000	7.1	10.9	7.0	7.3	24.9	37.3	21.6	26.5	2 877	-2.0
64	4.7	2.3	1 241	9.9	8.2	10 000	0.0	-2.5	5.2	5.4	10.4	8.7	6.4	6.1	1 950	18.0
64	19.5	16.5	685	8.2	10.4	5 200	4.0	2.6	9.3	8.5	4.7	11.5	12.3	10.7	1 938	26.0
64	-11.6	28.3	1 034	48.4	21.3	1 728	30.5	18.7	6.2	10.3	13.1	11.6	36.8	54.4	2 941	96.0
64	34.0	8.4	545	25.9	7.8	2 656	40.9	12.2	11.7	11.0	21.8	26.8	23.9	25.2	2 941	34.0
63	27.2	15.0	31	-16.2	-7.4	303	-33.7	-11.3	203.8	134.2	-288.4	-162.2	208.5	108.7	237	..
63	26.6	16.1	1 251	16.1	5.8	6 455	1.4	1.3	5.0	4.6	12.6	15.7	9.8	7.8	3 812	72.0
63	239.1	139.7	830	9.1	35.7	1 435	..	29.4	7.5	2.4	8.4	15.8	43.7	..	1 310	..
62	13.6	8.5	57	32.6	125.1	400	13.6	2.1	108.6	126.7	-96.2	-132.6	154.8	154.8	..	..
62	10.5	7.8	3 181	4.3	3.5	8 600	-3.4	-7.9	1.9	1.8	19.9	19.1	7.2	6.3	6 492	-17.0
62	0.8	21.6	2 304	20.8	10.4	18 400	10.2	8.3	2.7	3.2	13.2	11.2	3.3	3.7	6 735	48.0
61	26.5	..	8 450	62.2	..	11 300	..	..	0.7	0.9	2.3	2.0	5.4	..	3 560	..
61	31.2	..	7	133.3	..	246	..	..	869.0	1 545.0	-1 190.1	-1 766.7	247.3	..	799	..
61	10.0	5.6	3 929	12.1	12.0	21 400	5.4	7.3	1.5	1.6	8.1	8.5	2.8	2.7	4 551	-8.0
60	9.6	-0.4	1 179	14.8	4.4	9 024	-7.4	-2.7	5.1	5.4	7.9	-1.4	6.7	5.7	1 442	12.0
60	28.8	18.5	985	3.3	11.2	4 200	-10.6	-5.0	6.1	4.9	-14.2	5.7	14.3	9.9	606	25.0
60	-32.2	16.0	111	-1.8	56.4	326	25.4	15.8	53.9	78.0	-33.4	-59.3	183.5	339.2	361	31.0
60	35.0	31.0	11 499	2.4	-0.1	112 000	0.9	-0.9	0.5	0.4	9.0	8.8	0.5	0.4	9 394	..
59	9.5	-2.3	324	141.8	13.4	1 886	81.0	12.9	18.3	40.4	-13.8	-62.7	31.4	51.9	653	3.0
59	..	..	88	..	..	633	..	..	66.5	..	-77.5	..	92.5	..	113	..
58	96.0	50.5	279	75.5	52.3	932	15.1	45.3	20.9	18.7	-12.4	-33.3	62.5	36.7	459	..
58	16.1	9.6	287	28.1	16.6	2 257	30.1	11.2	20.1	22.2	8.5	7.6	25.5	28.6	965	18.0
58	1.6	4.4	292	9.0	6.0	1 607	-6.6	-2.8	19.7	21.2	7.1	3.0	35.8	33.0	874	64.0
57	79.8	30.9	127	67.1	49.5	337	34.8	8.2	45.2	42.0	0.0	-13.2	170.4	127.8	542	..
57	14.6	7.2	492	23.6	12.0	2 160	0.5	1.0	11.6	12.5	11.8	8.8	26.4	23.1	1 431	38.0
57	-17.8	-12.6	1 830	8.7	2.3	66 300	17.3	13.0	3.1	4.1	7.4	11.8	0.9	1.2	1 454	-15.0
57	9.9	22.4	381	14.1	16.7	2 578	0.4	..	14.9	15.5	16.6	3.0	22.1	20.1	717	..
57	2.7	5.3	4 851	17.5	8.5	27 020	6.2	3.6	1.2	1.3	16.9	16.6	2.1	2.2	12 222	30.0
56	8.9	9.3	1 796	8.6	8.3	7 500	7.1	3.6	3.1	3.1	11.1	10.1	7.4	7.3	1 838	-1.0
55	0.2	26.5	2 332	7.5	42.4	12 000	..	..	2.4	2.5	4.8	5.7	4.6	..	..	..
55	55.1	37.2	336	40.6	83.9	588	21.0	28.2	16.4	14.9	23.9	20.1	93.7	73.1	1 123	..
55	12.5	5.3	255	15.4	15.6	907	4.1	0.1	21.4	21.9	17.3	5.9	60.1	55.7	2 157	79.0
54	43.7	16.8	2 069	26.0	18.4	12 955	-11.3	..	2.6	2.3	13.8	12.6	4.2	2.6	3 254	..
54	4.2	15.9	6 053	8.9	27.9	29 400	0.0	18.8	0.9	0.9	-4.5	2.1	1.9	1.8	3 904	-13.0
54	-12.3	-11.9	263	-13.8	-10.5	1 150	-17.9	-20.6	20.6	20.3	-24.4	-28.2	47.2	44.2	175	-33.0
54	31.9	25.0	504	35.1	23.7	2 659	14.5	18.5	10.8	11.0	13.0	9.1	20.4	17.7	2 441	..
54	19.5	39.4	268	18.1	14.2	522	32.2	17.8	20.1	19.9	-136.8	22.5	103.2	114.1	1 178	..
54	6.1	9.5	2 794	7.5	7.4	17 600	0.0	-0.2	1.9	2.0	12.6	14.5	3.1	2.9	3 250	10.0
54	33.9	24.2	753	31.6	17.6	3 800	26.9	11.7	7.1	7.0	13.2	11.4	14.2	13.4	3 347	..
54	98.0	51.1	557	18.3	25.9	1 300	63.3	29.8	9.6	5.8	9.8	8.3	41.3	34.1	1 072	..
53	21.8	18.3	909	18.7	16.9	3 283	12.2	8.4	5.8	5.7	20.7	19.2	16.2	14.9	3 810	..
53	-16.3	8.0	55	0.0	-4.4	675	0.0	12.9	96.0	114.7	-265.1	-190.9	78.3	93.5	1 133	4.0
52	34.9	-12.8	5 074	36.3	43.2	44 200	14.2	128.1	1.0	1.0	10.9	11.2	1.2	1.0	6 681	..
52	5.2	35.9	520	12.3	29.0	3 058	29.9	27.7	10.1	10.7	24.9	27.9	17.1	21.1	1 873	26.0
52	-12.5	-37.6	286	-21.4	-26.7	2 044	-16.6	-24.8	18.2	16.3	3.3	4.4	25.4	24.2	344	42.0
52	11.4	8.2	3 283	9.9	2.0	26 863	-1.2	-4.2	1.6	1.6	11.1	6.6	1.9	1.7	4 397	-29.0
51	-37.3	-24.4	699	8.9	-15.2	699	-28.8	-18.9	7.3	12.7	-1.7	-24.8	73.0	82.9	1 131	-15.0
51	0.1	2.7	405	4.4	1.2	3 500	-5.4	-6.6	12.5	13.1	41.7	3.9	14.5	13.7	845	17.0
51	18.2	8.2	5 386	17.8	8.8	31 851	2.8	..	0.9	0.9	16.0	15.2	1.6	1.4	9 867	..
51	13.0	9.9	2 648	-2.3	5.0	10 900	-7.6	-2.4	1.9	1.6	7.3	9.5	4.6	3.8	1 037	..

## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year by countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>USA continued</b>				
301	Borland Software	555	Software (977)	Computer & related activities (720)
302	NetIQ	556	Software (977)	Computer & related activities (720)
303	International Paper	557	Forestry & paper (15)	Manufacture of pulp paper & paper products (211)
304	King Pharmaceuticals	558	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
305	Varian Semiconductor Equipment	559	Semiconductors (936)	Manufacture of machinery & equipment n e c (290)
306	LTX	560	Semiconductors (936)	Manufacture of medical/precision/optical instruments & watches (330)
307	ADTRAN	562	Telecommunications equipment (938)	Manufacture of medical/precision/optical instruments & watches (330)
308	Verisign	563	Internet (974)	Computer & related activities (720)
309	Smith International	564	Oil & gas (7)	Manufacture of machinery & equipment n e c (290)
310	Estee Lauder	565	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
311	Brooks Automation	566	Semiconductors (936)	Manufacture of machinery & equipment n e c (290)
312	Cirrus Logic	568	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
313	IDX Systems	569	Software (977)	Computer & related activities (720)
314	Aspen Technology	570	Software (977)	Computer & related activities (720)
315	CuraGen	571	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
316	CheckFree	573	Software (977)	Computer & related activities (720)
317	Newmarket	575	Chemicals (11)	Manufacture of chemicals & chemical products (240)
318	Waters	576	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
319	Alkermes	578	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
320	Eclipsys	579	Software (977)	Computer & related activities (720)
321	Biomet	580	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
322	Lawson Software	581	Software (977)	Computer & related activities (720)
323	Avon Products	582	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
324	Arris	583	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
325	Axcelis Technologies	584	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
326	MGI PHARMA	586	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
328	Millipore	587	Biotechnology (482)	Manufacture of medical/precision/optical instruments & watches (330)
327	Coherent	588	Semiconductors (936)	Manufacture of medical/precision/optical instruments & watches (330)
329	Finisar	590	Computer hardware (932)	Manufacture of radio TV & communication equip & apparatus (320)
330	Unova	591	Diversified industrials (24)	Manufacture of office machinery & computers (300)
331	RSA Security	593	Software (977)	Computer & related activities (720)
332	Ecolab	595	Chemicals (11)	Manufacture of chemicals & chemical products (240)
333	Tibco Software	597	Software (977)	Computer & related activities (720)
334	Leapfrog Enterprises	599	Computer hardware (932)	Manufacture of furniture (361)
335	Georgia-Pacific	600	Forestry & paper (15)	Manufacture of wood;cork products articles of straw (205)
336	GTECH	601	Leisure & hotels (53)	Manufacture of furniture (361)
337	Snap-On	602	Engineering - general (267)	Manufacture of fabricated metal products (not machinery & equip) (280)
338	Triquint Semiconductor	603	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
339	Wind River Systems	604	Software (977)	Computer & related activities (720)
341	Polaris Industries	605	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
340	Nabi Biopharmaceuticals	606	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
342	Progress Software	607	Software (977)	Computer & related activities (720)
343	Diebold	609	Computer hardware (932)	Manufacture of office machinery & computers (300)
344	Eyetech Pharmaceuticals	611	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
345	ADC Telecommunications	612	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
346	CSG Systems International	613	Support services (58)	Computer & related activities (720)
347	Analogic	617	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
348	USEC	618	Mining (4)	Mining of uranium & thorium ores (120)
349	Cymer	619	Semiconductors (936)	Manufacture of machinery & equipment n e c (290)
350	Veeco Instruments	620	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)

R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
50	6.0	13.2	228	5.1	11.8	1 361	0.2	5.5	22.0	21.8	6.0	-13.4	36.8	34.8	343	-29.0
50	-4.3	23.2	192	-15.8	16.0	1 322	-3.1	6.6	26.1	22.9	-73.6	-296.1	37.9	38.4	430	10.0
50	-6.9	-9.6	18 796	1.5	-1.0	80 000	-3.6	-7.2	0.3	0.3	3.8	4.5	0.6	0.6	11 299	-27.0
50	54.1	42.5	960	-10.2	14.4	2 758	-8.1	14.4	5.2	3.0	-17.2	11.8	18.1	10.8	2 437	..
50	11.9	10.8	390	46.1	-5.7	1 444	10.1	-4.3	12.8	16.7	16.1	3.4	34.5	34.0	1 176	..
50	2.4	0.8	188	113.6	-8.2	635	10.2	-8.9	26.5	55.3	2.1	-119.3	78.4	84.4	257	-30.0
50	15.9	4.6	334	14.4	5.4	1 593	-0.6	-0.7	14.8	14.7	22.7	20.9	31.1	26.7	1 418	..
50	20.7	-4.8	858	10.6	5.8	3 206	28.2	-0.7	5.8	5.3	11.0	-24.5	15.5	16.4	4 561	..
49	20.9	9.8	3 251	22.9	7.6	13 235	10.6	4.8	1.5	1.5	9.9	9.1	3.7	3.4	5 337	..
49	10.5	2.6	4 260	13.1	7.9	22 200	11.0	3.7	1.2	1.2	10.5	9.7	2.2	2.2	3 699	..
49	-7.9	3.3	397	56.9	13.6	1 900	0.0	0.0	12.4	21.2	5.6	-51.0	26.0	28.2	500	6.0
49	-12.3	-18.1	143	-0.7	-22.5	603	-21.4	-20.6	34.4	38.9	-19.6	13.2	81.5	73.1	458	21.0
49	20.4	13.6	383	30.3	11.0	2 409	17.6	-20.3	12.8	13.9	8.4	7.5	20.4	19.9	720	..
49	-8.7	-1.2	240	1.3	1.6	1 550	-11.3	-7.0	20.4	22.6	-3.5	-50.2	31.5	30.6	172	1.0
49	15.2	16.1	5	0.0	-33.5	454	38.8	-3.6	977.0	848.0	-1 474.4	-1 180.0	107.6	129.7	180	-2.0
49	16.3	3.1	446	9.9	11.8	3 000	11.1	-3.1	10.9	10.3	3.2	-14.5	16.3	15.5	2 584	..
48	14.8	4.3	658	18.3	7.3	1 135	3.2	1.1	7.3	7.5	7.0	6.8	42.4	38.1	202	..
48	7.1	11.9	813	15.3	8.8	4 200	7.7	6.3	5.9	6.4	25.7	23.4	11.4	11.5	3 767	..
48	-20.2	19.6	56	93.1	11.9	528	7.8	0.5	85.5	206.9	-91.3	-251.7	90.7	122.5	1 045	..
48	-15.0	14.0	227	21.4	9.3	1 983	5.6	12.5	21.1	30.1	-11.1	-23.0	24.1	30.0	594	..
48	17.3	14.7	1 188	16.1	16.1	5 330	-23.9	6.4	4.0	4.0	30.9	31.9	9.0	5.8	6 990	..
48	9.8	7.2	267	5.5	-2.7	1 579	-5.7	..	17.9	17.2	3.3	-3.2	30.2	26.0	419	..
47	28.6	11.6	5 700	13.9	9.2	47 700	3.9	2.9	0.8	0.7	15.4	14.9	1.0	0.8	11 191	..
47	0.8	5.2	361	13.2	-13.1	728	-8.0	-19.9	12.9	14.5	-4.3	-14.4	64.0	58.5	781	191.0
47	-0.1	-6.2	374	57.8	11.6	1 595	4.0	-6.5	12.4	19.6	15.7	-12.2	29.2	30.4	459	-29.0
46	24.9	20.2	144	300.0	81.7	282	25.3	19.1	32.0	102.4	-43.3	-127.8	163.4	163.9	1 376	..
46	7.0	10.9	650	10.5	10.4	4 500	4.7	2.7	7.1	7.3	15.6	15.8	10.2	10.0	2 312	..
46	23.1	5.7	364	21.7	1.1	2 218	3.8	-2.2	12.6	12.5	5.7	-14.1	20.7	17.5	717	..
46	3.2	22.7	137	12.3	-0.5	2 826	38.5	..	33.4	36.4	-47.3	-369.7	16.2	21.7	212	..
46	9.5	-2.2	597	-27.7	-19.0	4 456	-7.2	-12.8	7.7	5.1	-4.5	1.3	10.3	8.7	1 240	..
46	15.4	2.0	226	18.3	2.8	1 144	9.1	-2.1	20.1	20.7	15.3	9.4	39.8	37.6	665	..
45	15.6	22.9	3 079	11.2	21.1	21 300	..	3.3	1.5	1.4	12.8	13.1	2.1	..	6 315	..
45	-5.4	-12.4	285	46.9	6.6	1 360	52.0	10.6	15.8	24.5	17.6	1.0	33.1	53.1	1 126	11.0
45	5.9	16.7	471	-5.8	26.8	921	6.0	..	9.5	8.5	-2.2	16.8	48.7	48.8	326	..
45	-4.7	..	14 461	-3.0	-7.7	55 000	-9.8	-9.8	0.3	0.3	7.8	4.8	0.8	0.8	6 289	..
45	6.4	21.8	925	19.7	7.6	5 300	..	5.6	4.9	5.5	24.8	27.4	8.5	..	2 504	..
45	1.7	3.7	1 714	4.3	3.6	11 500	-7.3	-4.0	2.6	2.7	6.2	4.4	3.9	3.5	1 522	..
45	-6.5	5.5	255	10.9	1.2	2 072	1.3	9.9	17.5	20.8	-7.8	-22.2	21.6	23.4	369	-9.0
45	7.1	-12.1	173	15.3	-12.5	1 112	3.2	-14.8	25.8	27.8	4.3	-12.0	40.2	38.7	988	..
45	17.3	19.4	1 305	10.5	5.5	3 600	5.9	0.5	3.4	3.2	9.8	10.4	12.4	11.2	1 691	..
45	109.0	58.2	132	1.5	-8.6	727	3.4	5.7	33.8	16.4	-21.9	-14.6	61.4	30.4	620	..
45	19.8	13.3	267	17.6	11.4	1 552	11.6	3.6	16.7	16.4	12.8	11.9	28.8	26.8	864	..
44	-0.7	0.2	1 752	12.9	10.6	14 376	7.3	4.3	2.5	2.9	11.6	12.1	3.1	3.3	2 510	..
44	-16.7	38.7	36	20.0	..	322	102.5	..	120.8	174.0	-211.1	-100.0	135.1	328.2	426	..
44	-45.6	-40.4	577	1.4	-31.2	7 500	31.6	-14.6	7.5	14.0	1.5	-12.7	5.8	14.0	2 041	43.0
43	-6.2	4.2	390	-2.7	3.6	2 549	3.2	7.9	11.1	11.5	15.9	-6.5	17.0	18.7	691	8.0
43	0.0	9.4	262	-24.5	-0.4	1 700	-5.6	-2.4	16.5	12.4	1.9	15.6	25.4	24.0	498	..
43	30.6	66.8	1 043	-2.9	-0.2	2 871	7.4	0.4	4.1	3.1	5.2	3.4	15.0	12.3	964	..
43	0.4	1.5	308	56.3	15.9	770	0.5	-1.7	14.0	21.7	14.8	-12.7	55.8	55.9	858	..
43	19.4	-0.8	287	39.3	-4.6	1 261	2.9	-4.5	15.0	17.5	-3.0	-3.4	34.0	29.3	420	..



## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year by countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>USA continued</b>				
351	ImClone Systems	622	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
352	Extreme Networks	624	Computer hardware (932)	Manufacture of radio TV & communication equip & apparatus (320)
353	SPX	625	Electrical equipment (252)	Manufacture of machinery & equipment n e c (290)
354	NACCO Industries	629	Diversified industrials (24)	Manufacture of motor vehicles trailers & semi-trailers (340)
355	Pall	632	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
356	MKS Instruments	633	Semiconductors (936)	Manufacture of medical/precision/optical instruments & watches (330)
357	Imation	634	Computer hardware (932)	Manufacture of chemicals & chemical products (240)
358	Encysive Pharmaceuticals	635	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
359	Bookham Technology <i>(now Bookham)</i>	636	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
360	Redback Networks	637	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
362	Nalco	639	Chemicals (11)	Manufacture of chemicals & chemical products (240)
361	Cardinal Health	640	Food & drug retailers (63)	Wholesale & commission trade except motor vehicles (510)
363	Hillenbrand Industries	642	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
364	Cubist Pharmaceuticals	643	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
365	FEI	644	Semiconductors (936)	Manufacture of medical/precision/optical instruments & watches (330)
366	Alexion Pharmaceuticals	646	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
367	BE Aerospace	647	Aerospace & defence (21)	Manufacture of other transport equipment (350)
368	Weyerhaeuser	649	Forestry & paper (15)	Manufacture of wood;cork products articles of straw (205)
369	Reebok International	650	Household goods & textiles (34)	Tanning/dressing of leather (191)
370	WebMD	652	Health (44)	Health & social work (850)
371	Ariba	654	Software (977)	Computer & related activities (720)
372	Varco International <i>(now National Oilwell Varco)</i>	656	Oil & gas (7)	Manufacture of machinery & equipment n e c (290)
373	Centillum Communications	657	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
374	Cabot	659	Chemicals (11)	Manufacture of chemicals & chemical products (240)
375	JDA Software	661	Software (977)	Computer & related activities (720)
376	Realnetworks	663	Software (977)	Computer & related activities (720)
377	Sauer-Danfoss	664	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
378	Vignette	665	Software (977)	Computer & related activities (720)
379	Computer Network Technology	666	Computer hardware (932)	Computer & related activities (720)
380	Advanced Energy Industries	667	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
381	Informatica	668	Software (977)	Computer & related activities (720)
382	Interdigital Communications	669	Semiconductors (936)	Other business activities (740)
383	WR Grace	670	Chemicals (11)	Manufacture of chemicals & chemical products (240)
384	Vishay Intertechnology	671	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
385	Endo Pharmaceuticals	673	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
386	FMC Technologies	675	Oil & gas (7)	Manufacture of machinery & equipment n e c (290)
387	Timken	677	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
388	Aeroflex	680	Semiconductors (936)	Manufacture of medical/precision/optical instruments & watches (330)
389	Biomarin Pharmaceutical	681	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
390	S1	682	Software (977)	Computer & related activities (720)
391	Crompton	683	Chemicals (11)	Manufacture of chemicals & chemical products (240)
392	Medicines	684	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
393	Directv	690	Media & entertainment (54)	Recreational cultural & sporting activities (920)
394	Varian	692	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
395	Sycamore Networks	693	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
396	Reynolds American	696	Tobacco (49)	Manufacture of tobacco products (160)
397	Fiserv	698	Support services (58)	Computer & related activities (720)
398	York International	699	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)

R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
43	-34.5	-15.0	286	384.7	128.4	866	48.8	29.5	15.0	110.8	32.2	-135.6	49.4	112.3	1 955	-40.0
43	0.2	0.1	259	-3.0	-10.5	831	-6.6	-5.0	16.5	16.0	0.0	-18.4	51.4	47.9	385	..
43	-39.5	-18.9	3 217	-14.0	2.1	23 800	7.2	0.5	1.3	1.9	2.4	11.2	1.8	3.2	2 412	5.0
43	3.4	3.6	2 047	12.5	2.1	11 600	-0.1	-4.9	2.1	2.3	3.6	5.0	3.7	3.5	551	..
42	9.7	0.7	1 303	9.8	12.8	10 300	-1.9	3.1	3.2	3.2	12.3	10.4	4.1	3.7	2 710	..
42	19.6	14.5	408	64.5	24.6	2 319	8.2	15.8	10.3	14.1	11.8	-4.4	18.1	16.4	710	..
42	-0.2	-3.2	897	4.8	1.2	2 550	-8.9	-9.1	4.7	4.9	4.0	9.1	16.4	15.0	1 052	..
42	120.1	69.3	10	11.1	12.6	117	27.2	2.1	416.7	210.3	-396.7	-300.0	356.2	205.8	508	..
42	-17.5	-8.2	124	-1.6	58.7	1 877	5.2	34.1	33.6	40.1	-231.2	-97.6	22.2	28.3	109	-55.0
42	-14.5	-26.6	85	7.6	-20.2	447	-7.5	-18.3	49.0	61.7	-48.4	-91.1	93.2	100.8	372	83.0
42	..	..	2 232	..	..	10 500	..	..	1.9	..	4.6	..	4.0	..	1 919	..
42	-0.7	1.6	47 861	28.9	10.7	55 000	10.0	4.0	0.1	0.1	3.5	4.2	0.8	0.8	18 675	..
41	0.0	9.2	1 346	-10.4	-4.6	10 400	5.1	0.7	3.1	2.7	12.6	15.6	4.0	4.2	2 295	..
41	3.6	4.3	50	1 566.7	77.1	300	3.4	18.6	82.3	1 323.7	-95.0	-2 533.3	137.2	136.9	671	..
41	20.6	10.4	343	28.9	7.4	1 691	5.4	2.9	12.0	12.8	6.3	4.9	24.3	21.2	518	..
41	-21.3	26.8	3	200.0	-30.7	204	6.8	13.4	1 354.3	5 162.0	-1 528.5	-6 100.0	199.2	270.3	558	..
41	23.3	8.2	540	17.6	2.5	3 500	5.5	-5.1	7.5	7.2	8.8	3.3	11.6	9.9	711	..
41	7.8	0.0	16 675	14.1	15.9	53 646	-2.8	6.2	0.2	0.3	10.4	6.2	0.8	0.7	12 025	..
40	7.9	9.5	2 785	8.6	8.1	9 102	17.3	10.8	1.4	1.5	7.6	7.2	4.4	4.8	2 475	..
40	26.0	11.0	854	20.5	18.0	5 940	5.4	9.7	4.7	4.5	3.9	-2.1	6.7	5.6	2 652	..
40	0.5	-15.9	181	4.0	-15.6	1 686	99.5	14.5	22.0	22.8	-11.7	-45.4	23.6	46.9	293	..
40	-12.5	4.9	1 154	8.3	7.3	10 572	25.1	6.9	3.4	4.2	11.7	9.4	3.7	5.4	7 663	..
40	16.4	-3.1	52	-43.5	-23.7	340	-5.8	0.4	76.0	36.9	-61.8	-12.0	116.3	94.1	81	..
39	-17.2	3.4	1 423	7.7	5.0	4 300	-2.3	0.0	2.7	3.6	10.3	5.4	9.1	10.7	1 552	-11.0
39	8.8	15.4	160	4.6	1.7	1 156	-10.5	-5.8	24.3	23.3	-0.2	1.3	33.6	27.7	296	..
38	9.1	-2.3	196	31.5	12.1	819	10.7	0.5	19.5	23.6	-10.1	-12.8	46.8	47.5	656	..
38	19.5	10.9	1 033	24.6	18.0	8 300	15.3	6.9	3.7	3.9	6.4	4.3	4.6	4.4	703	..
38	26.4	-8.7	114	-1.7	-19.4	730	-9.3	-17.9	33.4	26.0	-166.7	-1.7	52.2	37.4	327	..
38	20.9	30.1	269	1.1	24.9	1 011	-16.8	8.5	14.1	11.8	-28.7	-5.6	37.6	25.9	..	..
38	-0.2	4.5	291	50.8	27.0	1 651	..	..	13.0	19.7	-0.1	-8.8	23.0	..	260	..
38	8.6	3.5	162	7.3	3.8	837	4.6	-0.0	23.3	23.0	-49.0	2.7	45.1	43.5	714	..
38	11.5	4.8	76	-9.5	24.9	325	..	0.6	49.6	40.2	-6.1	35.7	115.9	..	727	..
38	-1.7	5.0	1 663	14.1	9.5	6 500	3.2	0.5	2.3	2.6	-11.5	-2.9	5.8	6.1	450	..
38	12.4	19.1	1 776	11.2	13.4	25 700	2.0	6.3	2.1	2.1	3.6	4.2	1.5	1.3	1 730	..
37	-0.9	9.0	453	3.4	34.8	549	11.6	48.7	8.2	8.6	37.8	18.3	67.7	76.3	2 715	..
37	11.3	-2.8	2 036	20.0	12.8	9 000	4.7	1.9	1.8	2.0	6.0	5.0	4.1	3.9	2 031	..
37	-5.5	-2.5	3 321	19.2	22.7	25 931	-0.3	11.4	1.1	1.4	5.5	2.9	1.4	1.5	1 913	..
37	60.7	38.3	305	41.9	21.3	2 398	..	24.3	12.1	10.6	6.7	3.7	15.3	..	500	..
37	16.5	..	14	55.6	..	359	32.0	..	261.6	349.2	-962.2	-622.2	102.0	115.6	436	..
37	10.1	-3.6	177	-4.8	-4.8	1 666	33.8	0.5	20.7	17.9	2.6	-15.1	22.0	26.7	231	..
37	-3.7	-15.6	1 876	16.7	-2.1	4 773	-13.5	-13.4	1.9	2.4	0.5	-0.7	7.6	6.9	3 112	..
36	37.2	14.6	106	68.3	119.7	220	15.8	12.9	34.2	41.9	10.8	-20.6	164.8	139.1	797	..
36	..	..	8 358	..	..	11 800	..	..	0.4	..	-22.4	..	3.1	..	16 520	..
36	6.7	11.0	674	8.0	6.9	4 400	2.3	2.4	5.3	5.4	9.9	9.0	8.1	7.8	860	..
36	-12.6	-37.0	33	17.9	-50.7	353	-5.4	-28.0	108.0	145.7	-136.5	-207.1	101.0	109.4	715	..
35	-11.1	-9.2	4 736	22.2	-9.2	9 400	34.3	0.4	0.7	1.0	14.5	-70.5	3.8	5.7	8 951	..
35	-8.8	9.3	2 744	22.9	25.4	22 000	1.4	6.5	1.3	1.7	17.7	17.5	1.6	1.8	6 447	..
35	12.8	1.1	3 318	10.6	4.7	23 200	4.0	-0.6	1.1	1.0	3.0	1.4	1.5	1.4	1 303	..



## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year by countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>Japan</b>				
				<i>number of companies for calculation</i>
1	Toyota Motor	3	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
2	Matsushita Electric	6	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
3	Sony	9	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
4	Honda Motor	12	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
5	Hitachi	16	Computer hardware (932)	Manufacture of office machinery & computers (300)
6	Nissan Motor	18	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
7	Toshiba	19	Computer hardware (932)	Manufacture of office machinery & computers (300)
8	NTT	21	Telecommunication services (67)	Post & telecommunications (640)
9	NEC	25	Computer hardware (932)	Manufacture of office machinery & computers (300)
10	Canon	26	Electronic equipment (253)	Manufacture of office machinery & computers (300)
11	Fujitsu	29	Computer hardware (932)	Manufacture of office machinery & computers (300)
12	Denso	31	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
13	Fuji Photo Film	40	Media & entertainment (54)	Manufacture of medical/precision/optical instruments & watches (330)
14	Sharp	45	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
15	Takeda Chemical <i>(now Takeda Pharmaceutical)</i>	48	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
16	Mitsubishi Electric	51	Computer hardware (932)	Manufacture of electrical machinery & apparatus n e c (310)
17	Sanyo Electric	52	Electronic equipment (253)	Manufacture of office machinery & computers (300)
18	Ricoh	53	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
19	Mitsubishi Heavy	57	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
20	Aisin Seiki	66	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
21	Mitsubishi Chemical	67	Chemicals (11)	Manufacture of chemicals & chemical products (240)
22	Mazda Motor	68	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
23	Sankyo	70	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
24	Suzuki Motor	78	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
25	Sumitomo Chemical	79	Chemicals (11)	Manufacture of chemicals & chemical products (240)
26	Fujisawa Pharmaceutical	81	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
27	Bridgestone	82	Automobiles & parts (31)	Manufacture of rubber & plastic products (250)
28	Yamanouchi Pharmaceutical <i>(now Astellas Pharamc)</i>	84	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
29	Eisai	86	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
30	Mitsubishi Motors	87	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
31	Yamaha Motor	91	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
32	Daiichi Pharmaceutical	94	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
33	Fuji Heavy Industries	96	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
34	Pioneer	98	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
35	Sumitomo Electric	99	Electrical equipment (252)	Manufacture of basic metals (270)
36	Mitsubishi Pharma	107	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
37	Konica Minolta	111	Media & entertainment (54)	Manufacture of medical/precision/optical instruments & watches (330)
38	Asahi Kasei	112	Chemicals (11)	Manufacture of chemicals & chemical products (240)
39	Kyocera	115	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
40	Omron	116	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
41	Komatsu	117	Commercial vehicles & trucks (263)	Manufacture of machinery & equipment n e c (290)
42	Tokyo Electron	118	Semiconductors (936)	Manufacture of machinery & equipment n e c (290)
43	Alps Electric	120	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
44	Japan Tobacco	122	Tobacco (49)	Manufacture of tobacco products (160)
45	Seiko Epson	124	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
46	Kao	127	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
47	Olympus	132	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
48	Tokyo Electric Power	136	Electricity (72)	Electricity, gas, steam & hot water supply (400)
49	JFE	137	Steel & other metals (18)	Manufacture of basic metals (270)
50	Toray Industries	142	Chemicals (11)	Manufacture of textiles (170)

R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
68 263	3.5	3.0	1 717 228	3.4	2.0	5 554 878	2.3	1.2	4.0	4.0	6.3	5.5	11.9	12.0	1 199 540	8.2
198	196	184	198	197	191	178	167	146	198	195	198	197	178	166	194	150
5 422	10.7	8.6	133 197	11.9	9.0	265 753	0.5	2.5	4.1	4.1	9.8	10.2	20.4	18.5	106 171	1.0
4 419	6.3	2.9	62 562	16.5	8.2	334 752	15.2	7.8	7.1	7.7	2.8	2.2	13.2	14.3	31 262	29.0
3 604	-2.4	5.0	47 940	-10.9	-4.1	151 400	-6.5	-3.4	7.5	6.9	2.8	1.0	23.8	22.8	24 975	5.0
3 358	4.2	5.8	62 106	6.0	5.5	137 827	4.7	4.6	5.4	5.5	8.7	8.8	24.4	24.5	35 907	3.0
2 790	4.5	-2.2	64 813	4.6	4.1	347 424	6.5	2.6	4.3	4.3	2.6	1.6	8.0	8.2	15 627	3.0
2 544	18.0	15.2	53 340	8.8	6.9	123 748	-3.0	-2.6	4.8	4.4	9.9	9.5	20.6	16.9	35 606	1.0
2 418	1.6	0.9	40 060	-1.3	-2.1	161 000	-2.9	-5.0	6.0	5.9	2.2	1.7	15.0	14.4	9 446	10.0
2 284	-10.4	-6.6	77 584	-2.6	-2.2	201 486	-1.9	-1.8	2.9	3.2	11.5	14.4	11.3	12.4	96 526	-1.0
1 977	7.3	-6.2	34 859	-1.1	-1.6	147 753	3.0	1.4	5.7	5.2	2.7	2.5	13.4	12.9	7 706	-13.0
1 977	6.2	8.0	24 899	8.4	6.1	108 257	5.5	5.0	7.9	8.1	15.8	14.5	18.3	18.1	32 628	3.0
1 802	-12.2	-14.6	34 225	3.2	-4.6	156 169	-0.6	-5.9	5.3	6.2	0.8	-3.1	11.5	13.1	8 966	-1.0
1 543	17.5	6.7	18 398	9.8	8.3	95 461	6.8	3.8	8.4	7.8	7.1	9.8	16.2	14.7	17 126	8.0
1 244	8.9	29.9	18 383	2.2	21.1	73 164	0.7	1.1	6.8	6.4	6.5	5.1	17.0	15.7	12 543	11.0
997	-8.8	1.5	16 207	12.7	3.9	46 164	-1.0	-2.0	6.1	7.6	4.6	4.0	21.6	23.4	12 522	6.0
931	4.4	13.0	7 800	3.8	4.1	14 592	0.3	-2.8	11.9	11.9	39.9	37.0	63.8	61.3	34 095	11.0
900	-22.5	-13.9	23 763	-9.1	-7.1	98 988	-10.2	-5.3	3.8	4.4	2.7	0.3	9.1	10.5	8 189	13.0
899	3.6	4.8	18 007	10.3	5.2	82 337	4.2	-1.4	5.0	5.3	2.5	-3.0	10.9	11.0	3 482	-32.0
793	19.4	11.0	13 025	1.9	2.8	75 100	2.6	0.4	6.1	5.2	7.7	5.9	10.6	9.1	8 388	-21.0
715	-9.1	-5.1	17 041	-8.5	-8.0	59 949	-2.2	-2.2	4.2	4.2	3.1	3.6	11.9	12.8	6 728	4.0
640	11.2	14.8	11 525	14.0	12.5	47 600	7.9	9.4	5.6	5.7	4.8	7.5	13.4	13.0	5 421	14.0
636	-2.8	9.2	13 824	2.0	3.3	33 496	-11.0	0.5	4.6	4.8	3.9	3.4	19.0	17.4	4 957	29.0
630	0.0	1.6	20 937	23.3	13.1	35 627	-1.5	-3.5	3.0	3.7	2.5	1.9	17.7	17.4	3 567	14.0
623	0.1	3.3	4 282	4.6	3.0	11 520	0.0	..	14.5	15.2	13.1	12.5	54.1	54.0	3 480	27.0
544	25.4	..	15 788	9.1	11.2	38 493	..	38.6	3.4	3.0	3.4	2.9	14.1	..	6 795	-2.0
540	3.3	8.3	8 317	4.3	3.6	19 036	6.3	3.1	6.5	6.6	5.7	6.1	28.4	29.2	6 758	33.0
529	18.0	12.3	2 839	3.5	9.9	..	..	..	18.6	16.3	16.7	10.2	..	..	..	..
523	2.7	5.1	17 351	4.9	4.2	113 699	4.6	2.8	3.0	3.1	7.7	7.5	4.6	4.7	12 139	7.0
503	4.8	8.7	3 670	0.9	3.7	9 062	-2.3	-0.2	13.7	13.2	19.3	18.9	55.5	51.8	14 597	59.0
495	15.6	11.6	3 591	7.2	11.4	7 700	3.6	2.0	13.8	12.8	16.7	14.8	64.3	57.7	7 885	26.0
495	-11.7	..	18 089	-35.1	-8.4	43 624	-3.6	..	2.7	2.0	-3.7	1.9	11.3	12.4	3 968	..
451	12.1	13.5	7 325	0.7	4.9	33 694	5.1	8.4	6.2	5.5	7.7	5.8	13.4	12.5	4 115	33.0
424	10.6	13.9	2 317	0.2	0.6	..	..	..	18.3	16.6	14.4	10.8	..	..	4 972	31.0
413	-4.3	7.3	10 335	4.9	3.1	27 296	-0.7	1.0	4.0	4.4	3.4	4.2	15.1	15.7	2 502	-20.0
401	8.6	12.7	5 267	4.7	3.1	39 362	8.3	8.0	7.6	7.3	-0.2	6.7	10.2	10.2	2 134	-26.0
397	13.6	7.3	11 074	3.6	1.4	87 415	10.4	7.2	3.6	3.3	4.1	-0.9	4.5	4.4	6 534	27.0
363	4.7	38.5	1 690	-16.2	9.1	6 122	-29.9	13.6	21.5	17.2	8.8	2.6	59.3	39.7	3 247	-16.0
353	62.0	22.6	6 178	53.9	16.5	34 710	101.8	25.4	5.7	5.4	5.0	5.4	10.2	12.7	3 902	-22.0
348	-1.8	-0.9	9 000	5.0	-0.4	25 011	-2.8	-2.1	3.9	4.1	3.9	-7.6	13.9	13.8	5 057	6.0
335	-1.4	9.9	8 191	6.6	-3.9	57 870	17.1	4.2	4.1	4.4	9.9	7.0	5.8	6.9	10 173	-5.0
334	15.6	3.0	4 199	9.3	-0.5	24 324	2.4	-1.0	8.0	7.5	8.5	0.8	13.7	12.2	4 040	2.0
334	9.0	1.8	10 302	19.9	11.5	33 008	4.3	2.4	3.2	3.6	7.6	2.8	10.1	9.7	8 208	94.0
317	-11.9	-5.9	3 803	15.0	-9.9	8 870	-11.8	-4.7	8.3	10.9	3.5	-4.7	35.7	35.8	7 652	20.0
305	12.4	17.2	4 621	3.9	6.0	32 869	0.9	5.3	6.6	6.1	5.3	6.6	9.3	8.3	2 078	18.0
303	-5.1	-3.6	33 208	3.0	0.9	39 243	1.6	-0.8	0.9	1.0	-0.1	3.5	7.7	8.3	10 274	-16.0
295	-3.9	1.3	10 147	6.9	1.8	84 899	..	..	2.9	3.2	5.2	3.4	3.5	..	..	..
286	3.3	1.9	6 726	3.8	3.7	19 143	-1.0	-1.3	4.2	4.3	13.0	13.2	14.9	14.3	9 647	-7.0
278	11.3	7.8	4 549	12.3	10.7	28 857	20.4	13.3	6.1	6.2	9.8	8.9	9.6	10.4	4 004	10.0
265	-8.4	-13.5	34 850	-1.3	-2.6	51 694	-1.2	2.5	0.8	0.8	8.8	9.6	5.1	5.5	24 117	6.0
262	10.3	..	17 761	1.9	..	52 557	-2.9	..	1.5	1.4	8.6	3.0	5.0	4.4	12 105	17.0
257	0.2	-2.7	7 815	5.4	0.4	32 901	-2.6	-2.7	3.3	3.5	4.7	3.3	7.8	7.6	4 818	-1.0

## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year by countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>Japan continued</b>				
51	TDK	148	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
52	Murata Manufacturing	150	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
53	Mitsui Chemicals	157	Chemicals (11)	Manufacture of rubber & plastic products (250)
54	Teijin	158	Chemicals (11)	Manufacture of chemicals & chemical products (240)
55	Asahi Glass	160	Construction & building (13)	Manufacture of other non-metallic mineral products (268)
56	Rohm	166	Computer hardware (932)	Manufacture of radio TV & communication equip & apparatus (320)
57	Ono Pharmaceutical	168	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
58	Nikon	170	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
59	Shionogi	174	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
60	Toyota Industries	175	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
61	Kyowa Hakko Kogyo	177	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
62	Fuji Electric	183	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
63	Kirin Brewery	184	Beverages (41)	Manufacture of food products & beverages (150)
64	Ajinomoto	185	Food producers (43)	Manufacture of food products & beverages (150)
65	Shin-Etsu Chemical	187	Chemicals (11)	Manufacture of rubber & plastic products (250)
66	Tanabe Seiyaku	189	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
67	Yokogawa Electric	198	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
68	SEGA	202	Software (977)	Manufacture of furniture (361)
69	Dai Nippon Printing	203	Media & entertainment (54)	Publishing, printing & reproduction of recorded media (220)
70	Calsonic Kansei	209	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
71	Taisho Pharmaceutical	221	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
72	Daikin Industries	223	Electrical equipment (252)	Manufacture of machinery & equipment n e c (290)
73	Sekisui Chemical	227	Construction & building (13)	Construction (450)
74	Kansai Electric Power	230	Electricity (72)	Electricity, gas, steam & hot water supply (400)
75	Toyoda Gosei	234	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
76	Yamaha	235	Household goods & textiles (34)	Manufacture of furniture (361)
77	IHI	236	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
78	OKI Electric	240	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
79	Kubota	241	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
80	Advantest	242	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
81	Brother Industries	245	Electronic equipment (253)	Manufacture of office machinery & computers (300)
82	Toppan Printing	246	Media & entertainment (54)	Publishing, printing & reproduction of recorded media (220)
83	Japan Radio	255	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
84	Namco	256	Software (977)	Manufacture of furniture (361)
85	Furukawa Electric	258	Electrical equipment (252)	Manufacture of basic metals (270)
86	Bandai	264	Household goods & textiles (34)	Manufacture of furniture (361)
87	Chubu Electric Power	270	Electricity (72)	Electricity, gas, steam & hot water supply (400)
88	Showa Denko	271	Chemicals (11)	Manufacture of motor vehicles trailers & semi-trailers (340)
89	Kobe Steel	283	Steel & other metals (18)	Manufacture of basic metals (270)
90	Shiseido	284	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
91	Meiji Seika Kaisha	285	Food producers (43)	Manufacture of food products & beverages (150)
92	Casio Computer	287	Computer hardware (932)	Manufacture of radio TV & communication equip & apparatus (320)
93	Dainippon Pharmaceutical	298	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
94	East Japan Railway	299	Transport (59)	Land transport (600)
95	Nintendo	300	Software (977)	Manufacture of furniture (361)
96	Nitto Denko	301	Chemicals (11)	Manufacture of chemicals & chemical products (240)
97	Kaneka	302	Chemicals (11)	Manufacture of rubber & plastic products (250)
98	Sumitomo Rubber Industries	303	Automobiles & parts (31)	Manufacture of rubber & plastic products (250)
99	Nissan Diesel Motor	305	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
100	JSR	310	Chemicals (11)	Manufacture of chemicals & chemical products (240)

R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
248	8.3	-2.3	4 731	8.2	-1.5	36 804	16.1	-0.4	5.2	5.2	8.9	3.4	6.7	7.2	7 164	9.0
245	8.7	3.8	2 974	4.9	-10.8	26 469	0.1	-1.7	8.2	8.0	18.2	14.0	9.3	8.5	8 304	-3.0
236	-11.4	-3.4	7 823	3.5	5.1	12 348	-2.5	-1.3	3.0	3.5	3.1	3.5	19.1	21.1	3 667	42.0
236	9.9	2.7	6 279	-1.8	4.7	20 551	-11.7	-2.6	3.8	3.4	5.3	-1.3	11.5	9.2	3 590	49.0
232	-11.5	3.7	10 595	-11.0	5.3	56 776	1.9	5.5	2.2	2.2	8.4	6.2	4.1	4.7	8 386	8.0
225	-1.4	14.6	2 553	1.5	-4.6	18 591	10.4	7.0	8.8	9.1	29.3	27.1	12.1	13.6	7 945	-14.0
222	1.6	10.3	1 001	3.3	2.2	2 645	..	2.6	22.2	22.5	38.0	35.0	83.9	..	4 375	3.0
217	9.7	9.8	3 636	8.0	1.5	13 636	3.4	-0.6	6.0	5.9	-0.9	-3.5	15.9	15.0	3 306	28.0
214	-4.7	0.6	1 439	-30.0	-21.4	5 589	-9.1	-16.4	14.9	10.9	2.6	3.0	38.3	36.5	3 345	-25.0
212	-0.5	4.1	8 360	8.9	14.9	27 431	9.6	9.1	2.5	2.8	4.4	3.8	7.7	8.5	7 001	27.0
210	-5.6	0.3	2 505	-2.9	-2.4	6 294	-6.7	-6.8	8.4	8.6	0.9	3.3	33.3	32.9	2 280	4.0
205	6.7	1.9	6 147	2.8	-1.3	24 601	-4.7	-3.2	3.3	3.2	1.0	1.3	8.3	7.4	2 000	51.0
203	6.4	6.9	8 788	5.0	3.6	22 160	-3.0	-0.0	2.3	2.3	9.1	7.6	9.1	8.3	7 073	-1.0
202	6.2	2.4	7 464	5.2	4.6	24 861	0.3	1.6	2.7	2.7	4.8	6.8	8.1	7.7	4 927	-12.0
201	6.1	-0.3	6 946	16.2	7.7	18 151	4.4	3.3	2.9	3.2	15.7	15.3	11.1	10.9	12 564	19.0
200	12.9	10.0	1 235	-1.0	-3.2	4 517	..	..	16.2	14.2	14.9	15.8	44.2	..	1 961	20.0
194	7.0	12.1	2 670	13.1	1.8	18 364	-1.7	-1.1	7.3	7.7	0.7	-4.4	10.6	9.7	2 294	7.0
192	-3.5	5.8	1 373	-3.0	-7.7	3 507	1.1	..	14.0	14.0	5.5	2.1	54.6	57.3	..	..
187	8.1	1.8	9 722	3.4	0.3	34 514	-1.9	0.4	1.9	1.8	7.1	3.7	5.4	4.9	8 673	10.0
184	14.2	9.6	4 446	13.6	12.9	15 613	5.5	-2.6	4.1	4.1	2.7	3.1	11.8	10.9	1 185	3.0
174	-18.1	-10.2	2 057	4.5	1.5	5 477	14.0	2.9	8.4	10.8	22.8	19.8	31.7	44.1	4 561	-10.0
171	-0.4	-0.3	4 493	9.2	5.6	17 077	7.8	4.3	3.8	4.2	7.5	7.1	10.0	10.8	4 924	7.0
170	1.3	-1.5	5 851	1.9	-3.8	16 987	-17.1	..	2.9	2.9	3.2	2.5	10.0	8.2	2 438	-16.0
167	-14.8	-7.5	18 238	-2.9	-1.4	33 935	-4.6	1.4	0.9	1.0	10.7	8.6	4.9	5.5	14 997	15.0
163	..	8.8	2 850	15.1	10.7	15 483	14.8	13.1	5.7	..	6.2	9.0	10.5	..	1 666	..
162	0.3	2.1	3 874	2.8	1.3	18 842	1.6	..	4.2	4.3	9.4	4.6	8.6	8.7	2 549	13.0
161	1.8	-0.3	7 520	2.8	-2.1	22 768	-3.4	..	2.1	2.2	-3.7	-1.2	7.1	6.7	1 552	12.0
158	36.4	-0.9	4 944	5.3	4.4	20 410	-2.6	-4.7	3.2	2.5	3.5	2.3	7.7	5.5	1 452	-10.0
158	-5.6	-10.1	7 059	5.7	0.2	22 916	3.2	-0.2	2.2	2.5	9.0	2.6	6.9	7.5	6 162	36.0
155	-8.4	-8.8	1 251	78.2	-14.3	3 544	0.7	-9.6	12.4	24.2	16.7	-18.9	43.8	48.2	5 916	37.0
154	1.7	6.4	3 051	4.0	8.0	17 450	13.2	0.8	5.0	5.2	9.0	8.5	8.8	9.8	1 672	-3.0
153	5.2	4.2	9 315	3.7	0.1	32 178	-3.3	0.0	1.6	1.6	4.6	6.0	4.8	4.4	5 129	-1.0
144	-1.3	-3.6	2 000	7.4	0.2	8 739	..	-1.2	7.2	7.8	2.4	1.7	16.4	..	402	-4.0
142	35.7	22.7	1 239	11.5	5.6	..	..	..	11.5	9.4	8.0	5.0	..	..	1 212	..
137	-23.4	1.1	5 312	4.1	-3.6	25 880	0.4	..	2.6	3.5	-18.0	-19.5	5.3	6.9	2 095	6.0
132	23.9	10.1	1 890	7.4	6.7	2 933	12.9	3.7	7.0	6.1	10.0	9.7	45.1	41.1	1 644	-7.0
126	-4.3	-6.5	15 085	-3.5	-2.3	17 416	-3.2	-2.6	0.8	0.8	13.0	13.4	7.3	7.3	13 359	16.0
126	3.5	4.4	5 318	7.4	1.5	11 166	5.1	-2.3	2.4	2.5	4.0	4.4	11.3	11.5	2 394	29.0
122	-4.9	-9.3	8 753	1.2	-3.9	26 179	-2.2	-4.6	1.4	1.5	4.7	3.6	4.6	4.8	4 876	61.0
120	-4.7	-0.5	4 594	2.5	2.7	24 184	-2.6	-1.1	2.6	2.8	-0.3	8.1	5.0	5.1	4 533	16.0
120	-5.9	-1.8	2 648	4.3	0.9	..	..	..	4.5	5.0	1.3	1.2	..	..	1 471	22.0
119	17.1	5.7	4 014	6.8	13.5	12 140	4.3	-6.1	3.0	2.7	6.4	5.2	9.8	8.8	2 857	7.0
114	4.7	8.2	1 227	-0.7	2.5	2 445	-1.4	..	9.3	8.8	6.5	5.9	46.8	44.1	1 410	43.0
114	3.4	5.8	18 253	-0.9	-0.1	77 009	-2.2	-2.2	0.6	0.6	14.7	13.0	1.5	1.4	15 685	-5.0
114	8.4	-2.4	3 693	2.1	3.6	2 985	0.0	0.5	3.1	2.9	21.7	20.1	38.1	35.1	11 215	-2.0
114	14.2	8.4	3 250	19.5	7.4	13 161	22.3	10.1	3.5	3.7	12.3	8.8	8.6	9.2	7 269	31.0
113	8.9	4.4	3 145	9.4	7.2	6 649	0.8	-0.4	3.6	3.6	9.0	7.4	17.0	15.7	3 021	26.0
113	11.9	3.9	3 379	4.5	2.7	..	..	..	3.3	3.1	8.6	7.5	..	6.5	2 042	..
111	13.0	7.1	3 252	18.8	3.8	..	..	..	3.4	3.6	-9.2	0.5	..	..	756	..
108	7.7	42.7	1 975	11.3	5.9	4 303	0.0	..	5.5	5.7	11.1	7.8	25.2	23.4	3 823	20.0

## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year by countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>Japan continued</b>				
101	Dainippon Ink & Chemicals	312	Chemicals (11)	Manufacture of chemicals & chemical products (240)
102	Kawasaki Heavy Industries	313	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
103	Terumo	314	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
104	SMC	318	Engineering - general (267)	Manufacture of medical/precision/optical instruments & watches (330)
105	Tostem Inax (now JS)	319	Construction & building (13)	Construction (450)
106	Fanuc	322	Electronic equipment (253)	Manufacture of machinery & equipment n e c (290)
107	NGK Spark Plug	327	Automobiles & parts (31)	Manufacture of other non-metallic mineral products (268)
108	Yokohama Rubber	328	Automobiles & parts (31)	Manufacture of rubber & plastic products (250)
109	Kuraray	332	Chemicals (11)	Manufacture of rubber & plastic products (250)
110	Sumitomo Metal	334	Steel & other metals (18)	Manufacture of basic metals (270)
111	NTN	335	Engineering fabricators (266)	Manufacture of machinery & equipment n e c (290)
112	KDDI	338	Telecommunication services (67)	Post & telecommunications (640)
113	NGK Insulators	351	Diversified industrials (24)	Manufacture of electrical machinery & apparatus n e c (310)
114	Osaka Gas	358	Utilities - other (77)	Electricity. gas. steam & hot water supply (400)
115	Sammy	359	Leisure & hotels (53)	Manufacture of furniture (361)
116	UBE Industries	368	Chemicals (11)	Manufacture of other non-metallic mineral products (268)
117	Oji Paper	369	Forestry & paper (15)	Manufacture of pulp paper & paper products (211)
118	Glory	370	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
119	Santen Pharmaceutical	371	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
120	Funai Electric	372	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
121	Toto	381	Construction & building (13)	Manufacture of fabricated metal products (not machinery & equip) (280)
122	Mitsubishi Materials	384	Steel & other metals (18)	Manufacture of fabricated metal products (not machinery & equip) (280)
123	Tokyo Gas	386	Utilities - other (77)	Electricity. gas. steam & hot water supply (400)
124	Dainippon Screen Mfg	388	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
125	Daicel Chemical Industries	392	Chemicals (11)	Manufacture of chemicals & chemical products (240)
126	Mitsubishi Rayon	393	Chemicals (11)	Manufacture of rubber & plastic products (250)
127	Fujikura	395	Electrical equipment (252)	Manufacture of basic metals (270)
128	Ebara	396	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
129	Kajima	399	Construction & building (13)	Construction (450)
130	Kyushu Electric Power	404	Electricity (72)	Electricity. gas. steam & hot water supply (400)
131	Mitsubishi Gas Chemical	409	Chemicals (11)	Manufacture of chemicals & chemical products (240)
132	Tosoh	414	Chemicals (11)	Manufacture of chemicals & chemical products (240)
133	Sumitomo Bakelite	422	Chemicals (11)	Manufacture of rubber & plastic products (250)
134	Anritsu	427	Telecommunications equipment (938)	Manufacture of medical/precision/optical instruments & watches (330)
135	Hoya	429	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
136	Kissei Pharmaceutical	430	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
137	Sanken Electric	433	Electrical equipment (252)	Manufacture of basic metals (270)
138	Nippon Oil	439	Oil & gas (7)	Manufacture of coke. refined petroleum products & nuclear fuel (230)
139	Minebea	441	Electronic equipment (253)	Manufacture of machinery & equipment n e c (290)
140	Toyo Tire	446	Automobiles & parts (31)	Manufacture of rubber & plastic products (250)
141	Tohoku Electric Power	447	Electricity (72)	Electricity. gas. steam & hot water supply (400)
142	Citizen Watch	454	Household goods & textiles (34)	Manufacture of medical/precision/optical instruments & watches (330)
143	Taisei	456	Construction & building (13)	Construction (450)
144	Nippon Shokubai	459	Chemicals (11)	Manufacture of chemicals & chemical products (240)
145	Toyobo	466	Household goods & textiles (34)	Manufacture of textiles (170)
146	Pentax	468	Media & entertainment (54)	Manufacture of medical/precision/optical instruments & watches (330)
147	Akebono Brake Industry	474	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
148	Chugoku Electric Power	477	Electricity (72)	Electricity. gas. steam & hot water supply (400)
149	Hamamatsu Photonics	479	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
150	Tokuyama	480	Chemicals (11)	Manufacture of chemicals & chemical products (240)



R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
108	16.1	7.6	6 999	1.3	-0.2	26 522	-1.8	-4.4	1.5	1.3	4.3	3.3	4.1	3.4	1 810	37.0
106	-4.9	-5.6	8 330	-6.4	3.0	29 306	2.3	0.2	1.3	1.3	1.3	1.7	3.6	3.9	2 258	44.0
106	29.1	18.2	1 545	7.3	6.9	9 094	3.9	7.1	6.8	5.7	16.3	17.6	11.6	9.3	4 559	22.0
104	10.1	0.7	1 775	19.5	-0.6	11 162	3.0	2.0	5.9	6.4	22.2	12.1	9.3	8.7	6 273	20.0
104	6.8	31.3	6 946	2.6	10.5	29 050	12.3	..	1.5	1.4	5.7	4.3	3.6	3.8	4 052	..
103	11.5	5.3	1 901	23.6	0.1	..	..	..	5.4	6.0	34.0	29.8	..	..	12 818	29.0
100	2.1	3.9	1 643	-0.1	0.7	9 284	-0.2	-0.7	6.1	5.9	8.7	0.8	10.7	10.5	2 303	37.0
99	10.4	5.3	2 884	0.3	1.2	13 264	2.2	-0.2	3.4	3.1	4.6	5.3	7.5	6.9	1 084	11.0
98	9.3	3.8	2 385	3.0	1.9	6 760	-3.2	-1.7	4.1	3.9	5.7	4.4	14.5	12.9	2 481	16.0
98	0.3	-13.5	8 048	-8.5	-9.2	..	..	..	1.2	1.1	6.6	3.5	..	3.8	7 035	85.0
97	10.5	8.4	2 566	4.3	1.6	11 885	0.6	-2.0	3.8	3.6	5.8	2.6	8.2	7.5	2 043	..
96	27.6	37.6	20 434	2.2	7.9	13 128	-1.6	-2.8	0.5	0.4	10.4	4.7	7.3	5.6	17 114	11.0
91	-3.1	-9.7	1 804	-16.8	-8.9	8 693	-21.5	-7.7	5.0	4.3	6.9	5.5	10.4	8.4	2 705	30.0
89	-9.8	-9.1	6 830	0.4	-0.0	15 276	1.7	18.2	1.3	1.4	8.9	6.0	5.8	6.6	5 299	11.0
89	53.2	47.7	1 804	..	47.5	1 927	36.1	36.7	4.9	..	27.3	..	46.1	41.0	..	..
87	6.1	-1.9	3 672	-0.4	-1.5	11 397	5.2	-1.2	2.4	2.2	-1.2	2.1	7.6	7.5	1 684	96.0
86	-6.2	..	8 475	-2.7	-2.0	19 417	-6.3	..	1.0	1.1	4.5	2.4	4.4	4.4	4 045	..
85	17.3	2.7	1 269	50.7	5.2	5 038	3.4	2.8	6.7	8.6	16.7	9.5	16.9	14.9	931	..
85	-6.8	4.1	645	-0.5	0.5	2 335	-6.6	2.5	13.2	14.1	14.7	11.3	36.4	36.5	1 539	38.0
84	26.8	83.7	2 456	3.2	20.8	3 899	9.2	9.4	3.4	2.8	10.5	10.4	21.5	18.5	2 575	..
82	0.6	-3.8	3 360	6.4	3.2	17 192	0.8	0.2	2.4	2.6	5.7	2.7	4.7	4.8	2 114	-19.0
81	-3.2	-10.1	6 808	-1.7	-6.1	20 930	-3.7	-5.6	1.2	1.2	2.2	-2.3	3.9	3.8	2 429	44.0
80	-4.7	..	8 270	2.2	2.0	15 578	37.4	11.6	1.0	1.0	7.5	9.6	5.1	7.4	7 736	4.0
80	3.4	3.8	1 378	14.3	-7.5	4 460	-0.2	-1.7	5.8	6.4	1.8	-3.1	17.9	17.3	1 297	47.0
80	-5.6	-2.2	2 023	3.9	2.5	5 604	3.5	1.2	3.9	4.3	4.9	4.4	14.2	15.6	1 551	22.0
80	2.7	0.9	2 223	3.0	-1.7	8 557	-3.6	-3.9	3.6	3.6	6.7	4.3	9.3	8.7	1 841	19.0
79	-3.0	0.5	2 379	4.6	-2.7	27 568	15.5	4.1	3.3	3.6	-2.7	-3.5	2.9	3.4	1 636	20.0
79	-22.3	-18.2	3 646	-2.0	-5.4	15 207	-4.8	-0.7	2.2	2.7	0.5	-6.8	5.2	6.3	968	4.0
78	-4.6	-5.2	11 644	-13.5	-5.3	9 910	-8.7	-5.3	0.7	0.6	0.2	1.6	7.9	7.6	3 103	31.0
77	-2.5	-6.3	9 992	3.0	-1.3	19 284	1.2	1.7	0.8	0.8	13.6	11.6	4.0	4.1	7 657	15.0
76	-8.9	-5.5	2 446	9.1	1.8	4 537	-4.1	-3.6	3.1	3.7	5.5	0.3	16.6	17.5	2 078	49.0
74	-1.0	2.4	3 478	2.7	4.4	9 196	0.3	4.3	2.1	2.2	4.3	3.4	8.0	8.1	1 849	28.0
73	-0.9	7.7	1 222	6.2	-3.1	..	..	..	6.0	6.4	7.0	1.0	..	..	1 151	8.0
71	-25.2	-13.7	563	-0.2	-21.0	3 568	-4.1	-13.8	12.6	16.8	3.6	-44.3	19.9	25.5	520	-8.0
71	43.9	10.7	1 949	10.2	4.6	18 092	29.0	11.7	3.6	2.8	21.9	12.3	3.9	3.5	11 052	31.0
71	-24.8	-5.2	418	-2.1	-0.5	1 677	0.7	1.2	16.9	22.0	16.4	7.3	42.1	56.4	809	-4.0
70	12.6	4.6	1 057	0.8	-2.5	9 915	..	..	6.6	5.9	7.3	5.1	7.1	..	1 065	..
70	-3.5	-1.8	30 728	35.8	1.6	14 347	3.4	-1.1	0.2	0.3	-3.1	2.5	4.8	5.2	8 536	24.0
69	-1.0	..	1 928	-1.3	-2.2	43 839	1.9	-1.0	3.6	3.6	6.2	4.1	1.6	1.6	1 243	..
69	4.8	3.7	1 839	0.4	1.2	6 263	-0.3	-2.1	3.7	3.6	2.5	3.8	11.0	10.4	645	39.0
69	-10.9	-7.8	11 220	-1.9	-3.1	18 289	-2.1	-4.1	0.6	0.7	9.8	11.4	3.7	4.1	7 766	27.0
68	12.6	-6.0	2 698	12.5	-0.2	17 987	7.4	-2.7	2.5	2.5	9.9	4.1	3.8	3.6	1 958	-14.0
68	-4.8	-1.9	11 477	-2.8	-3.0	..	..	..	0.6	0.6	-0.7	2.2	..	..	2 881	30.0
68	2.1	1.0	1 219	3.5	1.9	2 658	-10.4	-5.9	5.6	5.6	8.0	6.3	25.5	22.3	1 348	25.0
65	3.2	-0.7	2 679	-0.9	-2.5	..	..	..	2.4	2.3	1.3	-3.8	..	6.4	1 244	-3.0
64	12.5	13.0	966	24.3	9.1	5 130	-5.6	-6.5	6.7	7.4	4.2	2.8	12.5	10.5	358	-25.0
64	1.9	-1.7	1 015	11.7	3.8	4 600	1.0	..	6.3	6.9	6.3	3.3	13.8	13.7	502	38.0
63	1.8	1.9	6 943	-4.2	-2.6	14 495	-1.0	..	0.9	0.9	11.0	12.8	4.4	4.2	5 432	15.0
63	0.4	5.4	506	15.8	4.0	3 131	3.8	2.5	12.4	14.4	11.8	6.4	20.1	20.8	1 074	17.0
63	12.5	5.0	1 575	-2.7	-3.5	4 568	-1.0	-2.1	4.0	3.5	6.2	2.4	13.8	12.1	1 608	76.0

## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year by countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>Japan continued</b>				
151	Nidec	481	Computer hardware (932)	Manufacture of electrical machinery & apparatus n e c (310)
152	NSK	483	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
153	Nissan Chemical Industries	484	Chemicals (11)	Manufacture of chemicals & chemical products (240)
154	Nippon Kayaku	489	Chemicals (11)	Manufacture of chemicals & chemical products (240)
155	Zeon	492	Chemicals (11)	Manufacture of rubber & plastic products (250)
156	Denki Kagaku Kogyo	493	Chemicals (11)	Manufacture of chemicals & chemical products (240)
157	Asahi Breweries	500	Beverages (41)	Manufacture of food products & beverages (150)
158	Nippon Shinyaku	502	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
159	Yamatake	507	Electronic equipment (253)	Manufacture of machinery & equipment n e c (290)
160	Toyo Ink Manufacturing	509	Chemicals (11)	Manufacture of chemicals & chemical products (240)
161	Showa	517	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
162	Nippon Sheet Glass	521	Construction & building (13)	Manufacture of other non-metallic mineral products (268)
163	Shimizu	522	Construction & building (13)	Construction (450)
164	Yaskawa Electric	528	Computer hardware (932)	Manufacture of machinery & equipment n e c (290)
165	Meiji Dairies	535	Food producers (43)	Manufacture of food products & beverages (150)
166	Nippon Paint	536	Chemicals (11)	Manufacture of chemicals & chemical products (240)
167	Shimadzu	544	Engineering - general (267)	Manufacture of medical/precision/optical instruments & watches (330)
168	Amada	545	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
169	Nippon Unipac (now Nippon Paper)	548	Forestry & paper (15)	Manufacture of pulp paper & paper products (211)
170	Nihon Unisys	561	Computer services (972)	Computer & related activities (720)
171	Meidensha	572	Diversified industrials (24)	Manufacture of machinery & equipment n e c (290)
172	Tokyo Ohka Kogyo	574	Chemicals (11)	Manufacture of chemicals & chemical products (240)
173	Yakult Honsha	585	Food producers (43)	Manufacture of food products & beverages (150)
174	Kaken Pharmaceutical	592	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
175	Sumitomo Heavy Industries	596	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
176	Disco	598	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
177	Shimano	610	Household goods & textiles (34)	Manufacture of other transport equipment (350)
178	West Japan Railway	614	Transport (59)	Land transport (600)
179	Taiheiyō Cement	615	Diversified industrials (24)	Manufacture of other non-metallic mineral products (268)
180	Mitsui	616	Construction & building (13)	Other business activities (740)
181	Kansai Paint	623	Chemicals (11)	Manufacture of chemicals & chemical products (240)
182	Ishihara Sangyo Kaisha	628	Chemicals (11)	Manufacture of chemicals & chemical products (240)
183	Shikoku Electric Power	630	Electricity (72)	Electricity, gas, steam & hot water supply (400)
184	Mitsui Mining & Smelting	631	Steel & other metals (18)	Manufacture of basic metals (270)
185	Sekisui House	638	Construction & building (13)	Construction (450)
186	NOF	641	Chemicals (11)	Manufacture of chemicals & chemical products (240)
187	Daiwa House Industry	645	Construction & building (13)	Construction (450)
188	Kureha Chemical Industry	648	Chemicals (11)	Manufacture of rubber & plastic products (250)
189	Nissin Kogyo	651	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
190	Systemex	653	Biotechnology (482)	Manufacture of medical/precision/optical instruments & watches (330)
191	Tokyo Seimitsu	655	Computer hardware (932)	Manufacture of machinery & equipment n e c (290)
192	Central Glass	658	Construction & building (13)	Manufacture of other non-metallic mineral products (268)
193	Tsumura	660	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
194	Toyama Chemical	676	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
195	Horiba	678	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
196	Nippon Soda	685	Chemicals (11)	Manufacture of chemicals & chemical products (240)
197	Ichihō Industries	686	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
198	Toagosei	687	Chemicals (11)	Manufacture of chemicals & chemical products (240)



R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
63	28.2	7.2	1 992	19.6	3.6	68 000	..	..	3.2	2.9	8.1	6.4	0.9	..	6 137	..
63	5.0	-2.0	3 749	-0.1	-0.7	19 772	-2.8	-5.3	1.7	1.6	4.5	-0.1	3.2	2.9	2 132	20.0
62	15.8	11.7	1 119	2.7	4.7	..	..	..	5.6	4.9	9.1	5.9	..	..	1 664	58.0
61	0.0	0.9	919	3.7	1.9	3 934	6.9	2.6	6.7	6.9	7.1	6.4	15.6	16.7	977	35.0
61	19.2	10.5	1 531	1.1	3.2	2 840	-1.0	0.4	4.0	3.4	3.1	3.2	21.5	17.8	1 524	34.0
61	-2.5	1.5	1 803	3.0	-2.7	..	..	..	3.4	3.6	6.0	4.7	..	..	1 352	18.0
60	12.2	..	6 394	4.2	0.9	15 749	7.5	2.6	0.9	0.9	10.2	8.2	3.8	3.6	4 341	9.0
59	4.8	7.7	369	-2.9	0.3	..	..	..	16.1	14.9	6.5	7.6	..	30.6	420	49.0
58	-8.8	-2.3	1 220	1.2	-1.5	6 691	-5.7	-0.8	4.8	5.3	3.8	7.4	8.7	9.0	967	75.0
58	0.5	..	1 554	-0.3	..	6 039	..	..	3.7	3.7	3.7	3.3	9.5	..	817	11.0
56	11.2	9.1	1 576	11.6	12.4	7 556	11.2	..	3.6	3.6	6.5	7.6	7.4	7.4	800	19.0
55	-13.6	6.8	1 932	-3.9	-4.3	11 392	-15.0	-3.4	2.9	3.2	4.1	1.1	4.9	4.8	1 371	14.0
55	3.0	1.2	10 196	-8.4	-6.0	..	..	..	0.5	0.5	3.2	2.4	..	..	3 076	28.0
54	9.0	..	1 889	16.3	..	7 635	-1.1	..	2.9	3.1	4.1	-0.9	7.1	6.5	1 214	37.0
53	7.4	..	5 183	-1.4	..	7 482	-3.5	..	1.0	0.9	2.3	1.6	7.1	6.4	1 231	..
53	9.4	..	1 426	0.4	-0.2	4 301	..	..	3.7	3.4	5.9	5.6	12.4	..	736	..
52	9.6	-3.3	1 565	6.7	2.9	7 930	0.6	-0.4	3.3	3.2	5.8	4.6	6.5	6.0	1 286	..
51	12.9	9.0	1 182	13.2	-4.9	4 793	16.0	2.8	4.4	4.4	2.7	-5.7	10.7	11.0	2 219	..
51	5.9	6.2	8 563	2.3	8.6	13 774	-12.1	4.7	0.6	0.6	4.2	1.5	3.7	3.1	2 961	-26.0
50	4.6	-11.6	2 222	0.2	-0.3	8 729	1.7	-1.6	2.2	2.1	-1.4	5.3	5.7	5.5	775	..
49	-3.1	-6.7	1 304	-1.7	-2.7	7 278	-2.5	-3.9	3.7	3.8	2.6	-1.3	6.7	6.7	456	..
48	11.9	12.5	597	15.0	-0.1	1 467	-16.2	..	8.1	8.3	10.5	5.8	33.0	24.7	783	..
46	11.3	11.4	1 715	-1.6	2.0	14 428	7.6	..	2.7	2.4	10.1	10.0	3.2	3.1	2 616	..
46	11.7	8.5	522	-1.7	1.1	..	..	..	8.7	7.7	7.6	7.3	..	..	508	..
45	8.0	1.1	3 466	0.3	-2.1	11 318	-3.9	-3.0	1.3	1.2	4.5	1.7	4.0	3.5	2 496	105.0
45	135.8	36.9	433	25.1	25.7	1 678	0.5	..	10.4	5.5	15.1	13.3	26.8	11.4	990	..
44	-0.9	-10.3	1 215	17.8	10.5	7 059	..	..	3.6	4.3	16.8	12.9	6.2	..	2 510	..
43	-1.0	6.5	8 729	4.3	0.6	..	..	..	0.5	0.5	11.0	10.9	..	..	5 016	..
43	-19.4	-7.3	6 315	-5.2	-4.3	18 098	-3.6	-3.3	0.7	0.8	4.1	2.4	2.4	2.9	2 246	35.0
43	76.3	52.5	21 398	6.9	7.9	39 735	5.3	56.6	0.2	0.1	2.9	-0.9	1.1	0.7	12 261	..
43	2.7	-2.8	1 334	3.2	0.2	5 886	-3.7	-2.7	3.2	3.2	7.8	4.8	7.3	6.8	1 342	..
43	4.7	..	673	-2.2	..	1 776	-2.1	..	6.3	5.9	6.6	3.5	24.0	22.4	575	..
43	-5.3	-9.3	4 034	-3.9	-2.9	8 264	..	-1.3	1.1	1.1	10.7	11.6	5.1	..	3 890	..
42	98.7	37.0	3 146	11.2	5.5	9 701	3.2	4.0	1.3	0.8	9.6	4.5	4.4	2.3	2 174	..
42	10.1	-8.5	9 852	3.5	1.7	19 926	..	..	0.4	0.4	0.6	5.6	2.1	..	5 554	..
41	0.9	0.2	987	0.8	-1.8	1 632	..	..	4.2	4.2	4.5	4.9	25.4	..	575	..
41	1.0	0.8	8 793	3.4	6.4	17 814	..	2.6	0.5	0.5	5.8	-12.6	2.3	..	4 936	..
41	-10.4	-0.5	969	-1.9	-2.4	3 866	-3.6	-4.4	4.2	4.6	5.2	2.4	10.5	11.3	599	..
40	21.1	..	897	9.5	..	..	..	..	4.4	4.0	10.0	11.4	..	..	597	..
40	11.7	16.3	474	15.3	19.3	2 907	36.6	24.5	8.4	8.7	9.4	7.5	13.7	16.8	1 155	..
40	68.0	20.2	447	31.9	-5.2	1 100	-0.1	-1.8	8.9	7.0	-9.6	0.6	36.1	21.5	1 235	..
39	-2.5	5.0	1 306	1.3	-0.7	..	..	..	3.0	3.1	11.7	8.9	..	..	998	..
39	2.1	5.7	590	0.9	3.6	..	..	..	6.6	6.5	12.8	11.5	..	14.5	1 029	..
37	1.5	-5.0	121	-48.9	-21.6	911	-44.3	-18.3	30.6	15.4	-30.4	1.7	40.7	22.3	544	..
37	26.8	1.3	611	8.3	3.0	3 808	3.2	2.5	6.0	5.1	6.4	6.6	9.7	7.9	709	..
36	..	..	971	-0.7	..	2 601	..	..	3.7	..	1.9	2.3	13.9	..	323	..
36	-3.8	6.6	852	1.2	1.4	3 688	..	..	4.2	4.5	-0.2	4.8	9.8	..	196	..
36	-4.3	-2.1	1 036	8.9	2.1	2 597	-5.1	-3.3	3.5	4.0	7.3	4.9	13.9	13.8	1 007	..

## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year within countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>Non-EU European countries</b> <span style="float: right;"><i>number of companies for calculation</i></span>				
<b>Croatia</b> <span style="float: right;"><i>number of companies for calculation</i></span>				
1	Pliva	339	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
<b>Liechtenstein</b> <span style="float: right;"><i>number of companies for calculation</i></span>				
1	Hilti	352	Construction & building (13)	Manufacture of machinery & equipment n e c (290)
<b>Norway</b> <span style="float: right;"><i>number of companies for calculation</i></span>				
1	Statoil	275	Oil & gas (7)	Extraction of crude petroleum/natural gas & incidental services (111)
2	Norsk Hydro	345	Oil & gas (7)	Manufacture of basic metals (270)
3	Telenor	546	Telecommunication services (67)	Post & telecommunications (640)
4	Kongsberg Gruppen	662	Aerospace & defence (21)	Manufacture of machinery & equipment n e c (290)
<b>Switzerland</b> <span style="float: right;"><i>number of companies for calculation</i></span>				
1	Roche	13	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
2	Novartis	14	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
3	STMicroelectronics	44	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
4	Nestle	50	Food producers (43)	Manufacture of food products & beverages (150)
5	Syngenta	71	Chemicals (11)	Manufacture of chemicals & chemical products (240)
6	Asea Brown Boveri	83	Electrical equipment (252)	Manufacture of electrical machinery & apparatus n e c (310)
7	Serono	90	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
8	Ciba Specialty Chemicals	205	Chemicals (11)	Manufacture of chemicals & chemical products (240)
9	Clariant	215	Chemicals (11)	Manufacture of chemicals & chemical products (240)
10	Givaudan	261	Personal care & household (47)	Manufacture of chemicals & chemical products (240)
11	Unaxis	290	Diversified industrials (24)	Manufacture of radio TV & communication equip & apparatus (320)
12	Swatch	323	Household goods & textiles (34)	Manufacture of medical/precision/optical instruments & watches (330)
13	Actelion	361	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
14	Rieter	364	Engineering - general (267)	Manufacture of motor vehicles trailers & semi-trailers (340)
15	Micronas Semiconductor	375	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
16	Synthes	385	Health (44)	Manufacture of medical/precision/optical instruments & watches (330)
17	Saurer	410	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
18	Schindler	416	Engineering fabricators (266)	Manufacture of machinery & equipment n e c (290)
19	Georg Fischer	417	Engineering - contractors (264)	Manufacture of fabricated metal products (not machinery & equip) (280)
20	Endress & Hauser	432	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
21	Leica Geosystems	437	Electronic equipment (253)	Manufacture of medical/precision/optical instruments & watches (330)
22	SIG	442	Support services (58)	Manufacture of rubber & plastic products (250)
23	Mettler-Toledo International	490	Engineering - general (267)	Manufacture of medical/precision/optical instruments & watches (330)
24	Logitech International	527	Computer hardware (932)	Manufacture of office machinery & computers (300)
25	Lonza	589	Chemicals (11)	Manufacture of chemicals & chemical products (240)
26	Basilea Pharmaceuticals	608	Biotechnology (482)	Manufacture of chemicals & chemical products (240)
27	Swisscom	626	Telecommunication services (67)	Post & telecommunications (640)
28	Bucher Industries	700	Engineering - general (267)	Manufacture of machinery & equipment n e c (290)
<b>Russia</b> <span style="float: right;"><i>number of companies for calculation</i></span>				
1	Gazprom	419	Utilities - other (77)	Electricity, gas, steam & hot water supply (400)
2	AvtoVAZ	621	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)

R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
12 304	10.8	6.3	266 398	5.8	3.6	1 222 557	0.5	-1.0	4.6	4.4	16.5	14.0	10.0	9.0	508 286	24.7
36	36	32	36	36	35	33	34	31	35	35	36	35	33	34	33	25
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
95	19.7	19.8	831	4.8	6.5	6 654	-3.2	-3.0	11.5	10.0	13.5	17.4	14.3	11.6	838	688.0
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
90	1.7	1.1	2 134	9.5	1.8	15 120	3.3	1.7	4.2	4.6	8.9	8.2	6.0	6.1	..	..
307	-3.4	-1.3	63 940	9.7	7.2	86 234	-4.1	2.6	0.5	0.5	20.0	16.0	3.6	3.5	69 563	67.7
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3
125	2.3	17.5	36 898	22.2	10.1	23 899	23.7	12.7	0.3	0.4	21.4	17.3	5.2	6.3	38 424	91.0
92	-10.6	-1.5	18 880	-9.5	0.6	36 938	-17.2	0.1	0.5	0.5	21.4	14.3	2.5	2.3	19 752	61.0
51	-8.3	-22.7	7 380	14.9	14.4	21 300	-2.1	-1.7	0.7	0.9	11.3	16.6	2.4	2.6	11 020	23.0
39	5.0	4.0	782	-3.2	1.4	4 097	-2.3	1.8	4.9	4.5	2.4	4.5	9.4	8.8	367	..
11 695	11.1	6.5	169 197	2.4	0.4	781 749	-2.9	-1.4	6.9	6.4	13.4	11.0	14.8	12.9	377 603	18.8
28	28	25	28	28	27	26	26	25	27	27	28	27	26	27	27	22
3 295	6.9	9.4	20 233	0.2	2.4	64 703	-1.0	0.5	16.3	15.3	24.0	17.8	50.9	47.2	92 766	42.0
3 095	12.0	4.5	20 782	13.6	0.1	81 392	3.6	5.0	14.9	15.1	23.7	22.3	38.0	35.2	100 808	10.0
1 065	24.6	14.0	6 442	21.1	11.6	49 500	8.3	7.4	16.5	16.1	7.7	4.1	21.5	18.7	11 259	-8.0
914	17.3	6.7	56 138	-1.4	0.8	247 000	-2.4	2.4	1.6	1.4	11.6	10.5	3.7	3.1	84 909	12.0
595	11.3	3.8	5 348	10.5	4.8	19 536	-9.0	-5.0	11.1	11.1	6.7	7.4	30.5	24.9	8 720	28.0
508	12.6	1.8	15 245	10.2	-4.4	102 537	-12.0	-13.2	3.3	3.3	3.0	-1.4	5.0	3.9	11 002	34.0
451	25.7	25.7	1 808	32.3	21.3	4 902	7.1	2.9	24.9	26.2	21.3	22.3	91.9	78.4	5 847	11.0
186	2.5	1.4	4 546	5.7	-1.6	19 338	3.6	-0.6	4.1	4.2	7.8	8.3	9.6	9.7	3 296	-8.0
177	-11.0	-12.5	5 519	0.2	-4.7	24 769	-8.3	-5.0	3.2	3.6	5.5	3.8	7.2	7.4	2 559	12.0
135	-4.2	1.3	1 734	-1.3	3.8	5 901	-1.3	3.5	7.8	8.0	18.1	12.5	22.8	23.5	3 583	3.0
117	16.9	-4.7	1 197	14.9	-4.5	6 650	2.3	-2.8	9.7	9.6	-17.8	0.5	17.5	15.3	1 527	42.0
102	-3.7	..	2 576	-0.0	-1.6	20 831	0.6	1.2	4.0	4.1	16.4	14.9	4.9	5.1	6 822	19.0
88	72.2	20.6	305	53.3	95.2	850	25.0	37.2	28.9	25.7	20.2	2.5	103.7	75.3	1 831	19.0
88	5.1	-1.9	2 053	1.8	0.0	13 557	1.8	1.5	4.3	4.1	6.6	6.4	6.5	6.3	1 029	20.0
83	30.7	16.3	623	25.6	19.3	1 917	9.8	8.5	13.3	12.8	18.1	16.5	43.2	36.3	1 006	2.0
81	70.1	20.8	1 309	45.0	9.9	5 501	35.9	18.0	6.2	5.2	28.8	17.5	14.6	11.7	10 506	27.0
75	0.7	-1.1	1 614	-7.6	1.2	8 852	-13.9	-8.4	4.7	4.3	4.9	4.7	8.5	7.3	802	42.0
74	-18.0	-3.0	5 351	8.4	0.9	39 269	-1.2	-2.5	1.4	1.8	6.3	5.4	1.9	2.3	3 857	42.0
74	1.8	-5.7	2 290	7.4	-3.2	12 324	-7.0	-6.2	3.2	3.4	4.6	-2.9	6.0	5.5	877	44.0
70	15.2	..	785	6.8	2.2	6 294	3.6	..	8.9	8.3	8.5	8.0	11.2	10.0	..	..
70	-0.6	-0.9	500	12.1	-0.7	2 398	-2.6	-6.0	13.9	15.7	9.3	4.3	29.1	28.5	710	..
69	-9.2	15.6	1 694	-10.7	2.9	6 671	-26.0	-10.1	4.1	4.0	-7.0	0.3	10.3	8.4	1 131	24.0
61	6.7	8.8	1 033	7.6	6.9	8 700	0.6	0.8	5.9	6.0	11.9	11.6	7.0	6.6	1 562	15.0
54	20.6	13.5	1 091	16.9	16.3	6 898	17.7	16.1	5.0	4.8	11.6	11.5	7.9	7.7	2 760	..
46	-13.4	-8.9	1 412	-2.7	5.3	..	..	..	3.3	3.7	9.7	6.2	..	8.9	2 125	30.0
45	37.8	..	0	..	..	..	..	..	..	..	-26 338.2	..	..	..	426	..
43	-27.5	-12.1	6 507	-31.0	-10.8	15 664	-20.9	-9.3	0.7	0.6	27.3	17.1	2.7	3.0	15 366	..
35	7.1	-1.6	1 062	6.9	3.3	5 795	-2.7	0.2	3.3	3.3	5.6	3.8	6.0	5.5	517	..
116	24.1	..	30 296	18.4	19.3	..	..	..	0.4	0.4	27.7	29.4	..	..	61 120	..
2	2	..	2	2	2	..	..	..	2	2	2	2	..	..	2	..
73	31.4	..	26 825	19.7	19.8	332 800	11.0	..	0.3	0.2	30.7	32.8	0.2	0.2	60 537	..
43	13.2	11.7	3 471	9.5	16.3	..	..	..	1.2	1.2	4.2	5.1	..	..	583	..

## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year within countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>Rest of the World</b> <i>number of companies for calculation</i>				
<b>Australia</b> <i>number of companies for calculation</i>				
1	Telstra	135	Telecommunication services (67)	Post & telecommunications (640)
<b>Bermuda</b> <i>number of companies for calculation</i>				
1	Tyco International	73	Diversified industrials (24)	Manufacture of radio TV & communication equip & apparatus (320)
2	Accenture	188	Support services (58)	Other business activities (740)
3	Marvell Technology	194	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
4	Xoma	674	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
<b>Brazil</b> <i>number of companies for calculation</i>				
1	Petroleo Brasileiro	211	Oil & gas (7)	Manufacture of coke. refined petroleum products & nuclear fuel (230)
2	Vale Do Rio Doce	282	Mining (4)	Mining of metal ores (130)
<b>Canada</b> <i>number of companies for calculation</i>				
1	Nortel Networks	34	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
2	ATI Technologies	190	Computer hardware (932)	Manufacture of office machinery & computers (300)
3	Alcan	219	Steel & other metals (18)	Manufacture of basic metals (270)
4	Bombardier	348	Aerospace & defence (21)	Manufacture of other transport equipment (350)
5	Cognos	401	Software (977)	Computer & related activities (720)
6	Research In Motion	412	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
7	Ballard Power Systems	460	Automobiles & parts (31)	Manufacture of electrical machinery & apparatus n e c (310)
8	Creo	485	Computer hardware (932)	Computer & related activities (720)
9	Cae	552	Electronic equipment (253)	Manufacture of machinery & equipment n e c (290)
10	Zarlink Semiconductor	577	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
11	Novelis	627	Steel & other metals (18)	Manufacture of basic metals (270)
12	Biovail	679	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
13	Geac Computer	689	Software (977)	Computer & related activities (720)
14	NOVA Chemicals	694	Chemicals (11)	Manufacture of chemicals & chemical products (240)
<b>Cayman Islands</b> <i>number of companies for calculation</i>				
1	Garmin	594	Telecommunications equipment (938)	Manufacture of medical/precision/optical instruments & watches (330)
<b>China</b> <i>number of companies for calculation</i>				
1	PetroChina	139	Oil & gas (7)	Manufacture of coke. refined petroleum products & nuclear fuel (230)
2	ZTE	195	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
3	China Petroleum & Chemical	260	Oil & gas (7)	Manufacture of coke. refined petroleum products & nuclear fuel (230)
<b>Hong Kong</b> <i>number of companies for calculation</i>				
1	Yue Yuen Industrial	464	Household goods & textiles (34)	Tanning/dressing of leather (191)
2	Lenovo	691	Computer hardware (932)	Manufacture of office machinery & computers (300)
<b>India</b> <i>number of companies for calculation</i>				
1	Ranbaxy Laboratories	444	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)
<b>Israel</b> <i>number of companies for calculation</i>				
1	Teva Pharmaceutical Industries	147	Pharmaceuticals (486)	Manufacture of chemicals & chemical products (240)

R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
14 855	22.8	7.8	531 604	22.9	14.5	2 263 740	5.0	1.9	2.8	2.8	14.0	12.3	3.3	3.1	688 872	36.3
68	68	59	68	68	61	53	47	37	68	68	67	68	53	47	66	34
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
266	-22.7	-14.4	12 273	3.8	4.4	38 564	3.8	-4.9	2.2	2.9	29.8	27.0	6.9	9.2	16 195	2.0
<b>1 010</b>	<b>15.4</b>	<b>8.4</b>	<b>41 564</b>	<b>10.7</b>	<b>5.3</b>	<b>360 537</b>	<b>5.7</b>	<b>4.1</b>	<b>2.4</b>	<b>2.3</b>	<b>12.1</b>	<b>8.8</b>	<b>2.8</b>	<b>2.6</b>	<b>62 405</b>	<b>3.0</b>
4	4	3	4	4	3	4	4	3	4	4	4	4	4	4	4	3
577	16.9	11.1	29 541	9.1	5.7	258 400	-0.1	2.1	2.0	1.8	12.5	7.8	2.2	1.9	42 585	-7.0
200	8.6	0.1	11 119	12.8	4.2	100 000	23.9	10.1	1.8	1.9	11.7	11.9	2.0	2.3	10 508	3.0
196	22.9	..	901	49.4	..	1 917	14.7	..	21.7	26.4	13.2	7.0	102.0	95.2	9 210	102.0
37	-2.9	25.1	3	-83.3	-38.7	220	-2.7	4.5	1 239.7	212.9	-2 134.3	-233.3	169.1	169.6	102	..
<b>304</b>	<b>40.3</b>	<b>34.5</b>	<b>35 184</b>	<b>25.5</b>	<b>18.8</b>	<b>88 213</b>	<b>35.4</b>	<b>13.7</b>	<b>0.9</b>	<b>0.8</b>	<b>26.4</b>	<b>30.5</b>	<b>3.5</b>	<b>3.3</b>	<b>73 580</b>	<b>..</b>
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	..
183	23.4	23.4	27 554	21.6	15.1	52 037	6.6	10.6	0.7	0.7	26.1	30.6	3.5	3.0	45 339	107.0
122	76.7	63.3	7 630	41.7	37.6	36 176	121.4	18.8	1.6	1.3	27.6	30.4	3.4	4.2	28 241	..
<b>2 438</b>	<b>3.4</b>	<b>-8.9</b>	<b>48 938</b>	<b>15.5</b>	<b>1.4</b>	<b>217 871</b>	<b>12.3</b>	<b>-1.0</b>	<b>5.0</b>	<b>5.6</b>	<b>2.6</b>	<b>2.9</b>	<b>10.9</b>	<b>12.5</b>	<b>46 251</b>	<b>-6.5</b>
14	14	13	14	14	13	13	12	10	14	14	14	14	13	12	13	7
1 441	-0.1	-15.3	6 035	-19.5	-22.3	34 150	-2.9	-13.4	23.9	19.2	-2.0	2.7	42.2	41.0	10 500	-7.0
199	26.7	21.8	1 469	44.2	24.4	2 700	22.7	9.9	13.5	15.4	12.5	3.5	73.5	71.2	2 190	-23.0
176	70.7	21.0	18 308	82.4	25.4	82 500	37.7	15.9	1.0	1.0	4.0	5.2	2.1	1.7	9 903	-7.0
91	-21.3	-14.1	9 726	-25.7	-9.9	59 556	-1.4	-7.3	0.9	0.9	0.5	1.2	1.5	1.9	3 576	10.0
78	16.2	19.4	607	20.7	18.9	3 297	13.5	9.7	12.8	13.3	19.2	17.1	23.6	23.1	2 397	..
74	61.5	39.3	994	127.5	66.3	3 555	61.6	..	7.5	10.5	2.5	6.2	20.9	20.9	9 686	..
68	-11.7	3.5	60	-31.8	30.5	..	..	..	112.5	86.8	-222.6	-131.8	..	69.5	449	-27.0
62	6.9	2.2	468	10.1	-1.1	3 960	-2.9	..	13.3	13.7	1.9	1.6	15.7	14.2	..	..
51	3.8	-7.6	606	-9.7	-4.3	5 000	-13.0	-7.8	8.4	7.3	-40.3	10.3	10.2	8.5	1 246	44.0
48	-13.2	-7.9	158	8.2	-1.0	962	-7.2	-13.1	30.4	37.8	-17.3	-22.6	49.9	53.3	125	-62.0
43	-6.4	..	5 705	24.6	..	13 500	..	..	0.7	1.0	3.5	3.7	3.2	..	1 251	..
37	-30.8	11.2	652	7.6	15.0	2 291	17.0	17.1	5.6	8.8	23.5	2.0	16.1	27.2	2 131	..
36	-37.6	-21.0	273	-28.7	-19.0	2 300	..	-15.4	13.2	15.1	15.9	13.3	15.7	..	637	..
35	6.6	6.3	3 877	33.5	18.2	4 100	-4.7	-3.8	0.9	1.1	7.5	1.4	8.6	7.7	2 160	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
45	40.9	29.8	561	32.9	27.3	2 484	22.9	23.2	8.1	7.6	35.5	39.3	18.2	15.9	4 461	..
<b>591</b>	<b>9.8</b>	<b>11.7</b>	<b>90 075</b>	<b>35.0</b>	<b>23.1</b>	<b>839 141</b>	<b>-0.8</b>	<b>-2.1</b>	<b>0.7</b>	<b>0.8</b>	<b>21.6</b>	<b>19.0</b>	<b>0.7</b>	<b>0.5</b>	<b>165 351</b>	<b>26.8</b>
3	3	2	3	3	2	3	2	2	3	3	3	3	3	2	3	2
261	21.8	15.7	34 546	27.9	17.6	424 175	1.1	0.1	0.8	0.8	38.9	33.3	0.6	0.5	119 046	85.0
195	43.0	..	1 886	24.6	..	25 515	..	..	10.4	9.0	7.9	8.6	7.7	..	15 927	..
135	-28.1	5.3	53 643	40.5	27.3	389 451	-2.8	-4.3	0.3	0.5	10.9	9.3	0.3	0.5	30 378	-43.0
<b>102</b>	<b>-7.0</b>	<b>25.1</b>	<b>4 136</b>	<b>2.4</b>	<b>8.0</b>	<b>261 682</b>	<b>..</b>	<b>..</b>	<b>2.5</b>	<b>2.7</b>	<b>7.1</b>	<b>7.9</b>	<b>0.4</b>	<b>..</b>	<b>6 236</b>	<b>..</b>
2	2	2	2	2	2	2	..	..	2	2	2	2	2	..	2	..
66	6.1	17.4	2 001	8.4	15.2	252 000	4.1	10.5	3.3	3.4	10.6	12.9	0.3	0.3	3 727	26.0
36	-24.1	47.2	2 135	-2.7	2.6	9 682	..	..	1.7	2.2	3.8	3.7	3.7	..	2 509	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
69	67.6	83.7	936	13.6	24.4	9 224	5.0	12.8	7.3	5.0	15.4	14.7	7.4	4.7	3 377	..
<b>426</b>	<b>30.7</b>	<b>12.8</b>	<b>6 392</b>	<b>31.6</b>	<b>15.2</b>	<b>30 299</b>	<b>13.8</b>	<b>3.8</b>	<b>6.7</b>	<b>6.7</b>	<b>11.0</b>	<b>15.2</b>	<b>14.0</b>	<b>12.2</b>	<b>17 092</b>	<b>..</b>
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	..
249	58.5	46.7	3 531	46.5	32.2	13 800	25.9	15.4	7.1	6.5	12.0	27.0	18.0	14.3	14 514	6.0

## II.1.6. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year within countries

No.	Company	Rank	FTSE Sector (Code)	NACE Sector
<b>Israel continued</b>				
2	ECI Telecom	518	Telecommunications equipment (938)	Manufacture of radio TV & communication equip & apparatus (320)
3	Elbit Systems	567	Aerospace & defence (21)	Manufacture of other transport equipment (350)
4	Koor Industries	688	Telecommunications equipment (938)	Manufacture of chemicals & chemical products (240)
5	Orbotech	695	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
<b>Malaysia</b> <i>number of companies for calculation</i>				
1	Proton Holdings Berhad	315	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
<b>Singapore</b> <i>number of companies for calculation</i>				
1	Chartered Semiconductor	367	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
2	Creative Technology	547	Computer hardware (932)	Manufacture of radio TV & communication equip & apparatus (320)
<b>South Africa</b> <i>number of companies for calculation</i>				
1	Sasol	543	Oil & gas (7)	Manufacture of coke, refined petroleum products & nuclear fuel (230)
<b>South Korea</b> <i>number of companies for calculation</i>				
1	Samsung Electronics	11	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
2	Hyundai Motor	37	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
3	LG Electronics	43	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
4	LG Philips LCD	123	Electrical equipment (252)	Manufacture of radio TV & communication equip & apparatus (320)
5	Hynix Semiconductor	129	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
6	Korea Electric Power	143	Electricity (72)	Electricity, gas, steam & hot water supply (400)
7	POSCO	192	Steel & other metals (18)	Manufacture of basic metals (270)
8	SK Telecom	197	Telecommunication services (67)	Post & telecommunications (640)
9	LG Chem	281	Chemicals (11)	Manufacture of chemicals & chemical products (240)
10	Hyundai Heavy Industries	374	Engineering - general (267)	Manufacture of other transport equipment (350)
11	KT	421	Telecommunication services (67)	Post & telecommunications (640)
<b>Taiwan</b> <i>number of companies for calculation</i>				
1	Taiwan Semiconductor Manufacturing	126	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
2	United Microelectronics	224	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
3	Hon Hai Precision Industry	233	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
4	AU Optronics	291	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
5	Winbond Electronic	306	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
6	Benq	316	Computer hardware (932)	Manufacture of radio TV & communication equip & apparatus (320)
7	Nanya Technology	326	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
8	Asustek Computer	402	Computer hardware (932)	Manufacture of office machinery & computers (300)
9	Delta Electronics	411	Electronic equipment (253)	Manufacture of electrical machinery & apparatus n e c (310)
10	Chunghwa Picture Tubes	415	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
11	Compal Electronics	451	Electronic equipment (253)	Manufacture of office machinery & computers (300)
12	Quanta Computer	452	Electronic equipment (253)	Manufacture of office machinery & computers (300)
13	Chi Mei Optoelectronic	470	Electronic equipment (253)	Manufacture of radio TV & communication equip & apparatus (320)
14	China Motor	472	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)
15	Advanced Semiconductor Engineering	497	Semiconductors (936)	Other business activities (740)
16	Macronix International	505	Semiconductors (936)	Manufacture of radio TV & communication equip & apparatus (320)
17	Chunghwa Telecom	511	Telecommunication services (67)	Post & telecommunications (640)
18	Taiwan Power	550	Electricity (72)	Electricity, gas, steam & hot water supply (400)
19	Micro-Star International	672	Computer hardware (932)	Manufacture of office machinery & computers (300)
20	Yulon Motor	697	Automobiles & parts (31)	Manufacture of motor vehicles trailers & semi-trailers (340)

R&D Investment			Net Sales			Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation	
2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03
€m	%	%	€m	%	%	#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%
56	-8.9	-14.9	365	17.7	-17.8	2 638	7.2	-13.9	15.3	19.8	1.1	-17.4	21.2	25.0	669	35.0
49	21.7	3.6	692	4.7	7.2	5 782	5.1	4.7	7.1	6.1	7.9	6.8	8.5	7.3	696	..
36	-4.2	-7.4	1 572	20.0	8.9	6 559	3.7	-3.5	2.3	2.9	12.4	7.9	5.5	6.0	631	..
35	21.6	-1.4	232	38.1	1.5	1 520	10.0	-2.5	15.2	17.3	9.8	-3.0	23.2	21.0	582	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
105	31.5	..	1 253	-30.2	..	8 956	-5.4	..	8.4	4.5	7.5	13.8	11.7	8.4	980	..
<b>138</b>	<b>2.4</b>	<b>12.1</b>	<b>1 286</b>	<b>39.5</b>	<b>1.1</b>	..	..	..	<b>10.7</b>	<b>14.6</b>	<b>4.2</b>	<b>-18.3</b>	..	..	<b>1 800</b>	..
2	2	2	2	2	2	..	..	..	2	2	2	2	..	..	2	..
87	-5.0	14.3	686	69.0	26.4	..	..	..	12.7	22.6	3.1	-45.6	..	..	1 347	..
51	18.3	8.8	600	16.3	-12.8	..	..	..	8.5	8.4	5.4	3.1	..	11.1	453	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
52	-41.0	-4.5	7 855	-6.8	13.4	30 910	-0.8	0.1	0.7	1.0	15.4	18.7	1.7	2.8	17 142	112.0
<b>7 463</b>	<b>39.7</b>	<b>18.7</b>	<b>205 243</b>	<b>23.1</b>	<b>14.8</b>	..	..	..	<b>3.6</b>	<b>3.2</b>	<b>12.7</b>	<b>9.9</b>	..	..	<b>166 129</b>	<b>66.8</b>
11	11	7	11	11	9	..	..	..	11	11	11	11	..	..	11	9
3 484	37.0	25.5	58 251	26.5	20.8	..	..	..	6.0	5.5	14.7	9.8	..	..	68 619	64.0
1 379	102.2	25.7	37 739	14.0	10.0	..	..	..	3.7	2.1	5.0	6.2	..	..	13 837	98.0
1 097	40.8	..	30 737	21.5	..	..	..	..	3.6	3.1	7.4	5.2	..	..	7 104	56.0
296	49.2	..	5 916	36.5	52.7	13 173	..	..	5.0	4.6	21.2	18.4	22.5	..	13 176	..
281	13.0	..	4 168	62.0	13.8	..	..	..	6.7	9.7	24.6	-57.5	..	..	7 185	..
256	21.7	-8.5	17 025	9.7	8.3	32 557	5.6	..	1.5	1.4	18.7	23.1	7.9	6.8	16 926	118.0
197	8.4	2.6	17 038	34.8	22.3	..	..	..	1.2	1.4	22.5	16.8	..	..	14 022	60.0
194	15.9	27.9	7 513	2.9	8.1	7 353	17.0	8.9	2.6	2.3	22.0	30.1	26.4	26.7	11 406	37.0
122	119.5	..	6 266	27.8	..	..	..	..	2.0	1.1	11.7	10.2	..	..	2 049	20.0
83	15.9	13.3	8 460	24.6	17.2	25 958	0.2	-0.2	1.0	1.1	1.0	4.2	3.2	2.8	3 534	222.0
73	-64.1	-35.2	12 130	47.5	2.3	43 218	13.2	-3.9	0.6	2.5	12.5	7.8	1.7	5.3	8 271	29.0
<b>1 848</b>	<b>14.8</b>	<b>9.4</b>	<b>75 908</b>	<b>31.1</b>	<b>22.8</b>	<b>253 600</b>	<b>12.4</b>	<b>8.3</b>	<b>2.4</b>	<b>2.8</b>	<b>12.0</b>	<b>11.0</b>	<b>5.5</b>	<b>6.9</b>	<b>107 873</b>	<b>36.7</b>
20	20	19	20	20	19	14	11	8	20	20	19	20	14	11	19	7
291	-1.5	5.5	6 081	26.4	26.8	18 597	15.8	10.8	4.8	6.1	34.9	25.5	15.6	18.4	30 607	41.0
171	25.7	-6.3	2 999	35.0	24.1	10 642	18.2	7.6	5.7	6.1	14.7	8.3	16.1	15.1	10 301	25.0
164	47.4	46.1	12 574	45.8	52.1	..	..	..	1.3	1.3	6.1	6.3	..	..	12 960	..
116	48.0	39.3	3 903	60.4	64.7	19 907	36.5	..	3.0	3.2	17.0	15.3	5.8	5.4	7 002	74.0
111	-1.8	-15.5	734	5.2	9.4	3 907	6.8	-2.6	15.1	16.1	8.6	-6.7	28.3	30.7	1 177	-7.0
105	30.4	40.3	4 057	519.4	43.7	14 375	-3.7	70.7	2.6	12.3	4.2	25.6	7.3	5.4	1 995	12.0
100	23.8	75.5	942	41.0	47.3	3 146	-2.9	2.5	10.6	12.1	21.2	5.7	31.8	24.9	2 098	..
77	44.3	32.8	5 805	27.6	42.9	..	..	..	1.3	1.2	6.2	5.8	..	..	5 848	..
75	2.6	11.5	1 311	15.0	9.1	40 000	..	..	5.7	6.4	10.2	9.5	1.9	..	2 415	72.0
74	5.3	19.0	2 719	31.6	24.9	21 334	..	..	2.7	3.4	10.2	2.3	3.5	..	2 319	..
68	12.0	41.8	5 335	29.8	43.0	20 060	..	..	1.3	1.5	4.1	6.7	3.4	..	2 818	..
68	15.8	29.8	7 662	10.8	43.6	..	..	..	0.9	0.9	3.7	4.7	..	..	4 526	..
64	35.2	..	2 820	45.7	..	12 326	61.6	..	2.3	2.4	15.1	10.3	5.2	6.2	5 121	..
64	15.5	21.3	1 661	30.8	7.5	..	..	..	3.8	4.4	..	12.4	..	..	999	..
60	9.8	19.8	1 897	81.5	28.6	34 649	41.8	30.2	3.2	5.2	5.5	5.6	1.7	2.2	2 285	..
59	-6.9	-13.0	533	31.9	2.0	3 761	9.5	..	11.0	15.6	2.6	-42.1	15.6	18.3	546	-50.0
58	-4.1	-9.6	4 299	1.5	0.5	28 518	-1.7	-3.2	1.3	1.4	33.5	31.4	2.0	2.1	13 236	..
51	6.6	-18.3	7 788	4.1	-9.7	22 378	-17.8	-7.1	0.7	0.6	13.3	13.4	2.3	1.8	..	..
38	20.5	34.4	1 594	4.1	19.6	..	..	..	2.4	2.0	0.2	4.8	..	..	433	..
35	-8.3	-4.8	1 194	8.4	7.7	..	..	..	3.0	3.5	14.3	18.3	..	..	1 187	..



## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

Explanations of the terms in the header are to be found in Volume II, page nr. 195, Glossary of Definitions

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
				<b>165</b>	<b>61.8</b>	<b>64.2</b>	<b>8 673</b>	<b>34.3</b>	<b>29.7</b>
<b>Mining (4)</b>		<i>number of companies for calculation</i>		2	2	2	2	2	2
1	Vale Do Rio Doce	282	Brazil	122	76.7	63.3	7 630	41.7	37.6
2	USEC	618	USA	43	30.6	66.8	1 043	-2.9	-0.2
				<b>2 510</b>	<b>-1.8</b>	<b>3.7</b>	<b>651 434</b>	<b>29.8</b>	<b>17.8</b>
<b>Oil &amp; gas (7)</b>		<i>number of companies for calculation</i>		17	17	17	17	17	17
1	Exxon Mobil	88	USA	478	5.0	2.5	194 221	23.8	12.1
2	Schlumberger	113	USA	344	-16.0	-12.8	8 446	-17.4	-5.8
3	PetroChina	139	China	261	21.8	15.7	34 546	27.9	17.6
4	Halliburton	208	USA	184	5.0	2.4	15 056	25.8	16.5
5	Petroleo Brasileiro	211	Brazil	183	23.4	23.4	27 554	21.6	15.1
6	ChevronTexaco (now Chevron)	213	USA	178	1.7	5.0	110 994	47.7	18.6
7	China Petroleum & Chemical	260	China	135	-28.1	5.3	53 643	40.5	27.3
8	Baker Hughes	265	USA	130	2.0	10.9	4 491	15.3	4.3
9	Statoil	275	Norway	125	2.3	17.5	36 898	22.2	10.1
10	ConocoPhillips	344	USA	93	-7.4	42.0	99 377	49.4	77.8
11	Norsk Hydro	345	Norway	92	-10.6	-1.5	18 880	-9.5	0.6
12	Nippon Oil	439	Japan	70	-3.5	-1.8	30 728	35.8	1.6
13	Weatherford International	488	USA	62	0.8	21.6	2 304	20.8	10.4
14	Sasol	543	South Africa	52	-41.0	-4.5	7 855	-6.8	13.4
15	Smith International	564	USA	49	20.9	9.8	3 251	22.9	7.6
16	Varco International ( <i>now National Oilwell Varco</i> )	656	USA	40	-12.5	4.9	1 154	8.3	7.3
17	FMC Technologies	675	USA	37	11.3	-2.8	2 036	20.0	12.8
				<b>9 116</b>	<b>3.0</b>	<b>1.3</b>	<b>263 449</b>	<b>10.5</b>	<b>4.7</b>
<b>Chemicals (11)</b>		<i>number of companies for calculation</i>		62	60	54	62	61	55
1	El du Pont de Nemours	46	USA	981	-1.2	-5.7	20 114	1.3	3.4
2	Dow Chemical	54	USA	752	4.2	-1.6	29 547	23.1	13.0
3	Mitsubishi Chemical	67	Japan	636	-2.8	9.2	13 824	2.0	3.3
4	Syngenta	71	Switzerland	595	11.3	3.8	5 348	10.5	4.8
5	Sumitomo Chemical	79	Japan	540	3.3	8.3	8 317	4.3	3.6
6	Monsanto	104	USA	376	-3.0	..	4 015	16.8	..
7	Asahi Kasei	112	Japan	348	-1.8	-0.9	9 000	5.0	-0.4
8	Toray Industries	142	Japan	257	0.2	-2.7	7 815	5.4	0.4
9	Mitsui Chemicals	157	Japan	236	-11.4	-3.4	7 823	3.5	5.1
10	Teijin	158	Japan	236	9.9	2.7	6 279	-1.8	4.7
11	PPG Industries	167	USA	223	4.5	2.3	6 999	8.6	5.2
12	Shin-Etsu Chemical	187	Japan	201	6.1	-0.3	6 946	16.2	7.7
13	Rohm & Haas	196	USA	195	11.3	4.8	5 371	13.7	8.8
14	Ciba Specialty Chemicals	205	Switzerland	186	2.5	1.4	4 546	5.7	-1.6
15	Clariant	215	Switzerland	177	-11.0	-12.5	5 519	0.2	-4.7
16	Showa Denko	271	Japan	126	3.5	4.4	5 318	7.4	1.5
17	Eastman Chemical	277	USA	124	-10.6	1.6	4 841	13.5	6.9
18	LG Chem	281	South Korea	122	119.5	..	6 266	27.8	..
19	Nitto Denko	301	Japan	114	14.2	8.4	3 250	19.5	7.4
20	Kaneka	302	Japan	113	8.9	4.4	3 145	9.4	7.2
21	JSR	310	Japan	108	7.7	42.7	1 975	11.3	5.9
22	Dainippon Ink & Chemicals	312	Japan	108	16.1	7.6	6 999	1.3	-0.2
23	Kuraray	332	Japan	98	9.3	3.8	2 385	3.0	1.9
24	Air Products and Chemicals	343	USA	93	4.6	1.1	5 453	17.7	9.0
25	Celanese	357	USA	89	13.1	-2.0	5 101	25.2	0.0

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
39 047	105.4	16.9	1.9	1.6	24.9	25.9	4.2	5.4	29 205	..	19.4	22.0
2	2	2	2	2	2	2	2	2	2	..	2	2
36 176	121.4	18.8	1.6	1.3	27.6	30.4	3.4	4.2	28 241	..	21.8	25.8
2 871	7.4	0.4	4.1	3.1	5.2	3.4	15.0	12.3	964	..	1.4	2.9
<b>1 387 629</b>	<b>-2.5</b>	<b>-1.1</b>	<b>0.4</b>	<b>0.5</b>	<b>15.0</b>	<b>13.9</b>	<b>1.8</b>	<b>1.8</b>	<b>821 200</b>	<b>39.6</b>	<b>6.9</b>	<b>7.7</b>
17	17	17	17	17	17	17	17	17	17	14	17	17
105 200	-0.5	2.4	0.2	0.3	15.7	14.2	4.5	4.3	283 199	27.0	4.5	6.0
52 500	-31.8	-13.5	4.1	4.0	16.8	5.2	6.6	5.3	37 232	34.0	10.6	7.4
424 175	1.1	0.1	0.8	0.8	38.9	33.3	0.6	0.5	119 046	85.0	24.5	23.2
97 000	-4.0	4.5	1.2	1.5	-3.4	-3.0	1.9	1.7	21 997	114.0	2.8	3.2
52 037	6.6	10.6	0.7	0.7	26.1	30.6	3.5	3.0	45 339	107.0	20.6	21.3
47 265	-6.6	-5.4	0.2	0.2	13.8	13.2	3.8	3.5	95 489	27.0	4.2	5.9
389 451	-2.8	-4.3	0.3	0.5	10.9	9.3	0.3	0.5	30 378	-43.0	0.7	1.1
26 900	0.9	0.1	2.9	3.3	14.1	7.1	4.8	4.8	14 675	49.0	5.7	7.7
23 899	23.7	12.7	0.3	0.4	21.4	17.3	5.2	6.3	38 424	91.0	10.5	9.4
35 800	-8.2	-2.6	0.1	0.2	11.0	10.1	2.6	2.6	68 225	72.0	7.0	6.8
36 938	-17.2	0.1	0.5	0.5	21.4	14.3	2.5	2.3	19 752	61.0	11.1	9.3
14 347	3.4	-1.1	0.2	0.3	-3.1	2.5	4.8	5.2	8 536	24.0	2.8	2.7
18 400	10.2	8.3	2.7	3.2	13.2	11.2	3.3	3.7	6 735	48.0	9.9	11.7
30 910	-0.8	0.1	0.7	1.0	15.4	18.7	1.7	2.8	17 142	112.0	17.4	16.1
13 235	10.6	4.8	1.5	1.5	9.9	9.1	3.7	3.4	5 337	..	2.5	2.8
10 572	25.1	6.9	3.4	4.2	11.7	9.4	3.7	5.4	7 663	..	3.3	4.6
9 000	4.7	1.9	1.8	2.0	6.0	5.0	4.1	3.9	2 031	..	1.8	2.8
<b>733 676</b>	<b>-4.8</b>	<b>-2.1</b>	<b>3.5</b>	<b>3.7</b>	<b>7.2</b>	<b>4.3</b>	<b>11.9</b>	<b>11.7</b>	<b>261 237</b>	<b>18.2</b>	<b>4.7</b>	<b>5.6</b>
57	50	46	62	60	62	61	57	50	61	45	60	60
60 000	-25.9	-8.8	4.9	5.0	7.2	1.5	16.3	12.3	30 584	-3.0	4.5	6.3
43 203	-6.9	-6.4	2.5	3.0	10.8	7.6	17.4	15.6	34 873	28.0	3.3	3.4
33 496	-11.0	0.5	4.6	4.8	3.9	3.4	19.0	17.4	4 957	29.0	3.4	4.7
19 536	-9.0	-5.0	11.1	11.1	6.7	7.4	30.5	24.9	8 720	28.0	2.3	3.4
19 036	6.3	3.1	6.5	6.6	5.7	6.1	28.4	29.2	6 758	33.0	11.5	8.2
12 600	-8.0	..	9.4	11.3	8.6	-36.9	29.8	28.3	12 882	..	3.9	4.8
25 011	-2.8	-2.1	3.9	4.1	3.9	-7.6	13.9	13.8	5 057	6.0	6.4	5.9
32 901	-2.6	-2.7	3.3	3.5	4.7	3.3	7.8	7.6	4 818	-1.0	..	5.9
12 348	-2.5	-1.3	3.0	3.5	3.1	3.5	19.1	21.1	3 667	42.0	4.6	6.6
20 551	-11.7	-2.6	3.8	3.4	5.3	-1.3	11.5	9.2	3 590	49.0	5.4	7.5
31 800	-3.3	-3.1	3.2	3.3	12.0	10.7	7.0	6.5	8 201	10.0	2.6	2.5
18 151	4.4	3.3	2.9	3.2	15.7	15.3	11.1	10.9	12 564	19.0	9.9	8.2
16 691	-3.2	-2.9	3.6	3.7	11.6	8.4	11.7	10.2	7 618	18.0	4.4	5.3
19 338	3.6	-0.6	4.1	4.2	7.8	8.3	9.6	9.7	3 296	-8.0	4.2	3.5
24 769	-8.3	-5.0	3.2	3.6	5.5	3.8	7.2	7.4	2 559	12.0	3.4	3.5
11 166	5.1	-2.3	2.4	2.5	4.0	4.4	11.3	11.5	2 394	29.0	4.1	5.8
12 000	-20.0	-8.8	2.6	3.2	2.7	-4.4	10.3	9.2	3 225	27.0	3.8	4.0
..	..	..	2.0	1.1	11.7	10.2	..	..	2 049	20.0	6.3	8.8
13 161	22.3	10.1	3.5	3.7	12.3	8.8	8.6	9.2	7 269	31.0	6.0	6.5
6 649	0.8	-0.4	3.6	3.6	9.0	7.4	17.0	15.7	3 021	26.0	5.8	4.1
4 303	0.0	..	5.5	5.7	11.1	7.8	25.2	23.4	3 823	20.0	..	6.5
26 522	-1.8	-4.4	1.5	1.3	4.3	3.3	4.1	3.4	1 810	37.0	4.2	4.2
6 760	-3.2	-1.7	4.1	3.9	5.7	4.4	14.5	12.9	2 481	16.0	9.7	5.7
19 900	7.6	3.8	1.7	1.9	13.0	10.8	4.7	4.8	9 982	15.0	9.5	9.7
9 100	-9.0	-10.0	1.8	1.9	2.7	3.3	9.8	7.9	2 953	37.0	4.3	7.2

## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Chemicals (11) continued</b>									
26	UBE Industries	368	Japan	87	6.1	-1.9	3 672	-0.4	-1.5
27	Lubrizol	391	USA	80	15.3	7.3	2 324	54.1	19.8
28	Daicel Chemical Industries	392	Japan	80	-5.6	-2.2	2 023	3.9	2.5
29	Mitsubishi Rayon	393	Japan	80	2.7	0.9	2 223	3.0	-1.7
30	Mitsubishi Gas Chemical	409	Japan	76	-8.9	-5.5	2 446	9.1	1.8
31	Tosoh	414	Japan	74	-1.0	2.4	3 478	2.7	4.4
32	Engelhard	418	USA	74	7.3	5.8	3 065	12.1	-6.5
33	Sumitomo Bakelite	422	Japan	73	-0.9	7.7	1 222	6.2	-3.1
34	FMC	443	USA	69	6.9	-2.2	1 509	6.7	1.8
35	Nippon Shokubai	459	Japan	68	2.1	1.0	1 219	3.5	1.9
36	Tokuyama	480	Japan	63	12.5	5.0	1 575	-2.7	-3.5
37	Nissan Chemical Industries	484	Japan	62	15.8	11.7	1 119	2.7	4.7
38	Nippon Kayaku	489	Japan	61	0.0	0.9	919	3.7	1.9
39	Huntsman	491	USA	61	26.5	..	8 450	62.2	..
40	Zeon	492	Japan	61	19.2	10.5	1 531	1.1	3.2
41	Denki Kagaku Kogyo	493	Japan	61	-2.5	1.5	1 803	3.0	-2.7
42	Avery Dennison	495	USA	61	10.0	5.6	3 929	12.1	12.0
43	Toyo Ink Manufacturing	509	Japan	58	0.5	..	1 554	-0.3	..
44	Praxair	516	USA	57	2.7	5.3	4 851	17.5	8.5
45	Valspar	519	USA	56	8.9	9.3	1 796	8.6	8.3
46	JohnsonDiversey	520	USA	55	0.2	26.5	2 332	7.5	42.4
47	Nippon Paint	536	Japan	53	9.4	..	1 426	0.4	-0.2
48	Tokyo Ohka Kogyo	574	Japan	48	11.9	12.5	597	15.0	-0.1
49	Newmarket	575	USA	48	14.8	4.3	658	18.3	7.3
50	Lonza	589	Switzerland	46	-13.4	-8.9	1 412	-2.7	5.3
51	Ecolab	595	USA	45	15.6	22.9	3 079	11.2	21.1
52	Kansai Paint	623	Japan	43	2.7	-2.8	1 334	3.2	0.2
53	Ishihara Sangyo Kaisha	628	Japan	43	4.7	..	673	-2.2	..
54	Nalco	639	USA	42	..	..	2 232	..	..
55	NOF	641	Japan	41	0.9	0.2	987	0.8	-1.8
56	Kureha Chemical Industry	648	Japan	41	-10.4	-0.5	969	-1.9	-2.4
57	Cabot	659	USA	39	-17.2	3.4	1 423	7.7	5.0
58	WR Grace	670	USA	38	-1.7	5.0	1 663	14.1	9.5
59	Crompton	683	USA	37	-3.7	-15.6	1 876	16.7	-2.1
60	Nippon Soda	685	Japan	36	..	..	971	-0.7	..
61	Toagosei	687	Japan	36	-4.3	-2.1	1 036	8.9	2.1
62	NOVA Chemicals	694	Canada	35	6.6	6.3	3 877	33.5	18.2
				<b>1 099</b>	<b>-3.6</b>	<b>1.3</b>	<b>90 401</b>	<b>-3.7</b>	<b>-0.5</b>
<b>Construction &amp; building (13)</b>		<i>number of companies for calculation</i>		<b>13</b>	<b>13</b>	<b>13</b>	<b>13</b>	<b>13</b>	<b>13</b>
1	Asahi Glass	160	Japan	232	-11.5	3.7	10 595	-11.0	5.3
2	Sekisui Chemical	227	Japan	170	1.3	-1.5	5 851	1.9	-3.8
3	Tostem Inax (now JS)	319	Japan	104	6.8	31.3	6 946	2.6	10.5
4	Hilti	352	Liechtenstein	90	1.7	1.1	2 134	9.5	1.8
5	Toto	381	Japan	82	0.6	-3.8	3 360	6.4	3.2
6	Kajima	399	Japan	78	-4.6	-5.2	11 644	-13.5	-5.3
7	Taisei	456	Japan	68	-4.8	-1.9	11 477	-2.8	-3.0
8	Nippon Sheet Glass	521	Japan	55	-13.6	6.8	1 932	-3.9	-4.3
9	Shimizu	522	Japan	55	3.0	1.2	10 196	-8.4	-6.0
10	Taiheiyo Cement	615	Japan	43	-19.4	-7.3	6 315	-5.2	-4.3
11	Sekisui House	638	Japan	42	10.1	-8.5	9 852	3.5	1.7

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
11 397	5.2	-1.2	2.4	2.2	-1.2	2.1	7.6	7.5	1 684	96.0	5.7	6.3
7 800	55.0	19.9	3.4	4.6	6.7	7.2	10.2	13.7	2 128	62.0	4.2	4.3
5 604	3.5	1.2	3.9	4.3	4.9	4.4	14.2	15.6	1 551	22.0	7.5	6.2
8 557	-3.6	-3.9	3.6	3.6	6.7	4.3	9.3	8.7	1 841	19.0	4.7	6.9
4 537	-4.1	-3.6	3.1	3.7	5.5	0.3	16.6	17.5	2 078	49.0	4.1	7.2
9 196	0.3	4.3	2.1	2.2	4.3	3.4	8.0	8.1	1 849	28.0	4.2	2.8
6 500	0.3	-0.2	2.4	2.5	7.5	8.6	11.3	10.6	2 537	-6.0	3.0	3.1
..	..	..	6.0	6.4	7.0	1.0	..	..	1 151	8.0	3.8	6.6
5 100	-3.8	-5.3	4.6	4.5	9.6	5.7	13.5	12.1	2 031	78.0	4.2	4.5
2 658	-10.4	-5.9	5.6	5.6	8.0	6.3	25.5	22.3	1 348	25.0	3.1	1.8
4 568	-1.0	-2.1	4.0	3.5	6.2	2.4	13.8	12.1	1 608	76.0	6.7	6.7
..	..	..	5.6	4.9	9.1	5.9	..	..	1 664	58.0	3.2	7.1
3 934	6.9	2.6	6.7	6.9	7.1	6.4	15.6	16.7	977	35.0	4.4	5.3
11 300	..	..	0.7	0.9	2.3	2.0	5.4	..	3 560	..	2.0	2.7
2 840	-1.0	0.4	4.0	3.4	3.1	3.2	21.5	17.8	1 524	34.0	5.3	4.3
..	..	..	3.4	3.6	6.0	4.7	..	..	1 352	18.0	5.4	10.0
21 400	5.4	7.3	1.5	1.6	8.1	8.5	2.8	2.7	4 551	-8.0	3.4	4.2
6 039	..	..	3.7	3.7	3.7	3.3	9.5	..	817	11.0	6.6	6.0
27 020	6.2	3.6	1.2	1.3	16.9	16.6	2.1	2.2	12 222	30.0	10.1	17.5
7 500	7.1	3.6	3.1	3.1	11.1	10.1	7.4	7.3	1 838	-1.0	2.5	2.3
12 000	..	..	2.4	2.5	4.8	5.7	4.6	..	..	..	3.0	3.4
4 301	..	..	3.7	3.4	5.9	5.6	12.4	..	736	..	2.6	3.4
1 467	-16.2	..	8.1	8.3	10.5	5.8	33.0	24.7	783	..	6.4	11.0
1 135	3.2	1.1	7.3	7.5	7.0	6.8	42.4	38.1	202	..	1.7	1.6
..	..	..	3.3	3.7	9.7	6.2	..	8.9	2 125	30.0	10.8	18.7
21 300	..	3.3	1.5	1.4	12.8	13.1	2.1	..	6 315	..	6.6	5.6
5 886	-3.7	-2.7	3.2	3.2	7.8	4.8	7.3	6.8	1 342	..	2.2	2.3
1 776	-2.1	..	6.3	5.9	6.6	3.5	24.0	22.4	575	..	4.9	3.8
10 500	..	..	1.9	..	4.6	..	4.0	..	1 919	..	3.1	..
1 632	..	..	4.2	4.2	4.5	4.9	25.4	..	575	..	6.8	4.3
3 866	-3.6	-4.4	4.2	4.6	5.2	2.4	10.5	11.3	599	..	6.3	..
4 300	-2.3	0.0	2.7	3.6	10.3	5.4	9.1	10.7	1 552	-11.0	6.2	7.2
6 500	3.2	0.5	2.3	2.6	-11.5	-2.9	5.8	6.1	450	..	2.8	4.4
4 773	-13.5	-13.4	1.9	2.4	0.5	-0.7	7.6	6.9	3 112	..	2.6	4.0
2 601	..	..	3.7	..	1.9	2.3	13.9	..	323	..	4.9	4.2
2 597	-5.1	-3.3	3.5	4.0	7.3	4.9	13.9	13.8	1 007	..	5.2	4.7
4 100	-4.7	-3.8	0.9	1.1	7.5	1.4	8.6	7.7	2 160	..	4.6	3.3
<b>212 265</b>	<b>-1.3</b>	<b>1.3</b>	<b>1.2</b>	<b>1.2</b>	<b>3.5</b>	<b>2.1</b>	<b>4.4</b>	<b>5.1</b>	<b>41 155</b>	<b>10.7</b>	<b>2.9</b>	<b>2.9</b>
<i>10</i>	<i>8</i>	<i>7</i>	<i>13</i>	<i>13</i>	<i>13</i>	<i>13</i>	<i>10</i>	<i>8</i>	<i>12</i>	<i>8</i>	<i>13</i>	<i>13</i>
56 776	1.9	5.5	2.2	2.2	8.4	6.2	4.1	4.7	8 386	8.0	10.9	8.7
16 987	-17.1	..	2.9	2.9	3.2	2.5	10.0	8.2	2 438	-16.0	2.6	2.6
29 050	12.3	..	1.5	1.4	5.7	4.3	3.6	3.8	4 052	..	0.8	3.6
15 120	3.3	1.7	4.2	4.6	8.9	8.2	6.0	6.1	..	..	3.7	4.5
17 192	0.8	0.2	2.4	2.6	5.7	2.7	4.7	4.8	2 114	-19.0	2.6	2.2
9 910	-8.7	-5.3	0.7	0.6	0.2	1.6	7.9	7.6	3 103	31.0	1.4	1.4
..	..	..	0.6	0.6	-0.7	2.2	..	..	2 881	30.0	0.8	1.2
11 392	-15.0	-3.4	2.9	3.2	4.1	1.1	4.9	4.8	1 371	14.0	4.7	4.3
..	..	..	0.5	0.5	3.2	2.4	..	..	3 076	28.0	0.6	0.6
18 098	-3.6	-3.3	0.7	0.8	4.1	2.4	2.4	2.9	2 246	35.0	3.7	3.8
19 926	..	..	0.4	0.4	0.6	5.6	2.1	..	5 554	..	2.6	1.1

## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales			
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs	
				€m	%	%	€m	%	%	
<b>Construction &amp; building (13) continued</b>										
12	Daiwa House Industry	645	Japan	41	1.0	0.8	8 793	3.4	6.4	
13	Central Glass	658	Japan	39	-2.5	5.0	1 306	1.3	-0.7	
				<b>273</b>	<b>-2.1</b>	<b>-2.1</b>	<b>66 970</b>	<b>2.8</b>	<b>1.4</b>	
<b>Forestry &amp; paper (15)</b>										
				<i>number of companies for calculation</i>	5	5	3	5	5	5
1	Oji Paper	369	Japan	86	-6.2	..	8 475	-2.7	-2.0	
2	Nippon Unipac (now Nippon Paper)	548	Japan	51	5.9	6.2	8 563	2.3	8.6	
3	International Paper	557	USA	50	-6.9	-9.6	18 796	1.5	-1.0	
4	Georgia-Pacific	601	USA	45	-4.7	..	14 461	-3.0	-7.7	
5	Weyerhaeuser	649	USA	41	7.8	0.0	16 675	14.1	15.9	
				<b>1 154</b>	<b>10.9</b>	<b>-0.9</b>	<b>102 840</b>	<b>17.3</b>	<b>5.8</b>	
<b>Steel &amp; other metals (18)</b>										
				<i>number of companies for calculation</i>	9	9	7	9	9	7
1	JFE	137	Japan	262	10.3	..	17 761	1.9	..	
2	POSCO	192	South Korea	197	8.4	2.6	17 038	34.8	22.3	
3	Alcan	219	Canada	176	70.7	21.0	18 308	82.4	25.4	
4	AlCoA	262	USA	134	-6.2	-3.6	17 273	9.2	0.9	
5	Kobe Steel	283	Japan	122	-4.9	-9.3	8 753	1.2	-3.9	
6	Sumitomo Metal	334	Japan	98	0.3	-13.5	8 048	-8.5	-9.2	
7	Mitsubishi Materials	384	Japan	81	-3.2	-10.1	6 808	-1.7	-6.1	
8	Novelis	627	Canada	43	-6.4	..	5 705	24.6	..	
9	Mitsui Mining & Smelting	631	Japan	42	98.7	37.0	3 146	11.2	5.5	
				<b>4 302</b>	<b>12.0</b>	<b>4.8</b>	<b>151 905</b>	<b>6.6</b>	<b>5.5</b>	
<b>Aerospace &amp; defence (21)</b>										
				<i>number of companies for calculation</i>	12	12	11	12	12	11
1	Boeing	36	USA	1 382	13.8	-1.0	38 593	3.9	-3.4	
2	Lockheed Martin	59	USA	708	6.5	16.6	26 137	11.6	14.0	
3	Honeywell	64	USA	675	22.1	3.3	18 835	10.8	2.7	
4	Northrop Grumman	105	USA	371	26.0	13.8	21 963	13.9	30.1	
5	Raytheon	108	USA	361	0.8	1.1	14 895	11.8	6.3	
6	General Dynamics	152	USA	242	16.7	17.5	14 110	15.4	16.4	
7	Goodrich	210	USA	183	11.5	18.6	3 476	7.8	4.1	
8	Rockwell Collins	237	USA	160	0.9	..	2 156	15.3	..	
9	Bombardier	348	Canada	91	-21.3	-14.1	9 726	-25.7	-9.9	
10	Elbit Systems	567	Israel	49	21.7	3.6	692	4.7	7.2	
11	BE Aerospace	647	USA	41	23.3	8.2	540	17.6	2.5	
12	Kongsberg Gruppen	662	Norway	39	5.0	4.0	782	-3.2	1.4	
				<b>5 136</b>	<b>15.4</b>	<b>6.9</b>	<b>229 214</b>	<b>12.7</b>	<b>6.2</b>	
<b>Diversified industrials (24)</b>										
				<i>number of companies for calculation</i>	13	13	13	13	13	13
1	General Electric	22	USA	2 274	16.4	16.0	112 096	14.7	6.6	
2	United Technologies	49	USA	924	22.3	0.1	27 549	20.7	10.9	
3	Tyco International	73	Bermuda	577	16.9	11.1	29 541	9.1	5.7	
4	3M	76	USA	558	1.3	0.6	14 722	9.8	7.6	
5	Textron	164	USA	226	20.4	-5.7	7 535	3.9	-6.0	
6	Dover	257	USA	139	18.7	2.4	4 038	24.4	7.2	
7	Unaxis	290	Switzerland	117	16.9	-4.7	1 197	14.9	-4.5	
8	NGK Insulators	351	Japan	91	-3.1	-9.7	1 804	-16.8	-8.9	
9	Fortune Brands	553	USA	51	18.2	8.2	5 386	17.8	8.8	
10	Meidensha	572	Japan	49	-3.1	-6.7	1 304	-1.7	-2.7	
11	Unova	591	USA	46	9.5	-2.2	597	-27.7	-19.0	

Employees 2004			- R&D/Net Sales ratio -		— Operating Profit —		— R&D per employee —		- Market Capitalisation -		- Capital expenditures -	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
17 814	..	2.6	0.5	0.5	5.8	-12.6	2.3	..	4 936	..	1.8	2.2
..	..	..	3.0	3.1	11.7	8.9	..	..	998	..	5.6	4.7
<b>221 837</b>	<b>-5.8</b>	<b>-4.4</b>	<b>0.4</b>	<b>0.4</b>	<b>6.4</b>	<b>4.3</b>	<b>1.2</b>	<b>1.2</b>	<b>36 619</b>	<b>-26.7</b>	<b>3.6</b>	<b>4.5</b>
5	5	4	5	5	5	5	5	5	5	2	4	5
19 417	-6.3	..	1.0	1.1	4.5	2.4	4.4	4.4	4 045	..	..	5.0
13 774	-12.1	4.7	0.6	0.6	4.2	1.5	3.7	3.1	2 961	-26.0	5.6	6.6
80 000	-3.6	-7.2	0.3	0.3	3.8	4.5	0.6	0.6	11 299	-27.0	4.9	4.6
55 000	-9.8	-9.8	0.3	0.3	7.8	4.8	0.8	0.8	6 289	..	3.6	3.5
53 646	-2.8	6.2	0.2	0.3	10.4	6.2	0.8	0.7	12 025	..	2.7	3.9
<b>324 367</b>	<b>6.5</b>	<b>1.7</b>	<b>1.1</b>	<b>1.2</b>	<b>9.1</b>	<b>6.0</b>	<b>2.6</b>	<b>2.6</b>	<b>72 871</b>	<b>18.1</b>	<b>6.0</b>	<b>5.0</b>
7	7	5	9	9	9	9	7	7	9	7	9	9
52 557	-2.9	..	1.5	1.4	8.6	3.0	5.0	4.4	12 105	17.0	5.2	5.3
..	..	..	1.2	1.4	22.5	16.8	..	..	14 022	60.0	9.5	7.3
82 500	37.7	15.9	1.0	1.0	4.0	5.2	2.1	1.7	9 903	-7.0	5.2	6.5
119 000	-0.8	-2.7	0.8	0.9	9.5	8.2	1.1	1.2	19 076	-7.0	4.9	4.0
26 179	-2.2	-4.6	1.4	1.5	4.7	3.6	4.6	4.8	4 876	61.0	8.4	3.7
..	..	..	1.2	1.1	6.6	3.5	..	3.8	7 035	85.0	5.6	4.3
20 930	-3.7	-5.6	1.2	1.2	2.2	-2.3	3.9	3.8	2 429	44.0	4.0	4.1
13 500	..	..	0.7	1.0	3.5	3.7	3.2	..	1 251	..	2.1	3.0
9 701	3.2	4.0	1.3	0.8	9.6	4.5	4.4	2.3	2 174	..	7.5	5.5
<b>776 035</b>	<b>0.6</b>	<b>-0.7</b>	<b>2.8</b>	<b>2.7</b>	<b>6.0</b>	<b>5.3</b>	<b>5.5</b>	<b>5.0</b>	<b>135 111</b>	<b>9.5</b>	<b>2.1</b>	<b>2.1</b>
12	12	11	12	12	12	12	12	12	12	9	12	12
159 000	1.3	-5.4	3.6	3.3	4.3	2.7	8.7	7.7	29 354	-6.0	1.9	1.5
130 000	0.0	1.3	2.7	2.8	5.7	5.6	5.4	5.1	20 605	18.0	2.2	2.2
109 000	0.9	-1.8	3.6	3.3	8.5	8.7	6.2	5.1	24 436	3.0	2.5	2.8
125 400	2.3	9.0	1.7	1.5	6.7	6.1	3.0	2.4	14 444	4.0	2.3	2.4
79 000	1.3	-3.2	2.4	2.7	4.5	6.0	4.6	4.6	13 199	27.0	1.8	2.4
70 200	3.8	10.7	1.7	1.7	10.2	8.9	3.4	3.1	16 950	18.0	1.4	1.4
14 700	-28.6	-15.1	5.3	5.1	7.5	6.4	12.5	8.0	4 401	57.0	3.2	2.9
15 800	10.5	..	7.4	8.5	14.9	14.5	10.2	11.1	6 372	43.0	3.2	2.8
59 556	-1.4	-7.3	0.9	0.9	0.5	1.2	1.5	1.9	3 576	10.0	1.9	1.9
5 782	5.1	4.7	7.1	6.1	7.9	6.8	8.5	7.3	696	..	5.6	6.8
3 500	5.5	-5.1	7.5	7.2	8.8	3.3	11.6	9.9	711	..	2.0	1.7
4 097	-2.3	1.8	4.9	4.5	2.4	4.5	9.4	8.8	367	..	2.8	3.3
<b>1 024 834</b>	<b>1.2</b>	<b>2.9</b>	<b>2.2</b>	<b>2.2</b>	<b>15.9</b>	<b>15.3</b>	<b>5.0</b>	<b>4.4</b>	<b>433 421</b>	<b>3.9</b>	<b>5.8</b>	<b>5.2</b>
13	13	12	13	13	13	13	13	13	13	8	13	13
307 000	0.7	-0.3	2.0	2.0	21.0	22.4	7.4	6.4	269 147	8.0	8.6	7.4
210 000	3.3	11.4	3.4	3.3	11.9	12.4	4.4	3.7	38 925	11.0	2.1	1.7
258 400	-0.1	2.1	2.0	1.8	12.5	7.8	2.2	1.9	42 585	-7.0	2.5	3.2
67 071	-0.0	-2.2	3.8	4.1	22.9	20.4	8.3	8.2	40 730	-14.0	4.7	3.7
44 000	2.3	-4.8	3.0	2.6	7.5	6.3	5.1	4.4	7 274	17.0	2.9	3.1
28 100	9.3	1.8	3.4	3.6	11.2	10.2	4.9	4.5	6 153	4.0	2.0	2.2
6 650	2.3	-2.8	9.7	9.6	-17.8	0.5	17.5	15.3	1 527	42.0	6.9	6.0
8 693	-21.5	-7.7	5.0	4.3	6.9	5.5	10.4	8.4	2 705	30.0	6.2	6.7
31 851	2.8	..	0.9	0.9	16.0	15.2	1.6	1.4	9 867	..	3.3	3.1
7 278	-2.5	-3.9	3.7	3.8	2.6	-1.3	6.7	6.7	456	..	2.4	4.7
4 456	-7.2	-12.8	7.7	5.1	-4.5	1.3	10.3	8.7	1 240	..	1.3	1.8

## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Diversified industrials (24) continued</b>									
12	Mitsui	616	Japan	43	76.3	52.5	21 398	6.9	7.9
13	NACCO Industries	629	USA	43	3.4	3.6	2 047	12.5	2.1
				<b>25 136</b>	<b>9.4</b>	<b>6.5</b>	<b>464 246</b>	<b>11.7</b>	<b>6.6</b>
<b>Electronics &amp; Electrical Equipment (25)</b>		<i>number of companies for calculation</i>		<b>61</b>	<b>61</b>	<b>56</b>	<b>61</b>	<b>61</b>	<b>59</b>
1	Matsushita Electric	6	Japan	4 419	6.3	2.9	62 562	16.5	8.2
2	Sony	9	Japan	3 604	-2.4	5.0	47 940	-10.9	-4.1
3	Samsung Electronics	11	South Korea	3 484	37.0	25.5	58 251	26.5	20.8
4	Canon	26	Japan	1 977	6.2	8.0	24 899	8.4	6.1
5	LG Electronics	43	South Korea	1 097	40.8	..	30 737	21.5	..
6	Sharp	45	Japan	997	-8.8	1.5	16 207	12.7	3.9
7	Sanyo Electric	52	Japan	899	3.6	4.8	18 007	10.3	5.2
8	Ricoh	53	Japan	793	19.4	11.0	13 025	1.9	2.8
9	Agilent Technologies	62	USA	686	-11.2	-11.6	5 283	18.6	-5.1
10	Asea Brown Boveri	83	Switzerland	508	12.6	1.8	15 245	10.2	-4.4
11	Pioneer	98	Japan	401	8.6	12.7	5 267	4.7	3.1
12	Sumitomo Electric	99	Japan	397	13.6	7.3	11 074	3.6	1.4
13	Emerson Electric	110	USA	358	-5.4	-6.5	11 488	11.9	0.3
14	Omron	116	Japan	334	15.6	3.0	4 199	9.3	-0.5
15	Alps Electric	120	Japan	305	12.4	17.2	4 621	3.9	6.0
16	LG Philips LCD	123	South Korea	296	49.2	..	5 916	36.5	52.7
17	Seiko Epson	124	Japan	295	-3.9	1.3	10 147	6.9	1.8
18	Olympus	132	Japan	278	11.3	7.8	4 549	12.3	10.7
19	TDK	148	Japan	248	8.3	-2.3	4 731	8.2	-1.5
20	Fuji Electric	183	Japan	205	6.7	1.9	6 147	2.8	-1.3
21	Yokogawa Electric	198	Japan	194	7.0	12.1	2 670	13.1	1.8
22	Eaton	201	USA	192	17.0	4.6	7 223	21.8	10.4
23	Daikin Industries	223	Japan	171	-0.4	-0.3	4 493	9.2	5.6
24	Hon Hai Precision Industry	233	Taiwan	164	47.4	46.1	12 574	45.8	52.1
25	Harman International Industries	238	USA	160	51.6	34.7	1 995	21.6	16.5
26	Brother Industries	245	Japan	154	1.7	6.4	3 051	4.0	8.0
27	Japan Radio	255	Japan	144	-1.3	-3.6	2 000	7.4	0.2
28	Furukawa Electric	258	Japan	137	-23.4	1.1	5 312	4.1	-3.6
29	Pitney Bowes	288	USA	119	9.9	6.7	3 647	8.3	6.3
30	AU Optronics	291	Taiwan	116	48.0	39.3	3 903	60.4	64.7
31	Fanuc	322	Japan	103	11.5	5.3	1 901	23.6	0.1
32	Thermo Electron	329	USA	99	-8.0	-7.8	1 623	5.2	0.3
33	Symbol Technologies	346	USA	92	15.0	26.7	1 274	13.1	6.0
34	Rockwell Automation	356	USA	90	-6.4	-10.4	3 245	7.5	1.0
35	Molex	365	USA	88	1.7	-4.0	1 653	21.9	-1.7
36	Funai Electric	372	Japan	84	26.8	83.7	2 456	3.2	20.8
37	Fujikura	395	Japan	79	-3.0	0.5	2 379	4.6	-2.7
38	Delta Electronics	411	Taiwan	75	2.6	11.5	1 311	15.0	9.1
39	Chunghwa Picture Tubes	415	Taiwan	74	5.3	19.0	2 719	31.6	24.9
40	Hoya	429	Japan	71	43.9	10.7	1 949	10.2	4.6
41	Endress & Hauser	432	Switzerland	70	15.2	..	785	6.8	2.2
42	Sanken Electric	433	Japan	70	12.6	4.6	1 057	0.8	-2.5
43	Leica Geosystems	437	Switzerland	70	-0.6	-0.9	500	12.1	-0.7
44	Minebea	441	Japan	69	-1.0	..	1 928	-1.3	-2.2
45	Compal Electronics	451	Taiwan	68	12.0	41.8	5 335	29.8	43.0
46	Quanta Computer	452	Taiwan	68	15.8	29.8	7 662	10.8	43.6



Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
39 735	5.3	56.6	0.2	0.1	2.9	-0.9	1.1	0.7	12 261	..	3.8	4.4
11 600	-0.1	-4.9	2.1	2.3	3.6	5.0	3.7	3.5	551	..	2.1	2.4
<b>2 005 551</b>	<b>4.7</b>	<b>0.5</b>	<b>5.4</b>	<b>5.5</b>	<b>7.2</b>	<b>4.8</b>	<b>10.1</b>	<b>10.7</b>	<b>409 142</b>	<b>19.2</b>	<b>7.6</b>	<b>6.2</b>
56	49	45	61	61	61	61	56	49	59	42	60	59
334 752	15.2	7.8	7.1	7.7	2.8	2.2	13.2	14.3	31 262	29.0	4.0	3.7
151 400	-6.5	-3.4	7.5	6.9	2.8	1.0	23.8	22.8	24 975	5.0	6.8	5.7
..	..	..	6.0	5.5	14.7	9.8	..	..	68 619	64.0	12.8	11.9
108 257	5.5	5.0	7.9	8.1	15.8	14.5	18.3	18.1	32 628	3.0	7.4	6.6
..	..	..	3.6	3.1	7.4	5.2	..	..	7 104	56.0	13.2	8.6
46 164	-1.0	-2.0	6.1	7.6	4.6	4.0	21.6	23.4	12 522	6.0	8.1	8.6
82 337	4.2	-1.4	5.0	5.3	2.5	-3.0	10.9	11.0	3 482	-32.0	4.4	4.0
75 100	2.6	0.4	6.1	5.2	7.7	5.9	10.6	9.1	8 388	-21.0	4.6	4.2
28 000	-3.4	-11.9	13.0	17.4	6.3	-15.8	24.5	26.7	9 442	12.0	1.6	3.4
102 537	-12.0	-13.2	3.3	3.3	3.0	-1.4	5.0	3.9	11 002	34.0	2.6	2.9
39 362	8.3	8.0	7.6	7.3	-0.2	6.7	10.2	10.2	2 134	-26.0	8.7	8.3
87 415	10.4	7.2	3.6	3.3	4.1	-0.9	4.5	4.4	6 534	27.0	5.4	6.6
107 800	1.0	-4.7	3.1	3.7	13.0	12.3	3.3	3.5	20 977	11.0	2.6	2.4
24 324	2.4	-1.0	8.0	7.5	8.5	0.8	13.7	12.2	4 040	2.0	6.5	6.4
32 869	0.9	5.3	6.6	6.1	5.3	6.6	9.3	8.3	2 078	18.0	6.3	6.2
13 173	..	..	5.0	4.6	21.2	18.4	22.5	..	13 176	..	46.7	19.5
84 899	..	..	2.9	3.2	5.2	3.4	3.5	..	..	..	4.6	6.4
28 857	20.4	13.3	6.1	6.2	9.8	8.9	9.6	10.4	4 004	10.0	6.9	5.8
36 804	16.1	-0.4	5.2	5.2	8.9	3.4	6.7	7.2	7 164	9.0	6.8	6.8
24 601	-4.7	-3.2	3.3	3.2	1.0	1.3	8.3	7.4	2 000	51.0	1.4	2.1
18 364	-1.7	-1.1	7.3	7.7	0.7	-4.4	10.6	9.7	2 294	7.0	3.7	2.5
55 000	7.8	3.9	2.7	2.8	8.8	9.1	3.5	3.2	7 326	2.0	3.4	3.4
17 077	7.8	4.3	3.8	4.2	7.5	7.1	10.0	10.8	4 924	7.0	4.8	4.1
..	..	..	1.3	1.3	6.1	6.3	..	..	12 960	..	..	..
10 606	-1.6	-0.2	8.0	6.4	9.0	7.5	15.1	9.8	4 096	-2.0	5.0	5.2
17 450	13.2	0.8	5.0	5.2	9.0	8.5	8.8	9.8	1 672	-3.0	3.2	2.8
8 739	..	-1.2	7.2	7.8	2.4	1.7	16.4	..	402	-4.0	2.4	2.3
25 880	0.4	..	2.6	3.5	-18.0	-19.5	5.3	6.9	2 095	6.0	3.6	4.4
35 183	8.3	2.4	3.3	3.2	17.5	19.4	3.4	3.3	7 521	4.0	6.4	6.2
19 907	36.5	..	3.0	3.2	17.0	15.3	5.8	5.4	7 002	74.0	48.7	37.5
..	..	..	5.4	6.0	34.0	29.8	..	..	12 818	29.0	4.3	3.4
9 900	-8.3	-6.2	6.1	7.0	11.2	8.7	10.0	10.0	3 462	10.0	2.3	2.2
5 400	1.9	0.9	7.2	7.1	8.1	0.7	17.1	15.1	1 594	-29.0	5.3	4.0
21 000	-2.3	-3.1	2.8	3.2	12.7	8.7	4.3	4.4	6 994	38.0	2.2	2.7
21 225	22.9	8.0	5.3	6.3	9.6	5.5	4.1	5.0	3 579	-5.0	8.5	9.3
3 899	9.2	9.4	3.4	2.8	10.5	10.4	21.5	18.5	2 575	..	2.2	1.8
27 568	15.5	4.1	3.3	3.6	-2.7	-3.5	2.9	3.4	1 636	20.0	7.1	8.5
40 000	..	..	5.7	6.4	10.2	9.5	1.9	..	2 415	72.0	4.0	2.5
21 334	..	..	2.7	3.4	10.2	2.3	3.5	..	2 319	..	21.6	..
18 092	29.0	11.7	3.6	2.8	21.9	12.3	3.9	3.5	11 052	31.0	8.6	5.8
6 294	3.6	..	8.9	8.3	8.5	8.0	11.2	10.0	..	..	5.9	5.4
9 915	..	..	6.6	5.9	7.3	5.1	7.1	..	1 065	..	5.8	4.1
2 398	-2.6	-6.0	13.9	15.7	9.3	4.3	29.1	28.5	710	..	3.2	2.7
43 839	1.9	-1.0	3.6	3.6	6.2	4.1	1.6	1.6	1 243	..	7.0	6.0
20 060	..	..	1.3	1.5	4.1	6.7	3.4	..	2 818	..	1.4	1.7
..	..	..	0.9	0.9	3.7	4.7	..	..	4 526	..	2.5	4.1

## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Electronics &amp; Electrical Equipment (25) continued</b>									
47	Chi Mei Optoelectronic	470	Taiwan	64	35.2	..	2 820	45.7	..
48	American Power Conversion	478	USA	63	26.6	16.1	1 251	16.1	5.8
49	Hamamatsu Photonics	479	Japan	63	0.4	5.4	506	15.8	4.0
50	Yamatake	507	Japan	58	-8.8	-2.3	1 220	1.2	-1.5
51	Trimble Navigation	513	USA	57	14.6	7.2	492	23.6	12.0
52	Energizer	525	USA	54	43.7	16.8	2 069	26.0	18.4
53	Cooper Industries	542	USA	52	11.4	8.2	3 283	9.9	2.0
54	Cae	552	Canada	51	3.8	-7.6	606	-9.7	-4.3
55	Analogic	617	USA	43	0.0	9.4	262	-24.5	-0.4
56	Veeco Instruments	620	USA	43	19.4	-0.8	287	39.3	-4.6
57	SPX	625	USA	43	-39.5	-18.9	3 217	-14.0	2.1
58	Vishay Intertechnology	671	USA	38	12.4	19.1	1 776	11.2	13.4
59	Horiba	678	Japan	37	26.8	1.3	611	8.3	3.0
60	Varian	692	USA	36	6.7	11.0	674	8.0	6.9
61	Orbotech	695	Israel	35	21.6	-1.4	232	38.1	1.5
				<b>5 233</b>	<b>7.7</b>	<b>1.6</b>	<b>204 230</b>	<b>13.8</b>	<b>5.9</b>
<b>Engineering &amp; Machinery (26)</b>		<i>number of companies for calculation</i>		<b>40</b>	<b>40</b>	<b>39</b>	<b>40</b>	<b>40</b>	<b>39</b>
1	Mitsubishi Heavy	57	Japan	715	-9.1	-5.1	17 041	-8.5	-8.0
2	Caterpillar	63	USA	683	38.7	10.1	22 256	32.9	13.9
3	Deere	92	USA	450	5.9	1.2	13 002	32.4	10.5
4	Komatsu	117	Japan	334	9.0	1.8	10 302	19.9	11.5
5	Danaher	172	USA	216	42.0	35.2	5 069	30.1	22.1
6	Cummins	214	USA	177	20.5	5.7	6 208	34.0	14.1
7	IHI	236	Japan	161	1.8	-0.3	7 520	2.8	-2.1
8	Kubota	241	Japan	158	-5.6	-10.1	7 059	5.7	0.2
9	Navistar International	247	USA	152	-4.2	-1.0	6 966	29.0	12.1
10	ITT Industries	297	USA	115	28.5	15.9	4 976	20.2	13.1
11	Ingersoll-Rand	308	USA	110	-26.8	-11.5	6 911	-4.9	-1.0
12	Kawasaki Heavy Industries	313	Japan	106	-4.9	-5.6	8 330	-6.4	3.0
13	SMC	318	Japan	104	10.1	0.7	1 775	19.5	-0.6
14	American Standard Companies	321	USA	103	9.4	1.7	6 996	11.0	8.4
15	NTN	335	Japan	97	10.5	8.4	2 566	4.3	1.6
16	Illinois Tool Works	349	USA	91	15.6	6.5	8 631	16.9	8.1
17	Rieter	364	Switzerland	88	5.1	-1.9	2 053	1.8	0.0
18	Glory	370	Japan	85	17.3	2.7	1 269	50.7	5.2
19	Hyundai Heavy Industries	374	South Korea	83	15.9	13.3	8 460	24.6	17.2
20	Dainippon Screen Mfg	388	Japan	80	3.4	3.8	1 378	14.3	-7.5
21	Ebara	396	Japan	79	-22.3	-18.2	3 646	-2.0	-5.4
22	AGCO	407	USA	76	45.2	27.9	3 880	50.9	27.5
23	Paccar	408	USA	76	27.3	11.7	8 384	39.1	23.2
24	Saurer	410	Switzerland	75	0.7	-1.1	1 614	-7.6	1.2
25	Schindler	416	Switzerland	74	-18.0	-3.0	5 351	8.4	0.9
26	Georg Fischer	417	Switzerland	74	1.8	-5.7	2 290	7.4	-3.2
27	Parker Hannifin	438	USA	70	1.6	-6.3	5 229	10.9	5.9
28	NSK	483	Japan	63	5.0	-2.0	3 749	-0.1	-0.7
29	Mettler-Toledo International	490	Switzerland	61	6.7	8.8	1 033	7.6	6.9
116	Yaskawa Electric	528	Japan	54	9.0	..	1 889	16.3	..
31	Shimadzu	544	Japan	52	9.6	-3.3	1 565	6.7	2.9
32	Amada	545	Japan	51	12.9	9.0	1 182	13.2	-4.9
33	Sumitomo Heavy Industries	596	Japan	45	8.0	1.1	3 466	0.3	-2.1

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
12 326	61.6	..	2.3	2.4	15.1	10.3	5.2	6.2	5 121	..	50.5	41.4
6 455	1.4	1.3	5.0	4.6	12.6	15.7	9.8	7.8	3 812	72.0	1.8	1.5
3 131	3.8	2.5	12.4	14.4	11.8	6.4	20.1	20.8	1 074	17.0	9.9	9.4
6 691	-5.7	-0.8	4.8	5.3	3.8	7.4	8.7	9.0	967	75.0	1.1	0.8
2 160	0.5	1.0	11.6	12.5	11.8	8.8	26.4	23.1	1 431	38.0	1.8	2.0
12 955	-11.3	..	2.6	2.3	13.8	12.6	4.2	2.6	3 254	..	4.3	3.3
26 863	-1.2	-4.2	1.6	1.6	11.1	6.6	1.9	1.7	4 397	-29.0	2.3	2.0
5 000	-13.0	-7.8	8.4	7.3	-40.3	10.3	10.2	8.5	1 246	44.0	11.9	8.6
1 700	-5.6	-2.4	16.5	12.4	1.9	15.6	25.4	24.0	498	..	6.1	3.5
1 261	2.9	-4.5	15.0	17.5	-3.0	-3.4	34.0	29.3	420	..	3.8	2.9
23 800	7.2	0.5	1.3	1.9	2.4	11.2	1.8	3.2	2 412	5.0	0.9	1.4
25 700	2.0	6.3	2.1	2.1	3.6	4.2	1.5	1.3	1 730	..	6.6	5.8
3 808	3.2	2.5	6.0	5.1	6.4	6.6	9.7	7.9	709	..	3.1	3.4
4 400	2.3	2.4	5.3	5.4	9.9	9.0	8.1	7.8	860	..	2.5	3.2
1 520	10.0	-2.5	15.2	17.3	9.8	-3.0	23.2	21.0	582	..	1.7	1.8
<b>933 691</b>	<b>2.8</b>	<b>0.2</b>	<b>2.6</b>	<b>2.7</b>	<b>7.4</b>	<b>5.0</b>	<b>5.6</b>	<b>5.3</b>	<b>184 210</b>	<b>22.9</b>	<b>3.4</b>	<b>3.4</b>
40	40	37	40	40	40	40	40	40	40	29	39	39
59 949	-2.2	-2.2	4.2	4.2	3.1	3.6	11.9	12.8	6 728	4.0	4.8	4.7
73 033	5.6	1.1	3.1	2.9	10.7	7.4	9.3	7.1	27 904	51.0	7.0	7.8
46 500	7.6	1.1	3.5	4.3	8.5	5.6	9.7	9.8	12 989	13.0	2.1	2.4
33 008	4.3	2.4	3.2	3.6	7.6	2.8	10.1	9.7	8 208	94.0	5.1	5.0
35 000	16.7	15.0	4.3	3.9	16.0	16.0	6.2	5.1	12 785	11.0	1.7	1.5
28 100	16.1	4.1	2.9	3.2	6.6	2.8	6.3	6.1	2 968	35.0	1.8	1.8
22 768	-3.4	..	2.1	2.2	-3.7	-1.2	7.1	6.7	1 552	12.0	..	..
22 916	3.2	-0.2	2.2	2.5	9.0	2.6	6.9	7.5	6 162	36.0	2.1	2.8
14 800	4.2	-3.6	2.2	2.9	4.6	1.2	10.3	11.2	1 735	-5.0	2.4	2.8
44 000	12.8	5.0	2.3	2.2	9.0	9.5	2.6	2.3	7 367	36.0	2.4	2.7
36 000	-14.3	-13.6	1.6	2.1	16.2	9.5	3.1	3.6	9 995	14.0	1.2	1.1
29 306	2.3	0.2	1.3	1.3	1.3	1.7	3.6	3.9	2 258	44.0	2.8	2.5
11 162	3.0	2.0	5.9	6.4	22.2	12.1	9.3	8.7	6 273	20.0	2.5	3.0
61 500	2.5	0.8	1.5	1.5	4.9	7.6	1.7	1.6	6 974	17.0	2.3	2.0
11 885	0.6	-2.0	3.8	3.6	5.8	2.6	8.2	7.5	2 043	..	10.2	7.2
49 000	3.2	-2.0	1.1	1.1	17.5	16.3	1.9	1.7	18 207	-12.0	2.4	2.6
13 557	1.8	1.5	4.3	4.1	6.6	6.4	6.5	6.3	1 029	20.0	3.8	4.1
5 038	3.4	2.8	6.7	8.6	16.7	9.5	16.9	14.9	931	..	2.5	3.7
25 958	0.2	-0.2	1.0	1.1	1.0	4.2	3.2	2.8	3 534	222.0	4.4	3.6
4 460	-0.2	-1.7	5.8	6.4	1.8	-3.1	17.9	17.3	1 297	47.0	0.9	1.1
15 207	-4.8	-0.7	2.2	2.7	0.5	-6.8	5.2	6.3	968	4.0	2.7	3.8
14 300	26.5	8.2	2.0	2.0	6.1	5.0	5.3	4.6	1 393	0.0	1.5	0.4
20 500	20.6	8.6	0.9	1.0	14.4	12.4	3.7	3.5	8 974	16.0	5.6	4.5
8 852	-13.9	-8.4	4.7	4.3	4.9	4.7	8.5	7.3	802	42.0	3.8	2.9
39 269	-1.2	-2.5	1.4	1.8	6.3	5.4	1.9	2.3	3 857	42.0	1.0	1.1
12 324	-7.0	-6.2	3.2	3.4	4.6	-2.9	6.0	5.5	877	44.0	5.2	4.4
48 447	3.5	1.5	1.3	1.5	7.9	5.9	1.4	1.5	5 833	16.0	2.0	2.5
19 772	-2.8	-5.3	1.7	1.6	4.5	-0.1	3.2	2.9	2 132	20.0	4.1	4.7
8 700	0.6	0.8	5.9	6.0	11.9	11.6	7.0	6.6	1 562	15.0	2.0	2.1
7 635	-1.1	..	2.9	3.1	4.1	-0.9	7.1	6.5	1 214	37.0	2.3	2.7
7 930	0.6	-0.4	3.3	3.2	5.8	4.6	6.5	6.0	1 286	..	2.0	2.1
4 793	16.0	2.8	4.4	4.4	2.7	-5.7	10.7	11.0	2 219	..	2.3	3.1
11 318	-3.9	-3.0	1.3	1.2	4.5	1.7	4.0	3.5	2 496	105.0	2.3	2.5

## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Engineering &amp; Machinery (26) continued</b>									
34	Disco	598	Japan	45	135.8	36.9	433	25.1	25.7
35	Snap-On	602	USA	45	1.7	3.7	1 714	4.3	3.6
36	Pall	632	USA	42	9.7	0.7	1 303	9.8	12.8
37	Sauer-Danfoss	664	USA	38	19.5	10.9	1 033	24.6	18.0
38	Timken	677	USA	37	-5.5	-2.5	3 321	19.2	22.7
39	York International	699	USA	35	12.8	1.1	3 318	10.6	4.7
40	Bucher Industries	700	Switzerland	35	7.1	-1.6	1 062	6.9	3.3
				<b>33 599</b>	<b>9.6</b>	<b>5.7</b>	<b>832 164</b>	<b>6.5</b>	<b>5.4</b>
<b>Automobiles &amp; parts (31)</b>		<i>number of companies for calculation</i>		<b>44</b>	<b>43</b>	<b>39</b>	<b>44</b>	<b>44</b>	<b>41</b>
1	Ford Motor	2	USA	5 444	-1.3	0.0	126 287	4.5	1.9
2	Toyota Motor	3	Japan	5 422	10.7	8.6	133 197	11.9	9.0
3	General Motors	4	USA	4 782	14.0	1.6	142 373	4.3	3.0
4	Honda Motor	12	Japan	3 358	4.2	5.8	62 106	6.0	5.5
5	Nissan Motor	18	Japan	2 544	18.0	15.2	53 340	8.8	6.9
6	Delphi	30	USA	1 545	5.0	7.3	21 058	1.9	3.1
7	Denso	31	Japan	1 543	17.5	6.7	18 398	9.8	8.3
8	Hyundai Motor	37	South Korea	1 379	102.2	25.7	37 739	14.0	10.0
9	Visteon	65	USA	659	-0.8	-7.1	13 726	5.6	1.5
10	Aisin Seiki	66	Japan	640	11.2	14.8	11 525	14.0	12.5
11	Mazda Motor	68	Japan	630	0.0	1.6	20 937	23.3	13.1
12	Suzuki Motor	78	Japan	544	25.4	..	15 788	9.1	11.2
13	Bridgestone	82	Japan	523	2.7	5.1	17 351	4.9	4.2
14	Mitsubishi Motors	87	Japan	495	-11.7	..	18 089	-35.1	-8.4
15	Yamaha Motor	91	Japan	451	12.1	13.5	7 325	0.7	4.9
16	Fuji Heavy Industries	96	Japan	413	-4.3	7.3	10 335	4.9	3.1
17	Johnson Controls	102	USA	379	6.4	14.7	19 536	17.3	13.0
18	Goodyear	131	USA	278	7.9	0.2	13 515	21.5	9.1
19	Toyota Industries	175	Japan	212	-0.5	4.1	8 360	8.9	14.9
20	Dana	191	USA	198	6.7	1.1	6 679	14.0	-4.4
21	Calsonic Kansei	209	Japan	184	14.2	9.6	4 446	13.6	12.9
22	Toyoda Gosei	234	Japan	163	..	8.8	2 850	15.1	10.7
23	Lear	253	USA	145	15.5	-0.2	12 478	7.7	7.6
24	Harley-Davidson	259	USA	137	11.3	32.0	3 914	8.5	14.5
25	TRW Automotive	267	USA	128	5.8	..	8 837	6.1	..
26	ArvinMeritor	296	USA	115	-6.6	4.7	5 910	3.1	5.7
27	Sumitomo Rubber Industries	303	Japan	113	11.9	3.9	3 379	4.5	2.7
28	Nissan Diesel Motor	305	Japan	111	13.0	7.1	3 252	18.8	3.8
29	Proton Holdings Berhad	315	Malaysia	105	31.5	..	1 253	-30.2	..
30	Federal-Mogul	325	USA	101	11.4	6.0	4 542	11.3	4.2
31	NGK Spark Plug	327	Japan	100	2.1	3.9	1 643	-0.1	0.7
32	Yokohama Rubber	328	Japan	99	10.4	5.3	2 884	0.3	1.2
33	BorgWarner	350	USA	91	4.2	5.6	2 594	14.9	14.5
34	Toyo Tire	446	Japan	69	4.8	3.7	1 839	0.4	1.2
35	Ballard Power Systems	460	Canada	68	-11.7	3.5	60	-31.8	30.5
36	China Motor	472	Taiwan	64	15.5	21.3	1 661	30.8	7.5
37	Akebono Brake Industry	474	Japan	64	1.9	-1.7	1 015	11.7	3.8
38	Showa	517	Japan	56	11.2	9.1	1 576	11.6	12.4
39	American Axle & Manufacturing	554	USA	51	13.0	9.9	2 648	-2.3	5.0
40	Polaris Industries	605	USA	45	17.3	19.4	1 305	10.5	5.5

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
1 678	0.5	..	10.4	5.5	15.1	13.3	26.8	11.4	990	..	18.9	6.4
11 500	-7.3	-4.0	2.6	2.7	6.2	4.4	3.9	3.5	1 522	..	1.6	1.3
10 300	-1.9	3.1	3.2	3.2	12.3	10.4	4.1	3.7	2 710	..	3.5	3.9
8 300	15.3	6.9	3.7	3.9	6.4	4.3	4.6	4.4	703	..	5.6	5.3
25 931	-0.3	11.4	1.1	1.4	5.5	2.9	1.4	1.5	1 913	..	3.4	3.1
23 200	4.0	-0.6	1.1	1.0	3.0	1.4	1.5	1.4	1 303	..	1.8	2.1
5 795	-2.7	0.2	3.3	3.3	5.6	3.8	6.0	5.5	517	..	2.3	2.5
<b>2 515 624</b>	<b>-0.1</b>	<b>-0.4</b>	<b>4.0</b>	<b>3.9</b>	<b>6.3</b>	<b>6.2</b>	<b>12.6</b>	<b>11.7</b>	<b>334 469</b>	<b>0.8</b>	<b>5.5</b>	<b>4.0</b>
36	36	30	44	43	43	44	36	35	44	31	42	42
324 864	-0.8	-2.9	4.3	4.6	6.2	4.8	16.8	16.8	13 584	-29.0	3.9	4.7
265 753	0.5	2.5	4.1	4.1	9.8	10.2	20.4	18.5	106 171	1.0	10.4	..
324 000	-0.6	-3.9	3.4	3.1	6.4	5.8	14.8	12.9	14 524	-18.0	4.0	4.0
137 827	4.7	4.6	5.4	5.5	8.7	8.8	24.4	24.5	35 907	3.0	4.3	3.5
123 748	-3.0	-2.6	4.8	4.4	9.9	9.5	20.6	16.9	35 606	1.0	5.8	5.5
185 200	-2.5	-1.7	7.3	7.1	-1.5	0.1	8.3	7.7	2 239	-43.0	3.4	3.6
95 461	6.8	3.8	8.4	7.8	7.1	9.8	16.2	14.7	17 126	8.0	7.7	7.7
..	..	..	3.7	2.1	5.0	6.2	..	..	13 837	98.0	6.4	6.5
70 200	-2.5	-3.9	4.8	5.1	-2.2	-6.1	9.4	9.2	947	-3.0	4.4	5.0
47 600	7.9	9.4	5.6	5.7	4.8	7.5	13.4	13.0	5 421	14.0	9.2	8.2
35 627	-1.5	-3.5	3.0	3.7	2.5	1.9	17.7	17.4	3 567	14.0	1.4	2.6
38 493	..	38.6	3.4	3.0	3.4	2.9	14.1	..	6 795	-2.0	3.5	3.9
113 699	4.6	2.8	3.0	3.1	7.7	7.5	4.6	4.7	12 139	7.0	7.4	6.1
43 624	-3.6	..	2.7	2.0	-3.7	1.9	11.3	12.4	3 968	..	5.4	4.9
33 694	5.1	8.4	6.2	5.5	7.7	5.8	13.4	12.5	4 115	33.0	3.3	3.5
27 296	-0.7	1.0	4.0	4.4	3.4	4.2	15.1	15.7	2 502	-20.0	8.7	8.4
123 000	4.2	3.2	1.9	2.1	4.9	4.9	3.1	3.0	8 243	4.0	3.2	2.9
84 000	-2.3	-4.5	2.1	2.3	4.2	-2.4	3.3	3.0	2 287	62.0	2.8	2.5
27 431	9.6	9.1	2.5	2.8	4.4	3.8	7.7	8.5	7 001	27.0	6.7	8.1
45 900	-22.2	-13.0	3.0	3.2	1.5	6.0	4.3	3.1	1 671	-21.0	3.6	3.8
15 613	5.5	-2.6	4.1	4.1	2.7	3.1	11.8	10.9	1 185	3.0	3.6	4.8
15 483	14.8	13.1	5.7	..	6.2	9.0	10.5	..	1 666	..	10.4	8.7
110 000	-0.9	-1.8	1.2	1.1	4.3	4.5	1.3	1.1	1 980	-29.0	2.5	2.4
8 900	1.1	1.0	3.5	3.4	25.5	23.3	15.4	13.9	10 519	-19.0	4.0	4.6
59 900	-1.5	..	1.4	1.5	3.4	3.0	2.1	2.0	2 127	..	4.1	3.7
31 000	-3.1	-2.1	1.9	2.1	1.2	4.0	3.7	3.8	1 037	2.0	1.9	2.5
..	..	..	3.3	3.1	8.6	7.5	..	6.5	2 042	..	7.8	6.5
..	..	..	3.4	3.6	-9.2	0.5	..	..	756	..	4.2	4.3
8 956	-5.4	..	8.4	4.5	7.5	13.8	11.7	8.4	980	..	16.4	11.0
44 700	-0.4	-3.0	2.2	2.2	-1.5	-0.7	2.3	2.0	32	83.0	4.3	5.4
9 284	-0.2	-0.7	6.1	5.9	8.7	0.8	10.7	10.5	2 303	37.0	4.5	4.5
13 264	2.2	-0.2	3.4	3.1	4.6	5.3	7.5	6.9	1 084	11.0	5.9	4.9
14 500	1.4	3.7	3.5	3.9	9.7	9.5	6.2	6.1	2 422	25.0	5.8	5.6
6 263	-0.3	-2.1	3.7	3.6	2.5	3.8	11.0	10.4	645	39.0	10.2	7.9
..	..	..	112.5	86.8	-222.6	-131.8	..	69.5	449	-27.0	8.3	4.5
..	..	..	3.8	4.4	..	12.4	..	..	999	..	..	1.3
4 600	1.0	..	6.3	6.9	6.3	3.3	13.8	13.7	502	38.0	3.7	5.1
7 556	11.2	..	3.6	3.6	6.5	7.6	7.4	7.4	800	19.0	3.0	4.0
10 900	-7.6	-2.4	1.9	1.6	7.3	9.5	4.6	3.8	1 037	..	6.7	6.2
3 600	5.9	0.5	3.4	3.2	9.8	10.4	12.4	11.2	1 691	..	5.0	3.8

## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Automobiles &amp; parts (31) continued</b>									
41	AvtoVAZ	621	Russia	43	13.2	11.7	3 471	9.5	16.3
42	Nissin Kogyo	651	Japan	40	21.1	..	897	9.5	..
43	Ichikoh Industries	686	Japan	36	-3.8	6.6	852	1.2	1.4
44	Yulon Motor	697	Taiwan	35	-8.3	-4.8	1 194	8.4	7.7
				<b>1 486</b>	<b>3.2</b>	<b>5.5</b>	<b>51 661</b>	<b>5.2</b>	<b>4.6</b>
<b>Household goods &amp; textiles (34)</b>									
		<i>number of companies for calculation</i>		15	15	14	15	15	15
1	Whirlpool	159	USA	232	-3.1	10.9	9 726	8.6	8.5
2	Yamaha	235	Japan	162	0.3	2.1	3 874	2.8	1.3
3	Bandai	264	Japan	132	23.9	10.1	1 890	7.4	6.7
4	Mattel	273	USA	126	2.2	-0.9	3 754	2.9	2.0
5	Hasbro	293	USA	116	9.8	7.8	2 205	-4.5	1.6
6	Swatch	323	Switzerland	102	-3.7	..	2 576	-0.0	-1.6
7	Brunswick	336	USA	97	10.9	11.0	3 847	26.6	15.8
8	Black & Decker	366	USA	87	18.1	6.2	3 972	20.4	7.6
9	Newell Rubbermaid	400	USA	78	-14.8	16.4	4 965	-12.9	-0.8
10	Maytag	424	USA	72	-8.2	5.0	3 474	-1.4	3.0
11	Citizen Watch	454	Japan	68	12.6	-6.0	2 698	12.5	-0.2
12	Yue Yuen Industrial	464	Hong Kong	66	6.1	17.4	2 001	8.4	15.2
13	Toyobo	466	Japan	65	3.2	-0.7	2 679	-0.9	-2.5
14	Shimano	610	Japan	44	-0.9	-10.3	1 215	17.8	10.5
15	Reebok International	650	USA	40	7.9	9.5	2 785	8.6	8.1
				<b>262</b>	<b>7.7</b>	<b>..</b>	<b>15 182</b>	<b>4.7</b>	<b>2.4</b>
<b>Beverages (41)</b>									
		<i>number of companies for calculation</i>		2	2	..	2	2	2
1	Kirin Brewery	184	Japan	203	6.4	6.9	8 788	5.0	3.6
2	Asahi Breweries	500	Japan	60	12.2	..	6 394	4.2	0.9
				<b>1 630</b>	<b>11.9</b>	<b>7.0</b>	<b>93 595</b>	<b>1.0</b>	<b>2.5</b>
<b>Food producers (43)</b>									
		<i>number of companies for calculation</i>		8	8	7	8	8	7
1	Nestle	50	Switzerland	914	17.3	6.7	56 138	-1.4	0.8
2	Ajinomoto	185	Japan	202	6.2	2.4	7 464	5.2	4.6
3	Meiji Seika Kaisha	285	Japan	120	-5.9	-1.8	2 648	4.3	0.9
4	General Mills	292	USA	116	6.0	24.0	8 144	5.4	16.1
5	Kellogg	309	USA	110	17.5	10.6	7 073	9.1	2.8
6	Campbell Soup	449	USA	68	5.7	13.9	5 230	6.5	2.2
7	Meiji Dairies	535	Japan	53	7.4	..	5 183	-1.4	..
8	Yakult Honsha	585	Japan	46	11.3	11.4	1 715	-1.6	2.0
				<b>4 748</b>	<b>8.0</b>	<b>10.0</b>	<b>61 264</b>	<b>11.5</b>	<b>10.8</b>
<b>Health (44)</b>									
		<i>number of companies for calculation</i>		22	22	21	22	22	21
9	Abbott Laboratories	39	USA	1 248	-2.1	2.5	14 479	0.0	6.5
10	Medtronic	60	USA	700	11.7	13.8	7 397	10.6	16.2
11	Boston Scientific	95	USA	419	25.9	27.4	4 138	61.8	28.1
12	Baxter International	100	USA	380	-6.5	6.6	6 996	6.6	7.5
13	Guidant	101	USA	380	-0.5	10.6	2 770	1.8	11.6
14	St Jude Medical	180	USA	207	16.9	19.8	1 688	18.7	19.4
15	Becton Dickinson	222	USA	173	0.2	3.6	3 631	9.0	9.5
16	Stryker	243	USA	155	17.1	14.1	3 136	17.6	17.9
17	Beckman Coulter	251	USA	147	2.9	1.8	1 772	9.9	6.7
18	Zimmer	280	USA	123	57.6	..	2 193	56.8	..

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
..	..	..	1.2	1.2	4.2	5.1	..	..	583	..	8.8	8.4
..	..	..	4.4	4.0	10.0	11.4	..	..	597	..	6.9	7.6
3 688	..	..	4.2	4.5	-0.2	4.8	9.8	..	196	..	6.9	8.4
..	..	..	3.0	3.5	14.3	18.3	..	..	1 187	..	..	..
<b>527 679</b>	<b>1.2</b>	<b>4.1</b>	<b>2.9</b>	<b>2.9</b>	<b>7.9</b>	<b>6.8</b>	<b>2.7</b>	<b>2.7</b>	<b>49 673</b>	<b>12.7</b>	<b>3.4</b>	<b>3.6</b>
14	14	12	15	15	15	15	14	14	15	13	15	15
68 125	-0.4	4.7	2.4	2.7	5.6	6.1	3.4	3.5	4 148	31.0	3.9	3.5
18 842	1.6	..	4.2	4.3	9.4	4.6	8.6	8.7	2 549	13.0	3.5	3.0
2 933	12.9	3.7	7.0	6.1	10.0	9.7	45.1	41.1	1 644	-7.0	4.2	3.1
25 000	0.0	-2.5	3.4	3.4	14.8	15.7	5.0	4.9	5 290	-3.0	2.8	4.0
6 000	-13.0	-9.1	5.2	4.6	9.7	10.0	19.3	15.3	2 752	17.0	2.6	2.0
20 831	0.6	1.2	4.0	4.1	16.4	14.9	4.9	5.1	6 822	19.0	7.3	5.1
25 600	10.2	7.3	2.5	2.9	8.1	5.9	3.8	3.7	3 228	20.0	3.3	3.9
26 200	18.6	4.9	2.2	2.2	11.7	9.7	3.3	3.3	5 176	25.0	2.2	2.3
31 100	-22.3	-14.3	1.6	1.6	1.5	0.8	2.5	2.3	5 033	15.0	1.8	3.9
16 900	-18.1	-8.1	2.1	2.2	0.7	4.6	4.3	3.8	1 117	-6.0	2.0	4.2
17 987	7.4	-2.7	2.5	2.5	9.9	4.1	3.8	3.6	1 958	-14.0	4.3	3.9
252 000	4.1	10.5	3.3	3.4	10.6	12.9	0.3	0.3	3 727	26.0	5.5	6.8
..	..	..	2.4	2.3	1.3	-3.8	..	6.4	1 244	-3.0	3.7	5.0
7 059	..	..	3.6	4.3	16.8	12.9	6.2	..	2 510	..	4.4	3.8
9 102	17.3	10.8	1.4	1.5	7.6	7.2	4.4	4.8	2 475	..	1.5	1.3
<b>37 909</b>	<b>1.1</b>	<b>1.1</b>	<b>1.7</b>	<b>1.7</b>	<b>9.6</b>	<b>7.9</b>	<b>6.9</b>	<b>6.5</b>	<b>11 414</b>	<b>2.7</b>	<b>5.0</b>	<b>..</b>
2	2	2	2	2	2	2	2	2	2	2	2	..
22 160	-3.0	-0.0	2.3	2.3	9.1	7.6	9.1	8.3	7 073	-1.0	5.6	5.1
15 749	7.5	2.6	0.9	0.9	10.2	8.2	3.8	3.6	4 341	9.0	4.1	..
<b>370 351</b>	<b>-1.6</b>	<b>3.4</b>	<b>1.7</b>	<b>1.6</b>	<b>11.5</b>	<b>10.9</b>	<b>4.1</b>	<b>3.5</b>	<b>130 992</b>	<b>10.2</b>	<b>3.9</b>	<b>4.1</b>
7	7	5	8	8	8	8	7	7	8	6	8	8
247 000	-2.4	2.4	1.6	1.4	11.6	10.5	3.7	3.1	84 909	12.0	3.8	3.8
24 861	0.3	1.6	2.7	2.7	4.8	6.8	8.1	7.7	4 927	-12.0	4.5	5.5
..	..	..	4.5	5.0	1.3	1.2	..	..	1 471	22.0	3.2	4.8
27 580	1.0	35.8	1.4	1.4	18.9	18.4	4.2	4.0	12 845	2.0	5.7	6.8
25 000	-1.0	-1.8	1.5	1.4	17.4	17.5	4.4	3.7	13 770	9.0	2.9	2.8
24 000	-4.0	0.0	1.3	1.3	15.5	16.1	2.9	2.6	9 223	19.0	4.1	4.2
7 482	-3.5	..	1.0	0.9	2.3	1.6	7.1	6.4	1 231	..	2.3	3.5
14 428	7.6	..	2.7	2.4	10.1	10.0	3.2	3.1	2 616	..	3.3	4.3
<b>312 744</b>	<b>-2.7</b>	<b>1.4</b>	<b>7.8</b>	<b>8.0</b>	<b>19.1</b>	<b>19.1</b>	<b>15.2</b>	<b>13.7</b>	<b>259 163</b>	<b>13.5</b>	<b>5.5</b>	<b>5.9</b>
22	22	21	22	22	22	22	22	22	22	16	21	22
60 600	-16.1	-5.3	8.6	8.8	22.2	20.0	20.6	17.7	53 224	18.0	6.6	6.3
33 000	6.5	6.0	9.5	9.4	24.8	30.8	21.2	20.2	49 024	11.0	4.5	4.7
17 500	16.7	6.7	10.1	13.0	27.7	19.8	23.9	22.2	17 083	-27.0	4.9	5.4
48 000	-9.6	0.0	5.4	6.2	5.6	14.0	7.9	7.7	18 452	36.0	5.9	8.8
12 000	0.0	-0.2	13.7	14.0	21.8	10.4	31.6	31.8	17 332	36.0	5.7	6.7
7 900	6.9	12.4	12.3	12.5	23.2	23.6	26.3	24.0	12 157	38.0	3.9	2.5
25 005	0.9	0.3	4.8	5.2	13.4	16.5	6.9	7.0	9 987	13.0	5.4	5.8
15 891	7.6	7.4	5.0	5.0	17.0	18.5	9.8	9.0	15 588	11.0	4.4	4.0
7 300	-26.3	-10.2	8.3	8.9	13.9	15.2	20.2	14.4	2 463	-2.0	6.6	6.1
6 600	1.5	..	5.6	5.6	25.6	26.6	18.6	12.0	14 611	7.0	8.1	8.4



## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Health (44) continued</b>									
19	Bausch & Lomb	286	USA	120	8.4	10.0	1 642	10.5	9.3
20	Terumo	314	Japan	106	29.1	18.2	1 545	7.3	6.9
21	CR Bard	377	USA	82	27.7	27.9	1 218	15.6	11.9
22	Synthes	385	Switzerland	81	70.1	20.8	1 309	45.0	9.9
23	Bio-Rad Laboratories	390	USA	80	14.9	12.3	802	8.7	10.1
24	Edwards Lifesciences	471	USA	64	19.5	16.5	685	8.2	10.4
25	Invitrogen	533	USA	54	33.9	24.2	753	31.6	17.6
26	Varian Medical Systems	537	USA	53	21.8	18.3	909	18.7	16.9
27	Waters	576	USA	48	7.1	11.9	813	15.3	8.8
28	Biomet	580	USA	48	17.3	14.7	1 188	16.1	16.1
29	Hillbrand Industries	642	USA	41	0.0	9.2	1 346	-10.4	-4.6
30	WebMD	652	USA	40	26.0	11.0	854	20.5	18.0
				<b>2 681</b>	<b>6.1</b>	<b>1.8</b>	<b>92 104</b>	<b>11.6</b>	<b>6.2</b>
<b>Personal care &amp; household (47)</b>		<i>number of companies for calculation</i>		<i>11</i>	<i>11</i>	<i>11</i>	<i>11</i>	<i>11</i>	<i>11</i>
1	Procter & Gamble	38	USA	1 326	8.2	0.6	37 821	18.5	9.4
2	Kao	127	Japan	286	3.3	1.9	6 726	3.8	3.7
3	Kimberly-Clark	182	USA	206	-0.3	-1.8	11 097	5.1	1.3
4	Colgate-Palmolive	229	USA	169	11.9	7.4	7 787	6.9	3.9
5	Gillette	244	USA	154	3.5	3.8	7 708	13.2	5.3
6	Givaudan	261	Switzerland	135	-4.2	1.3	1 734	-1.3	3.8
7	International Flavors & Fragrances	266	USA	129	10.0	9.0	1 496	6.9	3.3
8	Shiseido	284	Japan	120	-4.7	-0.5	4 594	2.5	2.7
9	Clorox	487	USA	62	10.5	7.8	3 181	4.3	3.5
10	Estee Lauder	565	USA	49	10.5	2.6	4 260	13.1	7.9
11	Avon Products	582	USA	47	28.6	11.6	5 700	13.9	9.2
				<b>39 409</b>	<b>13.2</b>	<b>12.7</b>	<b>255 579</b>	<b>8.9</b>	<b>4.9</b>
<b>Pharmaceuticals &amp; Biotechnology (48)</b>		<i>number of companies for calculation</i>		<i>93</i>	<i>92</i>	<i>89</i>	<i>93</i>	<i>92</i>	<i>89</i>
1	Pfizer	1	USA	5 653	7.8	16.6	38 637	16.2	17.6
2	Johnson & Johnson	8	USA	3 828	11.1	13.2	34 835	13.1	12.8
3	Roche	13	Switzerland	3 295	6.9	9.4	20 233	0.2	2.4
4	Novartis	14	Switzerland	3 095	12.0	4.5	20 782	13.6	0.1
5	Merck	15	USA	2 950	26.2	17.7	16 876	2.0	-21.7
6	Eli Lilly	24	USA	1 980	14.5	6.4	10 195	10.1	6.3
7	Bristol-Myers Squibb	27	USA	1 839	9.7	4.6	14 258	-7.2	2.2
8	Wyeth	28	USA	1 810	17.5	9.6	12 771	9.5	7.1
9	Amgen	32	USA	1 492	22.5	32.8	7 762	26.3	38.0
10	Schering-Plough	41	USA	1 182	9.4	7.0	6 086	-0.7	-5.5
11	Takeda Chemical <i>(now Takeda Pharmaceutical)</i>	48	Japan	931	4.4	13.0	7 800	3.8	4.1
12	Sankyo	70	Japan	623	0.1	3.3	4 282	4.6	3.0
13	Fujisawa Pharmaceutical	81	Japan	529	18.0	12.3	2 839	3.5	9.9
14	Yamanouchi Pharmaceutical <i>(now Astellas Pharmaceutical)</i>	84	Japan	503	4.8	8.7	3 670	0.9	3.7
15	Biogen Idec	85	USA	498	190.2	98.7	1 627	225.4	100.8
16	Eisai	86	Japan	495	15.6	11.6	3 591	7.2	11.4
17	Serono	90	Switzerland	451	25.7	25.7	1 808	32.3	21.3
18	Daiichi Pharmaceutical	94	Japan	424	10.6	13.9	2 317	0.2	0.6
19	Mitsubishi Pharma	107	Japan	363	4.7	38.5	1 690	-16.2	9.1
20	Chiron	121	USA	304	5.6	7.2	1 268	-2.5	30.7
21	Genzyme	130	USA	279	20.0	15.1	1 619	28.4	21.6

Employees 2004			- R&D/Net Sales ratio -		— Operating Profit —		— R&D per employee —		- Market Capitalisation -		- Capital expenditures -	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
12 400	6.9	2.2	7.3	7.4	12.5	11.6	9.6	9.5	3 216	34.0	5.3	4.5
9 094	3.9	7.1	6.8	5.7	16.3	17.6	11.6	9.3	4 559	22.0	5.3	6.3
8 600	3.6	3.8	6.7	6.1	22.2	16.0	9.5	7.7	5 073	20.0	4.4	5.0
5 501	35.9	18.0	6.2	5.2	28.8	17.5	14.6	11.7	10 506	27.0	7.9	10.0
5 200	8.3	6.5	9.9	9.4	11.0	14.6	15.3	14.5	1 089	10.0	5.6	6.9
5 200	4.0	2.6	9.3	8.5	4.7	11.5	12.3	10.7	1 938	26.0	4.5	4.4
3 800	26.9	11.7	7.1	7.0	13.2	11.4	14.2	13.4	3 347	..	3.9	4.2
3 283	12.2	8.4	5.8	5.7	20.7	19.2	16.2	14.9	3 810	..	2.0	1.8
4 200	7.7	6.3	5.9	6.4	25.7	23.4	11.4	11.5	3 767	..	..	3.5
5 330	-23.9	6.4	4.0	4.0	30.9	31.9	9.0	5.8	6 990	..	3.8	4.3
10 400	5.1	0.7	3.1	2.7	12.6	15.6	4.0	4.2	2 295	..	6.8	5.7
5 940	5.4	9.7	4.7	4.5	3.9	-2.1	6.7	5.6	2 652	..	3.4	2.0
<b>367 640</b>	<b>3.2</b>	<b>-0.3</b>	<b>2.9</b>	<b>3.1</b>	<b>17.2</b>	<b>16.9</b>	<b>7.3</b>	<b>7.1</b>	<b>220 393</b>	<b>1.4</b>	<b>4.0</b>	<b>3.9</b>
11	11	11	11	11	11	11	11	11	11	9	11	11
110 000	12.2	1.2	3.5	3.8	19.4	18.1	12.1	12.5	98 277	-3.0	3.9	3.4
19 143	-1.0	-1.3	4.2	4.3	13.0	13.2	14.9	14.3	9 647	-7.0	5.4	4.4
60 000	-3.2	-2.2	1.9	2.0	16.8	16.1	3.4	3.3	22 115	-8.0	3.6	6.1
36 000	-1.6	-2.2	2.2	2.1	19.8	23.0	4.7	4.1	20 178	-3.0	3.3	3.1
28 700	-2.4	-3.1	2.0	2.2	23.1	21.8	5.4	5.1	38 112	33.0	5.9	4.4
5 901	-1.3	3.5	7.8	8.0	18.1	12.5	22.8	23.5	3 583	3.0	5.5	5.7
5 212	-4.4	-4.2	8.6	8.4	15.0	14.9	24.7	21.5	2 566	-1.0	3.5	3.5
24 184	-2.6	-1.1	2.6	2.8	-0.3	8.1	5.0	5.1	4 533	16.0	3.1	3.6
8 600	-3.4	-7.9	1.9	1.8	19.9	19.1	7.2	6.3	6 492	-17.0	4.0	5.0
22 200	11.0	3.7	1.2	1.2	10.5	9.7	2.2	2.2	3 699	..	3.6	3.2
47 700	3.9	2.9	0.8	0.7	15.4	14.9	1.0	0.8	11 191	..	3.2	2.4
<b>827 596</b>	<b>-3.0</b>	<b>1.3</b>	<b>15.4</b>	<b>14.9</b>	<b>20.4</b>	<b>17.5</b>	<b>46.2</b>	<b>40.0</b>	<b>1 008 070</b>	<b>4.7</b>	<b>6.0</b>	<b>6.9</b>
87	85	79	92	91	93	91	87	85	90	62	92	91
115 000	-5.7	8.5	14.6	15.8	26.8	7.0	49.2	43.0	141 853	-22.0	5.0	5.8
109 900	-0.6	2.6	11.0	11.2	27.1	24.7	34.8	31.2	139 050	15.0	4.6	5.4
64 703	-1.0	0.5	16.3	15.3	24.0	17.8	50.9	47.2	92 766	42.0	7.5	7.3
81 392	3.6	5.0	14.9	15.1	23.7	22.3	38.0	35.2	100 808	10.0	4.5	5.3
63 000	-0.3	-6.9	17.5	14.1	33.9	41.4	46.8	37.0	49 348	-34.0	7.5	8.5
44 500	-3.5	2.7	19.4	18.7	21.6	26.4	44.5	37.5	43 985	-17.0	13.7	13.6
43 000	-2.3	-2.2	12.9	10.9	22.3	23.4	42.8	38.1	35 701	9.0	3.5	4.5
27 617	-47.3	-19.2	14.2	13.2	0.4	8.7	65.6	29.4	44 876	29.0	7.2	12.0
14 400	11.6	23.3	19.2	19.8	31.7	37.0	103.6	94.4	72 973	38.0	12.7	16.2
30 500	0.0	0.8	19.4	17.6	-0.9	-0.2	38.8	35.4	23 636	13.0	5.9	8.4
14 592	0.3	-2.8	11.9	11.9	39.9	37.0	63.8	61.3	34 095	11.0	5.0	3.2
11 520	0.0	..	14.5	15.2	13.1	12.5	54.1	54.0	3 480	27.0	4.4	2.9
..	..	..	18.6	16.3	16.7	10.2	..	..	..	..	3.3	4.1
9 062	-2.3	-0.2	13.7	13.2	19.3	18.9	55.5	51.8	14 597	59.0	2.4	3.6
4 266	14.5	83.4	30.6	34.3	1.2	-132.2	116.8	46.1	10 350	-27.0	16.4	44.4
7 700	3.6	2.0	13.8	12.8	16.7	14.8	64.3	57.7	7 885	26.0	4.4	4.7
4 902	7.1	2.9	24.9	26.2	21.3	22.3	91.9	78.4	5 847	11.0	6.1	9.9
..	..	..	18.3	16.6	14.4	10.8	..	..	4 972	31.0	3.5	3.8
6 122	-29.9	13.6	21.5	17.2	8.8	2.6	59.3	39.7	3 247	-16.0	4.2	4.2
5 400	1.3	13.1	24.0	22.1	4.1	16.6	56.3	54.0	5 074	-20.0	10.6	7.9
7 000	24.4	10.4	17.2	18.4	10.7	1.0	39.9	41.3	13 292	56.0	8.5	15.1

## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Pharmaceuticals &amp; Biotechnology (48) continued</b>									
22	Applera	133	USA	277	16.6	5.3	1 343	2.7	3.5
23	Allergan	146	USA	254	13.7	11.1	1 505	16.6	5.4
24	Teva Pharmaceutical Industries	147	Israel	249	58.5	46.7	3 531	46.5	32.2
25	MedImmune	153	USA	241	109.4	58.0	840	8.2	25.4
26	Ono Pharmaceutical	168	Japan	222	1.6	10.3	1 001	3.3	2.2
27	Forest Laboratories	173	USA	216	19.1	23.0	2 246	15.2	24.9
28	Shionogi	174	Japan	214	-4.7	0.6	1 439	-30.0	-21.4
29	Kyowa Hakko Kogyo	177	Japan	210	-5.6	0.3	2 505	-2.9	-2.4
30	Cephalon	186	USA	202	60.9	48.2	747	42.0	56.2
31	Tanabe Seiyaku	189	Japan	200	12.9	10.0	1 235	-1.0	-3.2
32	Millennium Pharmaceuticals	193	USA	196	-15.9	38.8	330	3.4	22.2
33	Taisho Pharmaceutical	221	Japan	174	-18.1	-10.2	2 057	4.5	1.5
34	Gilead Sciences	232	USA	165	35.6	6.4	975	52.6	78.3
35	Human Genome Sciences	239	USA	159	17.7	17.4	3	-50.0	-30.7
36	Barr Pharmaceuticals	276	USA	124	85.3	47.0	963	45.0	36.9
37	Sepracor	289	USA	118	-27.4	-11.6	280	10.7	35.7
38	Dainippon Pharmaceutical	298	Japan	114	4.7	8.2	1 227	-0.7	2.5
39	Ivax	317	USA	104	30.7	17.2	1 352	29.4	14.8
40	Celgene	320	USA	104	31.0	52.8	278	39.0	49.6
41	Exelixis	324	USA	101	7.9	18.5	39	2.6	9.1
42	Dade Behring	331	USA	99	14.0	17.0	1 148	8.6	8.2
43	Nektar Therapeutics	333	USA	98	1.5	-1.5	84	7.7	13.8
44	Pliva	339	Croatia	95	19.7	19.8	831	4.8	6.5
45	NPS Pharmaceuticals	341	USA	95	19.1	37.4	10	42.9	7.7
46	Watson Pharmaceuticals	342	USA	94	29.1	26.4	1 207	12.6	12.2
47	Protein Design Labs	353	USA	90	48.1	32.9	71	44.9	29.1
48	Medarex	355	USA	90	27.8	46.7	9	12.5	-33.8
49	Actelion	361	Switzerland	88	72.2	20.6	305	53.3	95.2
50	Hospira	362	USA	88	..	..	1 946	..	..
51	Amylin Pharmaceuticals	363	USA	88	87.5	34.1	25	-60.3	..
52	Santen Pharmaceutical	371	Japan	85	-6.8	4.1	645	-0.5	0.5
53	Kos Pharmaceuticals	380	USA	82	112.7	53.1	366	69.4	76.1
54	OSI Pharmaceuticals	382	USA	81	18.6	41.4	31	29.2	17.7
55	Abgenix	397	USA	79	29.3	19.8	13	8.3	-19.6
56	Vertex Pharmaceuticals	398	USA	79	-23.5	10.6	76	49.0	-14.8
57	CV Therapeutics	405	USA	77	49.6	11.8	15	87.5	44.2
58	Cell Therapeutics	413	USA	74	13.0	31.3	22	22.2	63.9
59	Kissei Pharmaceutical	430	Japan	71	-24.8	-5.2	418	-2.1	-0.5
60	Ranbaxy Laboratories	444	India	69	67.6	83.7	936	13.6	24.4
61	Valeant Pharmaceuticals	453	USA	68	104.2	44.8	502	-0.6	-7.3
62	Cell Genesys	457	USA	68	8.0	22.0	8	-38.5	-27.5
63	Incyte	465	USA	65	-24.1	-25.5	10	-71.4	-60.4
64	Mylan Laboratories	467	USA	65	-12.8	14.3	922	-8.8	4.3
65	Isis Pharmaceuticals	476	USA	63	27.2	15.0	31	-16.2	-7.4
66	Transkaryotic Therapies	486	USA	62	13.6	8.5	57	32.6	125.1
67	Theravance	494	USA	61	31.2	..	7	133.3	..
68	Alpharma	498	USA	60	28.8	18.5	985	3.3	11.2
69	InterMune	499	USA	60	-32.2	16.0	111	-1.8	56.4
70	Nippon Shinyaku	502	Japan	59	4.8	7.7	369	-2.9	0.3
71	Affymetrix	524	USA	55	12.5	5.3	255	15.4	15.6

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
5 360	-2.0	-1.1	20.7	18.2	6.4	3.4	51.8	43.5	3 021	-14.0	3.7	8.1
5 030	2.0	-7.9	16.9	17.3	26.2	-1.3	50.5	45.4	9 100	22.0	4.7	6.3
13 800	25.9	15.4	7.1	6.5	12.0	27.0	18.0	14.3	14 514	6.0	6.5	6.3
1 823	10.5	27.6	28.7	14.8	-5.8	23.2	132.1	69.7	5 038	21.0	7.0	10.7
2 645	..	2.6	22.2	22.5	38.0	35.0	83.9	..	4 375	3.0	6.8	4.7
5 136	3.4	11.2	9.6	9.3	37.4	34.5	42.1	36.5	10 025	-23.0	2.9	3.8
5 589	-9.1	-16.4	14.9	10.9	2.6	3.0	38.3	36.5	3 345	-25.0	2.2	3.2
6 294	-6.7	-6.8	8.4	8.6	0.9	3.3	33.3	32.9	2 280	4.0	2.6	3.6
2 173	32.0	24.5	27.0	23.8	0.8	22.1	92.8	76.1	1 691	-19.0	5.0	5.7
4 517	..	..	16.2	14.2	14.9	15.8	44.2	..	1 961	20.0	3.6	3.2
1 477	-3.5	-8.1	59.4	73.1	-57.3	-111.9	132.7	152.3	2 289	-10.0	11.2	12.2
5 477	14.0	2.9	8.4	10.8	22.8	19.8	31.7	44.1	4 561	-10.0	2.7	4.9
1 654	16.1	18.3	16.9	19.0	47.7	-18.3	99.4	85.1	14 226	42.0	3.9	18.6
840	-23.6	-6.0	5 290.3	2 247.8	-6 404.3	-2 783.3	188.9	122.6	1 288	38.0	2 700.0	833.3
1 500	21.6	31.6	12.9	10.1	14.6	28.6	82.9	54.4	3 604	37.0	3.6	8.9
1 700	72.9	22.3	42.0	64.0	-71.8	-30.4	69.2	164.8	4 211	48.0	2.9	1.2
2 445	-1.4	..	9.3	8.8	6.5	5.9	46.8	44.1	1 410	43.0	2.6	3.7
10 100	15.8	8.1	7.7	7.6	14.7	15.4	10.3	9.1	5 114	50.0	5.4	6.7
766	9.0	26.0	37.3	39.6	11.3	-1.0	135.3	112.5	5 798	84.0	9.4	4.0
517	-9.8	-3.3	259.8	247.1	-255.6	-184.2	196.0	163.9	453	12.0	25.6	26.3
6 000	0.5	..	8.6	8.2	11.8	10.3	16.4	14.5	2 412	54.0	8.5	7.9
662	-0.9	-1.6	117.0	124.1	-64.4	-32.1	148.4	144.9	783	..	23.8	17.9
6 654	-3.2	-3.0	11.5	10.0	13.5	17.4	14.3	11.6	..	..	4.8	5.3
356	30.9	34.6	948.1	1 137.7	-1 157.9	-1 371.4	266.3	292.8	291	..	130.0	14.3
3 851	-3.3	4.1	7.8	6.8	15.2	20.5	24.5	18.3	2 666	35.0	4.2	10.4
660	20.2	22.1	127.0	124.2	-60.8	-193.9	136.6	110.9	2 050	..	98.6	136.7
435	2.8	13.6	997.3	877.9	-1 449.3	-1 187.5	206.3	166.0	821	134.0	77.8	87.5
850	25.0	37.2	28.9	25.7	20.2	2.5	103.7	75.3	1 831	19.0	5.2	2.5
14 000	..	..	4.5	..	16.2	..	6.3	..	4 525	..	8.6	..
600	12.2	40.8	351.8	74.5	-444.3	-144.4	146.6	87.7	1 529	10.0	36.0	14.3
2 335	-6.6	2.5	13.2	14.1	14.7	11.3	36.4	36.5	1 539	38.0	3.6	7.9
1 053	15.5	22.0	22.3	17.8	23.5	22.2	77.6	42.1	2 465	..	1.9	3.7
452	-5.8	5.7	262.0	285.4	-589.2	-558.3	179.7	142.7	1 482	-15.0	6.5	25.0
523	29.8	17.3	605.5	507.3	-1 044.8	-1 233.3	150.5	151.1	681	10.0	46.2	183.3
736	2.2	-9.7	103.4	201.2	-154.1	-382.4	106.7	142.5	1 192	131.0	11.8	25.5
265	1.5	6.1	509.7	639.0	-728.6	1 025.0	288.5	195.9	853	177.0	20.0	37.5
402	8.1	19.1	338.2	365.9	-813.8	-500.0	185.1	177.1	127	-36.0	13.6	11.1
1 677	0.7	1.2	16.9	22.0	16.4	7.3	42.1	56.4	809	-4.0	3.1	2.1
9 224	5.0	12.8	7.3	5.0	15.4	14.7	7.4	4.7	3 377	..	5.4	4.2
4 307	-2.9	-28.9	13.6	6.6	-3.6	3.4	15.8	7.5	1 338	..	4.0	2.6
377	8.3	12.9	847.0	482.7	-754.4	-530.8	179.7	180.3	195	-8.0	50.0	153.8
186	-59.0	-31.7	649.4	244.3	-1 065.3	-331.4	349.1	188.4	444	38.0	10.0	20.0
3 000	7.1	10.9	7.0	7.3	24.9	37.3	21.6	26.5	2 877	-2.0	7.3	8.6
303	-33.7	-11.3	203.8	134.2	-288.4	-162.2	208.5	108.7	237	..	9.7	16.2
400	13.6	2.1	108.6	126.7	-96.2	-132.6	154.8	154.8	..	..	17.5	25.6
246	..	..	869.0	1 545.0	-1 190.1	-1 766.7	247.3	..	799	..	28.6	33.3
4 200	-10.6	-5.0	6.1	4.9	-14.2	5.7	14.3	9.9	606	25.0	3.7	3.3
326	25.4	15.8	53.9	78.0	-33.4	-59.3	183.5	339.2	361	31.0	0.9	0.9
..	..	..	16.1	14.9	6.5	7.6	..	30.6	420	49.0	2.4	10.3
907	4.1	0.1	21.4	21.9	17.3	5.9	60.1	55.7	2 157	79.0	6.3	4.1

## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Pharmaceuticals &amp; Biotechnology (48) continued</b>									
72	ICOS	538	USA	53	-16.3	8.0	55	0.0	-4.4
73	King Pharmaceuticals	558	USA	50	54.1	42.5	960	-10.2	14.4
74	CuraGen	571	USA	49	15.2	16.1	5	0.0	-33.5
75	Alkermes	578	USA	48	-20.2	19.6	56	93.1	11.9
76	MGI PHARMA	586	USA	46	24.9	20.2	144	300.0	81.7
77	Millipore	587	USA	46	7.0	10.9	650	10.5	10.4
78	Kaken Pharmaceutical	592	Japan	46	11.7	8.5	522	-1.7	1.1
79	Nabi Biopharmaceuticals	606	USA	45	109.0	58.2	132	1.5	-8.6
80	Basilea Pharmaceuticals	608	Switzerland	45	37.8	..	0	..	..
81	Eyeteq Pharmaceuticals	611	USA	44	-16.7	38.7	36	20.0	..
82	ImClone Systems	622	USA	43	-34.5	-15.0	286	384.7	128.4
83	Encysive Pharmaceuticals	635	USA	42	120.1	69.3	10	11.1	12.6
84	Cubist Pharmaceuticals	643	USA	41	3.6	4.3	50	1 566.7	77.1
85	Alexion Pharmaceuticals	646	USA	41	-21.3	26.8	3	200.0	-30.7
86	Sysmex	653	Japan	40	11.7	16.3	474	15.3	19.3
87	Tsumura	660	Japan	39	2.1	5.7	590	0.9	3.6
88	Endo Pharmaceuticals	673	USA	37	-0.9	9.0	453	3.4	34.8
89	Xoma	674	Bermuda	37	-2.9	25.1	3	-83.3	-38.7
90	Toyama Chemical	676	Japan	37	1.5	-5.0	121	-48.9	-21.6
91	Biovail	679	Canada	37	-30.8	11.2	652	7.6	15.0
92	Biomarin Pharmaceutical	681	USA	37	16.5	..	14	55.6	..
93	Medicines	684	USA	36	37.2	14.6	106	68.3	119.7
				<b>934</b>	<b>1.5</b>	<b>2.7</b>	<b>103 871</b>	<b>7.8</b>	<b>4.0</b>
<b>Tobacco (49)</b>		<i>number of companies for calculation</i>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
1	Altria	72	USA	595	6.2	7.7	65 927	9.5	7.1
2	Japan Tobacco	122	Japan	303	-5.1	-3.6	33 208	3.0	0.9
3	Reynolds American	696	USA	35	-11.1	-9.2	4 736	22.2	-9.2
				<b>508</b>	<b>32.1</b>	<b>24.8</b>	<b>18 546</b>	<b>11.1</b>	<b>8.9</b>
<b>General retailers (52)</b>		<i>number of companies for calculation</i>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
1	Amazon.com	155	USA	241	13.8	10.3	5 092	31.5	30.4
2	eBay	179	USA	207	61.3	55.3	1 955	22.7	52.5
3	Federated Department Stores	501	USA	60	35.0	31.0	11 499	2.4	-0.1
				<b>229</b>	<b>34.6</b>	<b>32.5</b>	<b>4 557</b>	<b>17.7</b>	<b>27.7</b>
<b>Leisure &amp; hotels (53)</b>		<i>number of companies for calculation</i>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>
1	International Game Technology	340	USA	95	36.2	27.4	1 828	16.7	27.5
2	Sammy	359	Japan	89	53.2	47.7	1 804	..	47.5
3	GTECH	601	USA	45	6.4	21.8	925	19.7	7.6
				<b>2 887</b>	<b>12.8</b>	<b>14.9</b>	<b>95 090</b>	<b>6.9</b>	<b>5.6</b>
<b>Media &amp; entertainment (54)</b>		<i>number of companies for calculation</i>		<b>9</b>	<b>8</b>	<b>8</b>	<b>9</b>	<b>8</b>	<b>8</b>
1	Fuji Photo Film	40	Japan	1 244	8.9	29.9	18 383	2.2	21.1
2	Eastman Kodak	69	USA	628	9.3	3.1	9 945	1.5	0.7
3	Konica Minolta	111	Japan	353	62.0	22.6	6 178	53.9	16.5
4	Dai Nippon Printing	203	Japan	187	8.1	1.8	9 722	3.4	0.3
5	Toppan Printing	246	Japan	153	5.2	4.2	9 315	3.7	0.1
6	Scientific-Atlanta	279	USA	123	6.4	2.6	1 257	17.8	-12.1
7	Time Warner	330	USA	99	-3.6	8.5	30 966	6.4	3.3
8	Pentax	468	Japan	64	12.5	13.0	966	24.3	9.1
9	Directv	690	USA	36	..	..	8 358	..	..

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
675	0.0	12.9	96.0	114.7	-265.1	-190.9	78.3	93.5	1 133	4.0	7.3	7.3
2 758	-8.1	14.4	5.2	3.0	-17.2	11.8	18.1	10.8	2 437	..	4.3	3.6
454	38.8	-3.6	977.0	848.0	-1 474.4	-1 180.0	107.6	129.7	180	-2.0	160.0	100.0
528	7.8	0.5	85.5	206.9	-91.3	-251.7	90.7	122.5	1 045	..	23.2	37.9
282	25.3	19.1	32.0	102.4	-43.3	-127.8	163.4	163.9	1 376	..	0.7	2.8
4 500	4.7	2.7	7.1	7.3	15.6	15.8	10.2	10.0	2 312	..	7.2	9.0
..	..	..	8.7	7.7	7.6	7.3	..	..	508	..	1.5	1.9
727	3.4	5.7	33.8	16.4	-21.9	-14.6	61.4	30.4	620	..	12.9	4.6
..	..	..	..	..	-26 338.2	..	..	..	426	..	..	..
322	102.5	..	120.8	174.0	-211.1	-100.0	135.1	328.2	426	..	25.0	10.0
866	48.8	29.5	15.0	110.8	32.2	-135.6	49.4	112.3	1 955	-40.0	27.3	91.5
117	27.2	2.1	416.7	210.3	-396.7	-300.0	356.2	205.8	508	..	10.0	0.0
300	3.4	18.6	82.3	1 323.7	-95.0	-2 533.3	137.2	136.9	671	..	10.0	66.7
204	6.8	13.4	1 354.3	5 162.0	-1 528.5	-6 100.0	199.2	270.3	558	..	66.7	200.0
2 907	36.6	24.5	8.4	8.7	9.4	7.5	13.7	16.8	1 155	..	3.0	2.7
..	..	..	6.6	6.5	12.8	11.5	..	14.5	1 029	..	3.9	7.0
549	11.6	48.7	8.2	8.6	37.8	18.3	67.7	76.3	2 715	..	1.5	2.1
220	-2.7	4.5	1 239.7	212.9	-2 134.3	-233.3	169.1	169.6	102	..	66.7	11.1
911	-44.3	-18.3	30.6	15.4	-30.4	1.7	40.7	22.3	544	..	0.8	0.8
2 291	17.0	17.1	5.6	8.8	23.5	2.0	16.1	27.2	2 131	..	3.2	4.5
359	32.0	..	261.6	349.2	-962.2	-622.2	102.0	115.6	436	..	128.6	44.4
220	15.8	12.9	34.2	41.9	10.8	-20.6	164.8	139.1	797	..	0.9	1.6
<b>204 643</b>	<b>-2.8</b>	<b>-3.1</b>	<b>0.9</b>	<b>1.0</b>	<b>11.4</b>	<b>10.5</b>	<b>4.6</b>	<b>4.4</b>	<b>121 283</b>	<b>33.2</b>	<b>2.0</b>	<b>2.3</b>
3	3	3	3	3	3	3	3	3	3	2	3	3
156 000	-5.5	-3.8	0.9	0.9	16.9	19.4	3.8	3.4	102 058	42.0	2.1	2.4
39 243	1.6	-0.8	0.9	1.0	-0.1	3.5	7.7	8.3	10 274	-16.0	1.8	2.3
9 400	34.3	0.4	0.7	1.0	14.5	-70.5	3.8	5.7	8 951	..	1.4	1.3
<b>129 100</b>	<b>3.7</b>	<b>1.0</b>	<b>2.7</b>	<b>2.3</b>	<b>11.5</b>	<b>9.3</b>	<b>3.9</b>	<b>3.1</b>	<b>63 588</b>	<b>28.5</b>	<b>3.2</b>	<b>3.9</b>
3	3	3	3	3	3	3	3	3	3	2	3	3
9 000	15.4	4.9	4.7	5.5	6.3	2.6	26.7	27.1	13 395	15.0	0.6	0.3
8 100	42.1	46.8	10.6	8.1	39.9	28.8	25.6	22.6	40 799	34.0	11.0	16.9
112 000	0.9	-0.9	0.5	0.4	9.0	8.8	0.5	0.4	9 394	..	3.0	3.3
<b>12 127</b>	<b>1.7</b>	<b>9.4</b>	<b>5.0</b>	<b>4.8</b>	<b>30.5</b>	<b>30.7</b>	<b>18.9</b>	<b>19.0</b>	<b>9 315</b>	<b>..</b>	<b>8.9</b>	<b>12.6</b>
3	2	3	3	2	3	2	3	2	2	..	3	2
4 900	-7.5	7.0	5.2	4.5	36.5	32.3	19.4	13.2	6 811	-18.0	8.5	5.6
1 927	36.1	36.7	4.9	..	27.3	..	46.1	41.0	..	..	3.3	..
5 300	..	5.6	4.9	5.5	24.8	27.4	8.5	..	2 504	..	20.5	26.8
<b>338 734</b>	<b>3.9</b>	<b>-0.7</b>	<b>3.0</b>	<b>3.1</b>	<b>6.2</b>	<b>8.2</b>	<b>8.5</b>	<b>8.0</b>	<b>118 456</b>	<b>10.0</b>	<b>6.0</b>	<b>5.9</b>
9	8	8	9	8	9	8	9	8	9	8	9	8
73 164	0.7	1.1	6.8	6.4	6.5	5.1	17.0	15.7	12 543	11.0	6.3	4.9
54 800	-14.2	-10.0	6.3	5.9	0.3	2.3	11.5	9.0	5 462	-2.0	3.4	3.8
34 710	101.8	25.4	5.7	5.4	5.0	5.4	10.2	12.7	3 902	-22.0	2.9	5.3
34 514	-1.9	0.4	1.9	1.8	7.1	3.7	5.4	4.9	8 673	10.0	4.9	5.0
32 178	-3.3	0.0	1.6	1.6	4.6	6.0	4.8	4.4	5 129	-1.0	5.9	7.7
7 538	9.4	-2.6	9.8	10.8	17.1	9.0	16.3	16.7	4 047	17.0	1.8	1.7
84 900	6.1	-1.7	0.3	0.4	15.6	14.8	1.2	1.3	61 822	15.0	7.2	7.3
5 130	-5.6	-6.5	6.7	7.4	4.2	2.8	12.5	10.5	358	-25.0	3.1	2.4
11 800	..	..	0.4	..	-22.4	..	3.1	..	16 520	..	9.0	..

## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
				<b>1 010</b>	<b>9.1</b>	<b>4.2</b>	<b>32 838</b>	<b>9.6</b>	<b>9.4</b>
<b>Support services (58)</b>		<i>number of companies for calculation</i>		9	9	9	9	9	9
1	ADP	93	USA	428	16.4	4.2	5 705	8.5	7.4
2	Accenture	188	Bermuda	200	8.6	0.1	11 119	12.8	4.2
3	SEI Investments	435	USA	70	67.8	15.6	509	8.8	1.7
4	SIG	442	Switzerland	69	-9.2	15.6	1 694	-10.7	2.9
5	Convergys	514	USA	57	-17.8	-12.6	1 830	8.7	2.3
6	MeadWestvaco	526	USA	54	4.2	15.9	6 053	8.9	27.9
7	Sealed Air	532	USA	54	6.1	9.5	2 794	7.5	7.4
8	CSG Systems International	613	USA	43	-6.2	4.2	390	-2.7	3.6
9	Fiserv	698	USA	35	-8.8	9.3	2 744	22.9	25.4
				<b>157</b>	<b>2.2</b>	<b>6.0</b>	<b>26 982</b>	<b>0.7</b>	<b>0.1</b>
<b>Transport (59)</b>		<i>number of companies for calculation</i>		2	2	2	2	2	2
1	East Japan Railway	299	Japan	114	3.4	5.8	18 253	-0.9	-0.1
2	West Japan Railway	614	Japan	43	-1.0	6.5	8 729	4.3	0.6
				<b>212</b>	<b>0.2</b>	<b>-2.8</b>	<b>107 097</b>	<b>21.3</b>	<b>14.1</b>
<b>Food &amp; drug retailers (63)</b>		<i>number of companies for calculation</i>		2	2	2	2	2	2
1	McKesson	226	USA	170	0.5	-3.8	59 236	15.8	17.2
2	Cardinal Health	640	USA	42	-0.7	1.6	47 861	28.9	10.7
				<b>3 187</b>	<b>-14.2</b>	<b>-8.2</b>	<b>170 587</b>	<b>-1.1</b>	<b>-2.5</b>
<b>Telecommunication services (67)</b>		<i>number of companies for calculation</i>		9	9	9	9	9	9
1	NTT	21	Japan	2 284	-10.4	-6.6	77 584	-2.6	-2.2
2	Telstra	135	Australia	266	-22.7	-14.4	12 273	3.8	4.4
3	SK Telecom	197	South Korea	194	15.9	27.9	7 513	2.9	8.1
4	AT&T	278	USA	123	-39.7	-19.9	22 467	-11.6	-16.6
5	KDDI	338	Japan	96	27.6	37.6	20 434	2.2	7.9
6	KT	421	South Korea	73	-64.1	-35.2	12 130	47.5	2.3
7	Chunghwa Telecom	511	Taiwan	58	-4.1	-9.6	4 299	1.5	0.5
8	Telenor	546	Norway	51	-8.3	-22.7	7 380	14.9	14.4
9	Swisscom	626	Switzerland	43	-27.5	-12.1	6 507	-31.0	-10.8
				<b>1 117</b>	<b>-1.9</b>	<b>-9.4</b>	<b>125 175</b>	<b>-0.1</b>	<b>-1.6</b>
<b>Electricity (72)</b>		<i>number of companies for calculation</i>		9	9	9	9	9	9
1	Tokyo Electric Power	136	Japan	265	-8.4	-13.5	34 850	-1.3	-2.6
2	Korea Electric Power	143	South Korea	256	21.7	-8.5	17 025	9.7	8.3
3	Kansai Electric Power	230	Japan	167	-14.8	-7.5	18 238	-2.9	-1.4
4	Chubu Electric Power	270	Japan	126	-4.3	-6.5	15 085	-3.5	-2.3
5	Kyushu Electric Power	404	Japan	77	-2.5	-6.3	9 992	3.0	-1.3
6	Tohoku Electric Power	447	Japan	69	-10.9	-7.8	11 220	-1.9	-3.1
7	Chugoku Electric Power	477	Japan	63	1.8	1.9	6 943	-4.2	-2.6
8	Taiwan Power	550	Taiwan	51	6.6	-18.3	7 788	4.1	-9.7
9	Shikoku Electric Power	630	Japan	43	-5.3	-9.3	4 034	-3.9	-2.9
				<b>242</b>	<b>1.6</b>	<b>..</b>	<b>41 925</b>	<b>12.3</b>	<b>11.5</b>
<b>Utilities - other (77)</b>		<i>number of companies for calculation</i>		3	3	..	3	3	3
1	Osaka Gas	358	Japan	89	-9.8	-9.1	6 830	0.4	-0.0
2	Tokyo Gas	386	Japan	80	-4.7	..	8 270	2.2	2.0
3	Gazprom	419	Russia	73	31.4	..	26 825	19.7	19.8



Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
<b>288 552</b>	<b>10.9</b>	<b>8.1</b>	<b>3.1</b>	<b>3.1</b>	<b>9.7</b>	<b>11.7</b>	<b>3.5</b>	<b>3.6</b>	<b>49 279</b>	<b>2.5</b>	<b>3.0</b>	<b>3.4</b>
9	9	9	9	9	9	9	9	9	9	7	8	9
42 000	2.4	0.8	7.5	7.0	18.5	21.2	10.2	9.0	19 107	5.0	2.6	1.9
100 000	23.9	10.1	1.8	1.9	11.7	11.9	2.0	2.3	10 508	3.0	1.9	1.6
2 032	6.1	2.4	13.7	8.9	36.9	34.8	34.4	21.7	2 787	..	2.0	3.6
6 671	-26.0	-10.1	4.1	4.0	-7.0	0.3	10.3	8.4	1 131	24.0	7.1	7.5
66 300	17.3	13.0	3.1	4.1	7.4	11.8	0.9	1.2	1 454	-15.0	6.3	7.6
29 400	0.0	18.8	0.9	0.9	-4.5	2.1	1.9	1.8	3 904	-13.0	4.9	5.2
17 600	0.0	-0.2	1.9	2.0	12.6	14.5	3.1	2.9	3 250	10.0	2.7	3.5
2 549	3.2	7.9	11.1	11.5	15.9	-6.5	17.0	18.7	691	8.0	1.8	1.7
22 000	1.4	6.5	1.3	1.7	17.7	17.5	1.6	1.8	6 447	..	..	4.7
..	..	..	<b>0.6</b>	<b>0.6</b>	<b>13.5</b>	<b>12.4</b>	..	..	<b>20 701</b>	..	<b>13.8</b>	<b>13.2</b>
..	..	..	2	2	2	2	..	..	2	..	2	2
77 009	-2.2	-2.2	0.6	0.6	14.7	13.0	1.5	1.4	15 685	-5.0	14.7	13.8
..	..	..	0.5	0.5	11.0	10.9	..	..	5 016	..	11.7	11.8
<b>80 200</b>	<b>7.5</b>	<b>3.2</b>	<b>0.2</b>	<b>0.2</b>	<b>1.5</b>	<b>2.6</b>	<b>2.6</b>	<b>2.8</b>	<b>29 330</b>	..	<b>0.4</b>	<b>0.4</b>
2	2	2	2	2	2	2	2	2	2	..	2	2
25 200	2.4	1.6	0.3	0.3	-0.2	1.4	6.8	6.9	10 655	53.0	0.2	0.2
55 000	10.0	4.0	0.1	0.1	3.5	4.2	0.8	0.8	18 675	..	0.6	0.8
<b>416 831</b>	<b>-3.6</b>	<b>-7.1</b>	<b>1.9</b>	<b>2.2</b>	<b>8.4</b>	<b>14.7</b>	<b>7.6</b>	<b>8.6</b>	<b>200 852</b>	<b>7.1</b>	<b>12.8</b>	<b>13.0</b>
9	9	9	9	9	9	9	9	9	9	7	9	9
201 486	-1.9	-1.8	2.9	3.2	11.5	14.4	11.3	12.4	96 526	-1.0	14.9	15.9
38 564	3.8	-4.9	2.2	2.9	29.8	27.0	6.9	9.2	16 195	2.0	13.8	12.7
7 353	17.0	8.9	2.6	2.3	22.0	30.1	26.4	26.7	11 406	37.0	15.4	16.0
47 600	-22.7	-26.1	0.5	0.8	-33.6	11.4	2.6	3.3	11 718	32.0	6.0	9.1
13 128	-1.6	-2.8	0.5	0.4	10.4	4.7	7.3	5.6	17 114	11.0	6.9	5.7
43 218	13.2	-3.9	0.6	2.5	12.5	7.8	1.7	5.3	8 271	29.0	17.4	18.0
28 518	-1.7	-3.2	1.3	1.4	33.5	31.4	2.0	2.1	13 236	..	12.4	17.7
21 300	-2.1	-1.7	0.7	0.9	11.3	16.6	2.4	2.6	11 020	23.0	19.0	10.6
15 664	-20.9	-9.3	0.7	0.6	27.3	17.1	2.7	3.0	15 366	..	10.3	7.4
<b>218 312</b>	<b>-2.9</b>	<b>-0.7</b>	<b>0.9</b>	<b>0.9</b>	<b>11.9</b>	<b>12.4</b>	<b>5.1</b>	<b>5.1</b>	<b>94 144</b>	<b>24.5</b>	<b>15.9</b>	<b>19.2</b>
9	8	7	9	9	9	9	9	8	8	7	9	9
51 694	-1.2	2.5	0.8	0.8	8.8	9.6	5.1	5.5	24 117	6.0	13.3	16.8
32 557	5.6	..	1.5	1.4	18.7	23.1	7.9	6.8	16 926	118.0	23.7	31.1
33 935	-4.6	1.4	0.9	1.0	10.7	8.6	4.9	5.5	14 997	15.0	12.3	15.9
17 416	-3.2	-2.6	0.8	0.8	13.0	13.4	7.3	7.3	13 359	16.0	11.8	14.8
19 284	1.2	1.7	0.8	0.8	13.6	11.6	4.0	4.1	7 657	15.0	15.2	19.7
18 289	-2.1	-4.1	0.6	0.7	9.8	11.4	3.7	4.1	7 766	27.0	13.0	15.0
14 495	-1.0	..	0.9	0.9	11.0	12.8	4.4	4.2	5 432	15.0	10.5	12.7
22 378	-17.8	-7.1	0.7	0.6	13.3	13.4	2.3	1.8	..	..	38.2	40.0
8 264	..	-1.3	1.1	1.1	10.7	11.6	5.1	..	3 890	..	12.6	11.6
<b>363 654</b>	<b>11.5</b>	<b>14.7</b>	<b>0.6</b>	<b>0.6</b>	<b>22.6</b>	<b>22.9</b>	<b>0.7</b>	<b>0.7</b>	<b>73 572</b>	<b>6.9</b>	<b>13.5</b>	<b>14.8</b>
3	3	2	3	3	3	3	3	3	3	2	3	3
15 276	1.7	18.2	1.3	1.4	8.9	6.0	5.8	6.6	5 299	11.0	7.2	7.1
15 578	37.4	11.6	1.0	1.0	7.5	9.6	5.1	7.4	7 736	4.0	8.8	8.7
332 800	11.0	..	0.3	0.2	30.7	32.8	0.2	0.2	60 537	..	16.6	19.3

## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
				<b>46 951</b>	<b>2.6</b>	<b>-3.0</b>	<b>595 635</b>	<b>10.9</b>	<b>2.6</b>
<b>IT Hardware (93)</b>		<i>number of companies for calculation</i>		<i>153</i>	<i>151</i>	<i>147</i>	<i>153</i>	<i>151</i>	<i>148</i>
1	Intel	10	USA	3 515	9.6	8.0	25 168	13.5	8.8
2	Hitachi	16	Japan	2 790	4.5	-2.2	64 813	4.6	4.1
3	Hewlett-Packard	17	USA	2 579	-4.0	9.5	58 787	9.4	20.9
4	Toshiba	19	Japan	2 418	1.6	0.9	40 060	-1.3	-2.1
5	Cisco Systems	20	USA	2 348	1.8	-6.6	16 219	16.8	-0.4
6	Motorola	23	USA	2 251	-18.9	-10.8	23 045	15.8	1.4
7	NEC	25	Japan	1 977	7.3	-6.2	34 859	-1.1	-1.6
8	Fujitsu	29	Japan	1 802	-12.2	-14.6	34 225	3.2	-4.6
9	Texas Instruments	33	USA	1 455	13.2	7.4	9 255	27.9	15.3
10	Nortel Networks	34	Canada	1 441	-0.1	-15.3	6 035	-19.5	-22.3
11	Sun Microsystems	35	USA	1 417	4.8	-1.5	8 229	-2.2	-15.1
12	STMicroelectronics	44	Switzerland	1 065	24.6	14.0	6 442	21.1	11.6
13	Lucent Technologies	47	USA	934	-14.7	-28.8	6 655	6.8	-24.8
14	Mitsubishi Electric	51	Japan	900	-22.5	-13.9	23 763	-9.1	-7.1
15	EMC	55	USA	746	21.9	3.0	6 055	31.9	5.1
16	Applied Materials	56	USA	730	7.7	-6.1	5 895	79.0	2.9
17	Freescale Semiconductor	58	USA	710	..	..	4 205	..	..
18	Advanced Micro Devices	61	USA	688	9.7	12.8	3 680	62.9	8.7
19	Xerox	74	USA	559	-12.4	-8.7	11 567	0.1	-2.6
20	Micron Technology	77	USA	555	15.0	15.5	3 240	42.5	3.8
21	Qualcomm	80	USA	530	37.6	20.2	3 590	22.9	22.1
22	Broadcom	97	USA	407	-15.3	7.4	1 766	49.0	35.6
23	Analog Devices	103	USA	377	13.7	3.3	1 938	28.7	5.0
24	Agere Systems	106	USA	365	6.2	..	1 407	4.0	..
25	Apple Computer	109	USA	360	3.8	4.4	6 091	33.4	15.6
26	Dell	114	USA	341	40.3	13.0	36 201	18.7	16.4
27	Kyocera	115	Japan	335	-1.4	9.9	8 191	6.6	-3.9
28	Tokyo Electron	118	Japan	317	-11.9	-5.9	3 803	15.0	-9.9
29	LSI Logic	119	USA	310	-2.6	-5.7	1 251	0.4	-1.6
30	Taiwan Semiconductor Manufacturing	126	Taiwan	291	-1.5	5.5	6 081	26.4	26.8
31	Hynix Semiconductor	129	South Korea	281	13.0	..	4 168	62.0	13.8
32	Corning	138	USA	261	3.2	-17.4	2 835	24.7	-15.0
33	National Semiconductor	140	USA	260	-19.0	-6.8	1 459	18.6	-2.1
34	Avaya	144	USA	256	-4.1	-13.4	2 994	-6.2	-15.7
35	Nvidia	149	USA	247	24.1	29.6	1 479	10.3	13.6
36	Murata Manufacturing	150	Japan	245	8.7	3.8	2 974	4.9	-10.8
37	NCR	154	USA	241	7.9	3.7	4 403	6.9	0.4
38	Maxtor	156	USA	238	-8.7	-9.5	2 793	-7.1	-0.0
39	Lexmark	161	USA	230	17.7	8.3	3 909	11.8	8.6
40	Xilinx	163	USA	226	24.2	14.5	1 157	12.5	15.7
41	Maxim Integrated Products	165	USA	225	12.5	3.0	1 059	24.9	-3.0
42	Rohm	166	Japan	225	-1.4	14.6	2 553	1.5	-4.6
43	Nikon	170	Japan	217	9.7	9.8	3 636	8.0	1.5
44	Kla-Tencor	181	USA	207	4.6	-7.6	1 101	13.2	-10.7
45	ATI Technologies	190	Canada	199	26.7	21.8	1 469	44.2	24.4
46	Marvell Technology	194	Bermuda	196	22.9	..	901	49.4	..
47	ZTE	195	China	195	43.0	..	1 886	24.6	..
48	Teradyne	199	USA	193	2.9	-3.2	1 318	32.5	7.5
49	Cypress Semiconductor	200	USA	193	4.1	-0.7	698	13.3	5.0

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
2 487 243	3.3	-0.7	7.9	8.4	7.6	2.8	18.7	19.4	1 027 092	7.8	5.4	4.6
148	141	132	153	151	153	151	148	141	151	112	152	150
85 000	6.7	0.6	14.0	14.5	29.7	24.1	41.4	40.2	117 943	-1.0	11.2	12.1
347 424	6.5	2.6	4.3	4.3	2.6	1.6	8.0	8.2	15 627	3.0	4.1	3.4
151 000	6.3	20.5	4.4	5.0	5.2	3.9	17.1	18.9	51 028	12.0	2.7	2.7
161 000	-2.9	-5.0	6.0	5.9	2.2	1.7	15.0	14.4	9 446	10.0	3.6	4.4
34 000	0.0	-3.6	14.5	16.6	28.2	23.1	69.1	67.8	83 643	-21.0	2.8	3.8
68 000	-22.7	-15.1	9.8	13.9	10.2	3.8	33.1	31.5	38 681	38.0	1.6	2.4
147 753	3.0	1.4	5.7	5.2	2.7	2.5	13.4	12.9	7 706	-13.0	5.4	4.7
156 169	-0.6	-5.9	5.3	6.2	0.8	-3.1	11.5	13.1	8 966	-1.0	3.0	3.5
35 472	3.9	0.7	15.7	17.8	18.3	9.1	41.0	37.7	37 961	41.0	10.3	8.1
34 150	-2.9	-13.4	23.9	19.2	-2.0	2.7	42.2	41.0	10 500	-7.0	3.4	1.7
32 600	-9.7	-9.3	17.2	16.1	3.1	-24.3	43.5	37.4	9 597	-1.0	2.2	3.3
49 500	8.3	7.4	16.5	16.1	7.7	4.1	21.5	18.7	11 259	-8.0	23.4	16.9
31 800	-7.8	-25.5	14.0	17.6	15.1	-8.2	29.4	31.7	9 647	0.0	1.7	3.4
98 988	-10.2	-5.3	3.8	4.4	2.7	0.3	9.1	10.5	8 189	13.0	2.9	3.7
22 700	13.5	4.1	12.3	13.3	12.6	6.2	32.9	30.6	23 641	21.0	4.5	5.9
12 191	1.2	-11.1	12.4	20.6	22.0	-7.0	59.9	56.2	21 069	-1.0	2.4	5.9
22 200	..	..	16.9	..	4.7	..	32.0	..	11 972	..	9.1	..
15 900	11.2	2.5	18.7	27.8	3.8	-7.3	43.2	43.8	6 067	88.0	28.8	18.6
58 100	-4.9	-9.7	4.8	5.5	5.9	2.0	9.6	10.5	9 770	20.0	1.3	1.3
17 900	7.8	-0.4	17.1	21.2	6.1	-37.0	31.0	29.1	5 036	-16.0	24.5	26.6
7 600	2.7	5.4	14.8	13.2	41.9	29.8	69.7	52.0	48 929	13.0	6.8	5.8
3 373	23.6	7.3	23.1	40.6	11.6	-58.5	120.8	176.1	8 680	32.0	2.1	3.0
8 900	6.0	-0.4	19.4	22.0	26.5	18.2	42.3	39.4	10 140	-8.0	5.6	3.3
6 600	-2.9	..	25.9	25.4	-6.0	-14.4	55.3	50.5	1 508	1.0	5.1	6.3
11 695	7.2	6.8	5.9	7.6	3.9	0.2	30.8	31.8	28 160	219.0	2.1	2.7
55 200	20.0	16.8	0.9	0.8	8.6	8.5	6.2	5.3	65 264	-1.0	1.1	0.8
57 870	17.1	4.2	4.1	4.4	9.9	7.0	5.8	6.9	10 173	-5.0	4.4	3.8
8 870	-11.8	-4.7	8.3	10.9	3.5	-4.7	35.7	35.8	7 652	20.0	1.4	1.5
4 414	-6.5	-13.1	24.8	25.5	-25.7	-16.5	70.3	67.4	2 602	82.0	3.1	4.7
18 597	15.8	10.8	4.8	6.1	34.9	25.5	15.6	18.4	30 607	41.0	31.0	18.3
..	..	..	6.7	9.7	24.6	-57.5	..	..	7 185	..	30.1	18.2
24 700	19.9	-8.0	9.2	11.1	-25.0	-14.5	10.6	12.3	20 946	68.0	22.3	11.8
9 700	-1.0	-2.0	17.8	26.1	16.2	-2.3	26.8	32.7	6 000	33.0	10.8	10.2
14 900	-11.8	-13.5	8.6	8.4	8.1	2.1	17.2	15.8	3 404	-29.0	2.0	1.4
2 101	15.1	23.2	16.7	14.8	5.7	5.2	117.3	108.8	3 723	98.0	3.3	7.0
26 469	0.1	-1.7	8.2	8.0	18.2	14.0	9.3	8.5	8 304	-3.0	8.0	4.6
28 500	-1.7	-3.2	5.5	5.4	4.1	1.6	8.4	7.7	4 894	51.0	1.3	1.1
13 656	0.8	11.7	8.5	8.7	-4.1	3.2	17.4	19.2	961	13.0	4.5	3.2
13 400	13.6	1.8	5.9	5.6	13.8	12.5	17.2	16.6	5 361	-37.0	3.7	2.0
3 050	10.1	5.3	19.6	17.7	23.5	23.4	74.2	65.8	6 942	-8.0	3.9	2.9
7 599	22.5	6.4	21.3	23.6	42.1	38.8	29.7	32.3	10 299	-11.0	16.1	7.3
18 591	10.4	7.0	8.8	9.1	29.3	27.1	12.1	13.6	7 945	-14.0	12.7	10.2
13 636	3.4	-0.6	6.0	5.9	-0.9	-3.5	15.9	15.0	3 306	28.0	3.6	4.2
5 200	6.1	-6.7	18.8	20.3	19.5	10.4	39.7	40.3	6 994	17.0	3.7	10.1
2 700	22.7	9.9	13.5	15.4	12.5	3.5	73.5	71.2	2 190	-23.0	1.0	1.2
1 917	14.7	..	21.7	26.4	13.2	7.0	102.0	95.2	9 210	102.0	3.8	11.6
25 515	..	..	10.4	9.0	7.9	8.6	7.7	..	15 927	..	3.1	2.9
6 200	1.6	-9.6	14.6	18.8	10.5	-13.3	31.1	30.7	2 168	-11.0	9.3	2.3
4 500	11.6	3.0	27.6	30.0	0.0	-1.0	42.8	45.9	1 470	43.0	13.9	9.4

## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>IT Hardware (93) continued</b>									
50	Novellus Systems	206	USA	186	10.8	-2.5	999	46.7	0.5
51	Tellabs	207	USA	184	-12.5	-16.2	906	25.7	-17.6
52	Atmel	212	USA	182	-0.1	-2.6	1 214	24.0	3.9
53	Comverse Technology	216	USA	177	7.4	-8.7	706	25.4	-8.9
54	Conexant Systems	217	USA	177	50.6	-20.8	664	50.6	-5.3
55	Juniper Networks	220	USA	175	35.4	15.3	983	90.5	14.6
56	United Microelectronics	224	Taiwan	171	25.7	-6.3	2 999	35.0	24.1
57	UTStarcom	231	USA	165	40.7	55.4	1 989	37.6	62.8
58	OKI Electric	240	Japan	158	36.4	-0.9	4 944	5.3	4.4
59	Advantest	242	Japan	155	-8.4	-8.8	1 251	78.2	-14.3
60	Ciena	248	USA	151	-3.4	-4.5	220	5.8	-42.9
61	Western Digital	250	USA	148	49.2	17.9	2 242	12.1	16.0
62	Storage Technology	254	USA	145	-3.7	-7.0	1 636	1.9	2.8
63	Altera	263	USA	133	1.1	1.9	748	22.8	6.6
64	Network Appliance	272	USA	126	29.7	13.6	1 176	36.6	26.1
65	Lam Research	274	USA	125	6.2	-9.1	689	23.9	-14.9
66	Casio Computer	287	Japan	119	17.1	5.7	4 014	6.8	13.5
67	RF Micro Devices	294	USA	115	22.1	28.1	467	-2.5	19.7
68	Skyworks Solutions	304	USA	112	0.6	11.2	577	26.8	44.3
69	Winbond Electronic	306	Taiwan	111	-1.8	-15.5	734	5.2	9.4
70	Brocade Communications	307	USA	110	3.0	10.5	439	13.7	5.2
71	Benq	316	Taiwan	105	30.4	40.3	4 057	519.4	43.7
72	Nanya Technology	326	Taiwan	100	23.8	75.5	942	41.0	47.3
73	Tektronix	337	USA	96	28.9	-5.2	677	16.3	-9.4
74	SanDisk	347	USA	92	48.4	28.5	1 307	64.6	69.4
75	Applied Micro Circuits	354	USA	90	-4.7	-7.6	187	92.8	18.6
76	PMC-Sierra	360	USA	89	0.9	-15.7	219	19.0	-2.6
77	Chartered Semiconductor	367	Singapore	87	-5.0	14.3	686	69.0	26.4
78	Adaptec	373	USA	84	10.7	-2.6	349	4.8	4.3
79	Micronas Semiconductor	375	Switzerland	83	30.7	16.3	623	25.6	19.3
80	Intersil	376	USA	83	23.1	1.9	394	5.3	3.6
81	Harris	378	USA	82	11.8	-0.7	1 853	20.3	8.8
82	Electronics For Imaging	379	USA	82	14.9	4.2	290	3.9	-8.7
83	Andrew	383	USA	81	31.0	32.1	1 353	81.4	20.6
84	Silicon Graphics	387	USA	80	-36.4	-22.8	619	-12.6	-23.2
85	Vitesse Semiconductor	389	USA	80	-1.5	-7.5	161	40.0	-17.1
86	Asustek Computer	402	Taiwan	77	44.3	32.8	5 805	27.6	42.9
87	Linear Technology	403	USA	77	14.5	0.7	594	33.2	-6.0
88	Integrated Device Technology	406	USA	76	5.3	-7.1	287	13.0	0.9
89	Research In Motion	412	Canada	74	61.5	39.3	994	127.5	66.3
90	JDS Uniphase	420	USA	73	-35.3	-32.7	468	-5.8	-41.8
91	Tekelec	425	USA	72	33.9	11.0	292	50.5	8.3
92	Quantum	426	USA	71	-6.6	-8.6	584	-1.8	-10.0
93	Anritsu	427	Japan	71	-25.2	-13.7	563	-0.2	-21.0
94	Qlogic	431	USA	71	9.2	11.2	421	9.4	18.5
95	3Com	434	USA	70	-15.8	-43.8	514	-25.1	-37.2
96	Avid Technology	436	USA	70	11.0	3.3	434	25.1	10.7
97	ON Semiconductor	440	USA	70	10.4	5.3	932	18.4	1.4
98	Microchip Technology	448	USA	69	9.0	4.5	623	21.2	14.1
99	International Rectifier	455	USA	68	16.8	9.8	780	22.6	2.7

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
3 505	20.8	1.9	18.6	24.6	15.8	-10.1	52.9	57.7	2 751	-6.0	2.3	3.4
4 125	17.4	-17.5	20.3	29.2	-3.0	-28.3	44.6	59.9	3 067	13.0	3.3	1.0
8 800	11.4	2.4	15.0	18.6	2.8	-5.2	20.7	23.1	768	-49.0	14.7	4.8
5 050	8.3	-3.7	25.1	29.3	4.7	-2.8	35.1	35.4	3 803	55.0	4.8	4.6
2 400	65.5	-29.7	26.6	26.6	-30.8	-125.6	73.6	80.9	599	10.0	2.0	3.4
2 948	89.8	33.9	17.8	25.1	14.7	9.3	59.5	83.4	9 728	9.0	4.7	2.7
10 642	18.2	7.6	5.7	6.1	14.7	8.3	16.1	15.1	10 301	25.0	62.8	25.9
8 200	49.1	..	8.3	8.1	2.4	13.6	20.1	21.3	713	-53.0	5.0	6.2
20 410	-2.6	-4.7	3.2	2.5	3.5	2.3	7.7	5.5	1 452	-10.0	4.9	3.7
3 544	0.7	-9.6	12.4	24.2	16.7	-18.9	43.8	48.2	5 916	37.0	2.9	7.0
1 651	-9.1	-24.1	68.7	75.2	-259.9	-131.3	91.5	86.1	891	-24.0	10.9	10.6
17 376	51.0	30.0	6.6	5.0	5.1	7.0	8.5	8.6	2 287	114.0	4.3	2.3
7 100	0.0	-3.1	8.8	9.4	10.0	8.8	20.4	21.2	2 902	41.0	2.4	2.0
2 164	8.5	2.9	17.8	21.6	31.0	24.0	61.4	65.8	6 017	5.0	2.4	1.6
3 800	33.6	18.6	10.7	11.3	15.8	13.4	33.1	34.1	6 269	23.0	5.9	4.2
2 200	4.8	-11.3	18.2	21.2	11.3	-1.3	57.0	56.2	2 927	25.0	2.6	1.6
12 140	4.3	-6.1	3.0	2.7	6.4	5.2	9.8	8.8	2 857	7.0	3.6	2.6
2 570	35.6	24.7	24.6	19.7	-9.9	6.1	44.8	49.8	801	-1.0	18.4	6.1
4 200	10.5	..	19.5	24.5	5.7	-69.5	26.7	29.4	778	-16.0	7.6	6.6
3 907	6.8	-2.6	15.1	16.1	8.6	-6.7	28.3	30.7	1 177	-7.0	14.4	15.0
1 038	-15.6	-0.9	25.1	27.7	-4.5	-26.7	106.0	86.8	816	-12.0	9.1	6.0
14 375	-3.7	70.7	2.6	12.3	4.2	25.6	7.3	5.4	1 995	12.0	2.9	17.6
3 146	-2.9	2.5	10.6	12.1	21.2	5.7	31.8	24.9	2 098	..	..	23.4
3 834	-7.4	-7.9	14.2	12.8	16.2	-0.3	25.0	18.0	1 461	-23.0	2.1	2.2
876	16.6	15.7	7.0	7.8	23.4	22.2	105.0	82.5	4 870	69.0	7.1	4.9
755	4.4	-12.6	48.0	97.1	-56.4	-113.4	119.0	130.3	607	-26.0	10.7	10.3
951	2.3	-5.9	40.5	47.8	12.7	-7.1	93.2	94.5	1 154	-25.0	3.2	4.9
..	..	..	12.7	22.6	3.1	-45.6	..	..	1 347	..	73.6	39.9
1 525	0.9	-3.8	24.0	22.7	-20.0	6.0	54.9	50.0	271	-55.0	3.2	1.8
1 917	9.8	8.5	13.3	12.8	18.1	16.5	43.2	36.3	1 006	2.0	9.5	8.5
1 481	-7.4	-10.1	21.0	18.0	3.1	15.8	55.8	42.0	2 143	13.0	1.0	12.3
10 900	6.9	2.6	4.4	4.8	7.6	3.2	7.5	7.2	3 597	55.0	2.6	3.5
1 424	3.0	15.8	28.2	25.5	3.6	9.0	57.4	51.5	825	5.0	1.7	1.4
7 862	8.8	15.1	6.0	8.3	3.9	1.2	10.3	8.6	1 324	7.0	3.9	3.1
2 655	-28.5	-23.6	12.9	17.8	-7.0	-13.7	30.1	33.9	162	-45.0	2.1	2.0
778	-2.4	-15.6	49.6	70.5	-14.0	-104.3	102.6	101.7	340	-24.0	8.7	12.2
..	..	..	1.3	1.2	6.2	5.8	..	..	5 848	..	1.1	3.5
3 050	16.7	-1.5	13.0	15.1	54.1	48.7	25.2	25.7	8 489	-5.0	2.5	1.1
2 955	-6.2	-7.2	26.6	28.5	0.3	-2.0	25.8	23.0	857	-4.0	17.8	8.3
3 555	61.6	..	7.5	10.5	2.5	6.2	20.9	20.9	9 686	..	8.1	3.7
6 041	10.1	-32.8	15.6	22.8	-30.7	-141.1	12.1	20.6	1 652	-57.0	10.5	7.0
1 502	41.0	12.4	24.7	27.8	4.6	4.1	48.1	50.7	927	4.0	4.5	2.6
2 500	38.2	-6.9	12.2	12.8	-1.2	-2.2	28.5	42.1	382	18.0	2.6	2.7
3 568	-4.1	-13.8	12.6	16.8	3.6	-44.3	19.9	25.5	520	-8.0	1.6	3.5
847	3.4	8.2	16.8	16.8	39.3	37.9	83.3	78.8	2 248	35.0	4.5	4.2
1 925	-41.7	-38.2	13.6	12.1	-50.2	-32.1	36.4	25.2	970	-31.0	2.3	2.8
2 014	27.3	9.3	16.1	18.1	11.5	8.4	34.7	39.8	1 043	-3.0	2.5	1.7
10 325	2.7	3.3	7.5	8.0	11.8	-0.1	6.7	6.3	1 002	34.0	6.4	5.6
3 943	7.2	9.1	11.0	12.2	30.7	24.7	17.4	17.1	4 736	7.0	7.5	9.1
5 800	5.5	-0.8	8.7	9.1	11.3	-14.5	11.7	10.6	2 048	7.0	8.1	8.3

## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>IT Hardware (93) continued</b>									
100	Polycom	458	USA	68	26.8	15.7	397	28.5	12.1
101	McData	461	USA	67	3.0	23.0	294	-4.5	5.1
102	Lattice Semiconductor	462	USA	67	4.4	8.3	166	7.8	-8.5
103	PerkinElmer	469	USA	64	4.7	2.3	1 241	9.9	8.2
104	Nidec	481	Japan	63	28.2	7.2	1 992	19.6	3.6
105	Creo	485	Canada	62	6.9	2.2	468	10.1	-1.1
106	Fairchild Semiconductor	496	USA	60	9.6	-0.4	1 179	14.8	4.4
107	Advanced Semiconductor Engineering	497	Taiwan	60	9.8	19.8	1 897	81.5	28.6
108	Credence Systems	503	USA	59	9.5	-2.3	324	141.8	13.4
109	Mindspeed Technologies	504	USA	59	..	..	88	..	..
110	Macronix International	505	Taiwan	59	-6.9	-13.0	533	31.9	2.0
111	Zoran	506	USA	58	96.0	50.5	279	75.5	52.3
112	Silicon Image	512	USA	57	79.8	30.9	127	67.1	49.5
113	AMIS	515	USA	57	9.9	22.4	381	14.1	16.7
114	ECI Telecom	518	Israel	56	-8.9	-14.9	365	17.7	-17.8
115	Silicon Laboratories	523	USA	55	55.1	37.2	336	40.6	83.9
116	Logitech International	527	Switzerland	54	20.6	13.5	1 091	16.9	16.3
117	Enterasys Networks	529	USA	54	-12.3	-11.9	263	-13.8	-10.5
118	Emulex	531	USA	54	19.5	39.4	268	18.1	14.2
119	L-3 Communications	539	USA	52	34.9	-12.8	5 074	36.3	43.2
120	Creative Technology	547	Singapore	51	18.3	8.8	600	16.3	-12.8
121	palmOne	549	USA	51	-37.3	-24.4	699	8.9	-15.2
122	Varian Semiconductor Equipment	559	USA	50	11.9	10.8	390	46.1	-5.7
123	LTX	560	USA	50	2.4	0.8	188	113.6	-8.2
124	ADTRAN	562	USA	50	15.9	4.6	334	14.4	5.4
125	Brooks Automation	566	USA	49	-7.9	3.3	397	56.9	13.6
126	Cirrus Logic	568	USA	49	-12.3	-18.1	143	-0.7	-22.5
127	Zarlink Semiconductor	577	Canada	48	-13.2	-7.9	158	8.2	-1.0
128	Arris	583	USA	47	0.8	5.2	361	13.2	-13.1
129	Axcelis Technologies	584	USA	47	-0.1	-6.2	374	57.8	11.6
130	Coherent	588	USA	46	23.1	5.7	364	21.7	1.1
131	Finisar	590	USA	46	3.2	22.7	137	12.3	-0.5
132	Garmin	594	Cayman Islands	45	40.9	29.8	561	32.9	27.3
133	Leapfrog Enterprises	599	USA	45	5.9	16.7	471	-5.8	26.8
134	Triquint Semiconductor	603	USA	45	-6.5	5.5	255	10.9	1.2
135	Diebold	609	USA	44	-0.7	0.2	1 752	12.9	10.6
136	ADC Telecommunications	612	USA	44	-45.6	-40.4	577	1.4	-31.2
137	Cymer	619	USA	43	0.4	1.5	308	56.3	15.9
138	Extreme Networks	624	USA	43	0.2	0.1	259	-3.0	-10.5
139	MKS Instruments	633	USA	42	19.6	14.5	408	64.5	24.6
140	Imation	634	USA	42	-0.2	-3.2	897	4.8	1.2
141	Bookham Technology (now Bookham)	636	USA	42	-17.5	-8.2	124	-1.6	58.7
142	Redback Networks	637	USA	42	-14.5	-26.6	85	7.6	-20.2
143	FEI	644	USA	41	20.6	10.4	343	28.9	7.4
144	Tokyo Seimitsu	655	Japan	40	68.0	20.2	447	31.9	-5.2
145	Centillum Communications	657	USA	40	16.4	-3.1	52	-43.5	-23.7
146	Computer Network Technology	666	USA	38	20.9	30.1	269	1.1	24.9
147	Advanced Energy Industries	667	USA	38	-0.2	4.5	291	50.8	27.0
148	Interdigital Communications	669	USA	38	11.5	4.8	76	-9.5	24.9
149	Micro-Star International	672	Taiwan	38	20.5	34.4	1 594	4.1	19.6

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
1 437	21.5	4.2	17.1	17.3	7.8	5.5	47.1	45.2	1 140	-15.0	3.5	3.6
1 008	-1.4	4.4	22.9	21.2	-6.5	-1.9	66.8	63.9	544	23.0	4.1	4.2
1 008	-3.8	0.1	40.3	41.6	-24.8	-44.8	66.4	61.1	369	-10.0	4.8	4.5
10 000	0.0	-2.5	5.2	5.4	10.4	8.7	6.4	6.1	1 950	18.0	1.1	1.1
68 000	..	..	3.2	2.9	8.1	6.4	0.9	..	6 137	..	8.1	9.4
3 960	-2.9	..	13.3	13.7	1.9	1.6	15.7	14.2	..	..	2.6	3.5
9 024	-7.4	-2.7	5.1	5.4	7.9	-1.4	6.7	5.7	1 442	12.0	11.9	9.7
34 649	41.8	30.2	3.2	5.2	5.5	5.6	1.7	2.2	2 285	..	34.9	38.9
1 886	81.0	12.9	18.3	40.4	-13.8	-62.7	31.4	51.9	653	3.0	5.6	8.2
633	..	..	66.5	..	-77.5	..	92.5	..	113	..	4.5	..
3 761	9.5	..	11.0	15.6	2.6	-42.1	15.6	18.3	546	-50.0	12.0	14.9
932	15.1	45.3	20.9	18.7	-12.4	-33.3	62.5	36.7	459	..	2.2	3.1
337	34.8	8.2	45.2	42.0	0.0	-13.2	170.4	127.8	542	..	3.2	5.3
2 578	0.4	..	14.9	15.5	16.6	3.0	22.1	20.1	717	..	6.3	6.0
2 638	7.2	-13.9	15.3	19.8	1.1	-17.4	21.2	25.0	669	35.0	4.9	2.6
588	21.0	28.2	16.4	14.9	23.9	20.1	93.7	73.1	1 123	..	4.5	3.3
6 898	17.7	16.1	5.0	4.8	11.6	11.5	7.9	7.7	2 760	..	2.8	1.9
1 150	-17.9	-20.6	20.6	20.3	-24.4	-28.2	47.2	44.2	175	-33.0	2.3	4.6
522	32.2	17.8	20.1	19.9	-136.8	22.5	103.2	114.1	1 178	..	13.4	6.2
44 200	14.2	128.1	1.0	1.0	10.9	11.2	1.2	1.0	6 681	..	1.2	1.6
..	..	..	8.5	8.4	5.4	3.1	..	11.1	453	..	2.0	2.3
699	-28.8	-18.9	7.3	12.7	-1.7	-24.8	73.0	82.9	1 131	-15.0	0.6	1.2
1 444	10.1	-4.3	12.8	16.7	16.1	3.4	34.5	34.0	1 176	..	2.3	3.7
635	10.2	-8.9	26.5	55.3	2.1	-119.3	78.4	84.4	257	-30.0	6.9	14.8
1 593	-0.6	-0.7	14.8	14.7	22.7	20.9	31.1	26.7	1 418	..	1.5	1.7
1 900	0.0	0.0	12.4	21.2	5.6	-51.0	26.0	28.2	500	6.0	1.5	4.0
603	-21.4	-20.6	34.4	38.9	-19.6	13.2	81.5	73.1	458	21.0	2.1	1.4
962	-7.2	-13.1	30.4	37.8	-17.3	-22.6	49.9	53.3	125	-62.0	1.9	2.7
728	-8.0	-19.9	12.9	14.5	-4.3	-14.4	64.0	58.5	781	191.0	1.9	1.3
1 595	4.0	-6.5	12.4	19.6	15.7	-12.2	29.2	30.4	459	-29.0	1.1	1.7
2 218	3.8	-2.2	12.6	12.5	5.7	-14.1	20.7	17.5	717	..	9.3	6.4
2 826	38.5	..	33.4	36.4	-47.3	-369.7	16.2	21.7	212	..	7.3	11.5
2 484	22.9	23.2	8.1	7.6	35.5	39.3	18.2	15.9	4 461	..	10.2	5.7
921	6.0	..	9.5	8.5	-2.2	16.8	48.7	48.8	326	..	3.2	2.4
2 072	1.3	9.9	17.5	20.8	-7.8	-22.2	21.6	23.4	369	-9.0	7.5	9.1
14 376	7.3	4.3	2.5	2.9	11.6	12.1	3.1	3.3	2 510	..	2.1	2.3
7 500	31.6	-14.6	7.5	14.0	1.5	-12.7	5.8	14.0	2 041	43.0	1.4	9.0
770	0.5	-1.7	14.0	21.7	14.8	-12.7	55.8	55.9	858	..	4.5	23.4
831	-6.6	-5.0	16.5	16.0	0.0	-18.4	51.4	47.9	385	..	1.9	4.1
2 319	8.2	15.8	10.3	14.1	11.8	-4.4	18.1	16.4	710	..	3.2	2.0
2 550	-8.9	-9.1	4.7	4.9	4.0	9.1	16.4	15.0	1 052	..	2.9	6.4
1 877	5.2	34.1	33.6	40.1	-231.2	-97.6	22.2	28.3	109	-55.0	8.9	13.5
447	-7.5	-18.3	49.0	61.7	-48.4	-91.1	93.2	100.8	372	83.0	2.4	6.3
1 691	5.4	2.9	12.0	12.8	6.3	4.9	24.3	21.2	518	..	3.2	8.3
1 100	-0.1	-1.8	8.9	7.0	-9.6	0.6	36.1	21.5	1 235	..	2.7	6.8
340	-5.8	0.4	76.0	36.9	-61.8	-12.0	116.3	94.1	81	..	5.8	2.2
1 011	-16.8	8.5	14.1	11.8	-28.7	-5.6	37.6	25.9	..	..	4.1	2.3
1 651	..	..	13.0	19.7	-0.1	-8.8	23.0	..	260	..	3.4	7.8
325	..	0.6	49.6	40.2	-6.1	35.7	115.9	..	727	..	3.9	3.6
..	..	..	2.4	2.0	0.2	4.8	..	..	433	..	2.4	..



## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>IT Hardware (93) continued</b>									
150	Aeroflex	680	USA	37	60.7	38.3	305	41.9	21.3
151	Koor Industries	688	Israel	36	-4.2	-7.4	1 572	20.0	8.9
152	Lenovo	691	Hong Kong	36	-24.1	47.2	2 135	-2.7	2.6
153	Sycamore Networks	693	USA	36	-12.6	-37.0	33	17.9	-50.7
				<b>17 414</b>	<b>0.7</b>	<b>8.0</b>	<b>164 988</b>	<b>10.2</b>	<b>6.2</b>
<b>Software &amp; Computer services (97)</b>		<i>number of companies for calculation</i>		<b>66</b>	<b>66</b>	<b>65</b>	<b>66</b>	<b>66</b>	<b>65</b>
1	Microsoft	5	USA	4 550	-20.5	12.8	29 273	8.0	11.9
2	IBM	7	USA	4 167	11.8	7.0	70 844	8.0	3.9
3	Oracle	42	USA	1 097	16.7	11.5	8 681	16.2	6.8
4	Computer Associates	75	USA	559	7.6	1.3	2 597	7.8	6.0
5	Electronic Arts	89	USA	466	23.9	17.8	2 302	5.8	22.0
6	Google	125	USA	291	72.1	..	2 346	117.4	..
7	Yahoo!	128	USA	285	87.1	45.4	2 630	119.9	70.8
8	Cadence Design Systems	134	USA	274	9.6	7.8	881	6.9	-5.7
9	Veritas Software	141	USA	258	15.4	13.3	1 502	16.9	11.0
10	Intuit	145	USA	255	35.6	18.8	1 374	13.2	14.0
11	Symantec	151	USA	244	31.7	26.5	1 900	38.1	34.1
12	Adobe Systems	162	USA	229	12.4	11.6	1 226	28.6	10.6
13	Siebel Systems	169	USA	220	-3.2	14.6	986	-1.0	-13.2
14	Unisys	171	USA	217	5.1	-3.9	4 282	-1.5	-1.1
15	Synopsys	176	USA	212	-0.2	14.9	803	-7.3	17.0
16	BMC Software	178	USA	209	-51.5	-21.3	1 076	3.1	4.3
17	SEGA	202	Japan	192	-3.5	5.8	1 373	-3.0	-7.7
18	SunGard Data Systems	204	USA	187	22.3	13.8	2 547	20.6	21.5
19	Autodesk	218	USA	176	14.4	12.4	908	29.7	9.2
20	DST Systems	225	USA	171	26.2	5.0	1 787	0.5	13.5
21	Cerner	228	USA	170	28.1	26.5	682	10.4	21.7
22	Mentor Graphics	249	USA	149	9.5	13.7	523	5.2	5.8
23	Novell	252	USA	146	8.1	1.2	858	5.5	3.9
24	Namco	256	Japan	142	35.7	22.7	1 239	11.5	5.6
25	McAfee	268	USA	127	-6.4	5.6	670	-2.8	3.0
26	Compuware	269	USA	127	-1.3	14.3	906	-2.6	-10.7
27	Sybase	295	USA	115	7.9	-1.0	580	1.4	-5.2
28	Nintendo	300	Japan	114	8.4	-2.4	3 693	2.1	3.6
29	BEA Systems	311	USA	108	4.0	6.6	795	6.7	3.5
30	Parametric Technology	394	USA	80	-18.5	-10.2	486	-1.6	-10.9
31	Cognos	401	Canada	78	16.2	19.4	607	20.7	18.9
32	Macromedia	423	USA	72	7.9	-3.7	321	18.0	10.3
33	Hyperion Solutions	428	USA	71	30.5	5.7	458	21.8	6.4
34	Openwave Systems	445	USA	69	-19.0	-30.0	214	8.6	-32.1
35	Reynolds and Reynolds	450	USA	68	5.4	0.6	723	-2.6	-0.7
36	National Instruments	463	USA	66	11.5	14.0	378	20.8	10.1
37	Activision	473	USA	64	-11.6	28.3	1 034	48.4	21.3
38	Citrix Systems	475	USA	64	34.0	8.4	545	25.9	7.8
39	Take-Two Interactive Software	482	USA	63	239.1	139.7	830	9.1	35.7
40	Quest Software	508	USA	58	16.1	9.6	287	28.1	16.6
41	FileNET	510	USA	58	1.6	4.4	292	9.0	6.0
42	Mercury Interactive	530	USA	54	31.9	25.0	504	35.1	23.7
43	Thq	534	USA	54	98.0	51.1	557	18.3	25.9
44	Fair Isaac	540	USA	52	5.2	35.9	520	12.3	29.0

Employees 2004			R&D/Net Sales ratio		Operating Profit		R&D per employee		Market Capitalisation		Capital expenditures	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
2 398	..	24.3	12.1	10.6	6.7	3.7	15.3	..	500	..	2.6	2.3
6 559	3.7	-3.5	2.3	2.9	12.4	7.9	5.5	6.0	631	..	2.3	2.6
9 682	..	..	1.7	2.2	3.8	3.7	3.7	..	2 509	..	0.3	0.4
353	-5.4	-28.0	108.0	145.7	-136.5	-207.1	101.0	109.4	715	..	9.1	10.7
<b>701 685</b>	<b>5.4</b>	<b>1.6</b>	<b>10.6</b>	<b>11.5</b>	<b>19.0</b>	<b>14.9</b>	<b>24.6</b>	<b>25.7</b>	<b>609 914</b>	<b>3.9</b>	<b>3.7</b>	<b>4.2</b>
65	62	62	66	66	66	66	65	62	63	42	66	66
61 000	7.0	6.5	15.5	21.1	38.1	24.5	74.6	100.4	215 020	-5.0	2.0	3.0
329 001	3.1	0.9	5.9	5.7	13.3	12.9	12.7	11.7	96 496	-11.0	4.5	4.9
49 872	19.7	5.9	12.6	12.6	33.9	38.4	22.0	22.6	50 323	24.0	1.6	1.9
15 300	0.0	-2.7	21.5	21.6	3.3	0.1	36.5	34.0	11 615	9.0	2.0	0.9
6 100	27.1	20.3	20.2	17.3	20.9	26.1	76.3	78.3	13 372	22.0	4.0	3.0
3 021	..	..	12.4	15.7	19.9	23.6	96.2	..	59 218	..	10.0	12.1
7 600	38.2	36.3	10.8	12.8	34.1	20.7	37.5	27.7	35 856	19.0	6.9	7.2
4 900	2.1	-4.4	31.1	30.4	7.7	-2.8	56.0	52.1	3 194	22.0	5.1	7.4
7 587	16.4	10.6	17.2	17.4	27.5	21.6	34.0	34.3	..	..	5.8	4.7
6 700	0.0	3.2	18.6	15.5	22.5	22.2	38.1	28.1	6 242	16.0	2.8	3.1
6 500	22.6	18.6	12.9	13.5	31.7	28.1	37.6	35.0	19 176	80.0	3.5	6.0
3 142	-10.4	1.2	18.7	21.4	35.5	29.4	72.9	58.1	9 707	31.0	3.8	3.0
5 032	1.2	-12.1	22.3	22.8	10.2	-2.8	43.7	45.7	3 170	9.0	5.3	1.1
36 400	-2.4	-2.2	5.1	4.7	-0.1	7.6	5.9	5.5	1 606	-37.0	2.4	4.3
4 378	0.4	10.7	26.4	24.5	8.0	18.2	48.4	48.7	1 827	-24.0	4.1	4.3
6 905	7.4	2.9	19.4	41.3	1.6	-2.0	30.3	67.1	3 282	30.0	3.9	3.5
3 507	1.1	..	14.0	14.0	5.5	2.1	54.6	57.3	..	..	4.8	3.5
13 000	30.0	14.3	7.3	7.2	22.6	21.6	14.4	15.3	..	..	6.1	6.3
3 477	-0.5	-1.6	19.4	22.0	19.3	11.3	50.7	44.1	6 178	87.0	3.3	2.7
11 000	-3.5	-0.6	9.5	7.6	15.5	14.4	15.5	11.9	3 090	8.0	7.5	10.9
5 345	5.3	8.6	24.9	21.4	12.3	9.4	31.7	26.1	2 161	80.0	6.2	9.9
3 856	7.1	7.4	28.5	27.4	5.6	2.0	38.6	37.8	467	-21.0	3.4	3.4
6 186	7.9	-4.1	17.0	16.6	4.3	-7.3	23.6	23.6	1 665	-19.0	2.3	3.6
..	..	..	11.5	9.4	8.0	5.0	..	..	1 212	..	1.1	1.2
2 950	-20.3	-6.9	19.0	19.7	61.8	7.1	43.1	36.7	3 534	62.0	2.8	6.4
7 908	-8.7	-8.0	14.0	13.8	8.6	4.4	16.1	14.9	2 370	65.0	2.3	5.9
3 568	-2.5	-8.4	19.8	18.6	11.5	13.5	32.2	29.1	1 411	38.0	3.8	4.5
2 985	0.0	0.5	3.1	2.9	21.7	20.1	38.1	35.1	11 215	-2.0	0.4	0.4
3 353	7.4	2.5	13.6	13.9	18.3	17.3	32.2	33.2	2 668	39.0	0.9	1.6
3 042	-13.1	-12.5	16.3	19.7	5.1	-12.8	26.1	27.9	1 266	46.0	1.6	3.0
3 297	13.5	9.7	12.8	13.3	19.2	17.1	23.6	23.1	2 397	..	2.1	3.8
1 445	19.1	5.9	22.6	24.7	13.0	13.2	50.1	55.3	2 095	101.0	16.8	7.0
2 473	11.2	1.6	15.5	14.4	11.0	9.8	28.6	24.4	1 303	10.0	3.7	4.0
1 265	-13.1	-16.8	32.1	43.0	-7.1	-79.7	54.2	58.2	845	57.0	2.3	3.1
4 380	-3.1	-2.8	9.5	8.8	15.4	19.4	15.6	14.4	1 326	20.0	3.5	5.8
3 465	12.6	6.7	17.5	18.9	11.8	9.9	19.1	19.3	1 606	-4.0	2.4	4.2
1 728	30.5	18.7	6.2	10.3	13.1	11.6	36.8	54.4	2 941	96.0	1.1	1.3
2 656	40.9	12.2	11.7	11.0	21.8	26.8	23.9	25.2	2 941	34.0	3.3	1.8
1 435	..	29.4	7.5	2.4	8.4	15.8	43.7	..	1 310	..	1.9	1.4
2 257	30.1	11.2	20.1	22.2	8.5	7.6	25.5	28.6	965	18.0	8.0	2.2
1 607	-6.6	-2.8	19.7	21.2	7.1	3.0	35.8	33.0	874	64.0	2.4	2.6
2 659	14.5	18.5	10.8	11.0	13.0	9.1	20.4	17.7	2 441	..	4.8	3.5
1 300	63.3	29.8	9.6	5.8	9.8	8.3	41.3	34.1	1 072	..	2.2	1.3
3 058	29.9	27.7	10.1	10.7	24.9	27.9	17.1	21.1	1 873	26.0	3.3	2.8

## II.1.7. Ranking of the Top 700 non-EU companies by R&D investment in the 2004 financial year, by sectors (of declared main activity)

No.	Company	Rank	Country	R&D Investment			Net Sales		
				2004	Change 04/03	CAGR 3yrs	2004	Change 04/03	CAGR 3yrs
				€m	%	%	€m	%	%
<b>Software &amp; Computer services (97) continued</b>									
45	I2 Technologies	541	USA	52	-12.5	-37.6	286	-21.4	-26.7
46	Intergraph	551	USA	51	0.1	2.7	405	4.4	1.2
47	Borland Software	555	USA	50	6.0	13.2	228	5.1	11.8
48	NetIQ	556	USA	50	-4.3	23.2	192	-15.8	16.0
49	Nihon Unisys	561	Japan	50	4.6	-11.6	2 222	0.2	-0.3
50	Verisign	563	USA	50	20.7	-4.8	858	10.6	5.8
51	IDX Systems	569	USA	49	20.4	13.6	383	30.3	11.0
52	Aspen Technology	570	USA	49	-8.7	-1.2	240	1.3	1.6
53	CheckFree	573	USA	49	16.3	3.1	446	9.9	11.8
54	Eclipsys	579	USA	48	-15.0	14.0	227	21.4	9.3
55	Lawson Software	581	USA	48	9.8	7.2	267	5.5	-2.7
56	RSA Security	593	USA	46	15.4	2.0	226	18.3	2.8
57	Tibco Software	597	USA	45	-5.4	-12.4	285	46.9	6.6
58	Wind River Systems	604	USA	45	7.1	-12.1	173	15.3	-12.5
59	Progress Software	607	USA	45	19.8	13.3	267	17.6	11.4
60	Ariba	654	USA	40	0.5	-15.9	181	4.0	-15.6
61	JDA Software	661	USA	39	8.8	15.4	160	4.6	1.7
62	Realnetworks	663	USA	38	9.1	-2.3	196	31.5	12.1
63	Vignette	665	USA	38	26.4	-8.7	114	-1.7	-19.4
64	Informatica	668	USA	38	8.6	3.5	162	7.3	3.8
65	S1	682	USA	37	10.1	-3.6	177	-4.8	-4.8
66	Geac Computer	689	Canada	36	-37.6	-21.0	273	-28.7	-19.0

Employees 2004			- R&D/Net Sales ratio -		— Operating Profit —		— R&D per employee —		- Market Capitalisation -		- Capital expenditures -	
2004	Change 04/03	CAGR 3yrs	2004	2003	2004	2003	2004	2003	2004	Change 04/03	2004	2003
#	%	%	%	%	% of Net Sales	% of Net Sales	€K	€K	€m	%	% of Net Sales	% of Net Sales
2 044	-16.6	-24.8	18.2	16.3	3.3	4.4	25.4	24.2	344	42.0	0.7	0.3
3 500	-5.4	-6.6	12.5	13.1	41.7	3.9	14.5	13.7	845	17.0	1.2	1.8
1 361	0.2	5.5	22.0	21.8	6.0	-13.4	36.8	34.8	343	-29.0	0.9	2.3
1 322	-3.1	6.6	26.1	22.9	-73.6	-296.1	37.9	38.4	430	10.0	2.6	4.8
8 729	1.7	-1.6	2.2	2.1	-1.4	5.3	5.7	5.5	775	..	2.9	5.6
3 206	28.2	-0.7	5.8	5.3	11.0	-24.5	15.5	16.4	4 561	..	7.9	10.2
2 409	17.6	-20.3	12.8	13.9	8.4	7.5	20.4	19.9	720	..	4.7	7.1
1 550	-11.3	-7.0	20.4	22.6	-3.5	-50.2	31.5	30.6	172	1.0	0.8	1.3
3 000	11.1	-3.1	10.9	10.3	3.2	-14.5	16.3	15.5	2 584	..	3.8	4.4
1 983	5.6	12.5	21.1	30.1	-11.1	-23.0	24.1	30.0	594	..	4.8	6.4
1 579	-5.7	..	17.9	17.2	3.3	-3.2	30.2	26.0	419	..	1.5	1.6
1 144	9.1	-2.1	20.1	20.7	15.3	9.4	39.8	37.6	665	..	3.5	1.6
1 360	52.0	10.6	15.8	24.5	17.6	1.0	33.1	53.1	1 126	11.0	1.8	1.0
1 112	3.2	-14.8	25.8	27.8	4.3	-12.0	40.2	38.7	988	..	2.3	29.3
1 552	11.6	3.6	16.7	16.4	12.8	11.9	28.8	26.8	864	..	3.0	2.2
1 686	99.5	14.5	22.0	22.8	-11.7	-45.4	23.6	46.9	293	..	1.1	1.2
1 156	-10.5	-5.8	24.3	23.3	-0.2	1.3	33.6	27.7	296	..	5.6	5.2
819	10.7	0.5	19.5	23.6	-10.1	-12.8	46.8	47.5	656	..	3.6	4.7
730	-9.3	-17.9	33.4	26.0	-166.7	-1.7	52.2	37.4	327	..	3.5	4.3
837	4.6	-0.0	23.3	23.0	-49.0	2.7	45.1	43.5	714	..	5.6	1.3
1 666	33.8	0.5	20.7	17.9	2.6	-15.1	22.0	26.7	231	..	4.5	2.7
2 300	..	-15.4	13.2	15.1	15.9	13.3	15.7	..	637	..	0.7	0.5

The content of the *2005 EU Industrial R&D Investment Scoreboard* – i.e. the tables in Volume II (Company data) – has been prepared on the basis of information gathered according to the methodological standards set out below.

## Scope of the EU Industrial R&D Investment Scoreboard

1. The tables in Volume II of the *Scoreboard* have been prepared from companies' annual reports and accounts received up to and including 1 August 2005.
2. The accounts used are the consolidated group accounts of the ultimate parent company. Companies which are subsidiaries of any other company, such as Airbus, France, are not listed separately. Where consolidated group accounts of the ultimate parent company are not available, subsidiaries are included e.g. Sorin, Italy or Cognis Deutschland, Germany. These bases seek to maximise completeness while at the same time minimising double counting.
3. In case of companies whose accounts are expected close to the cut-off date, preliminary announcements are used. Examples are Microsoft, USA, Renishaw, UK, Marconi, UK and Misys, UK. The official stock exchange "preliminary announcements" of a limited number of companies have been used where: (i) the annual report & accounts are not yet published at that date; (ii) the preliminary announcements are available at the cut-off date; and (iii) they would significantly affect the *Scoreboard*.
4. In case of a de-merger, the full history of the continuing entity is included, thus producing breaks in the time series, for the year when the respective de-merger took place. The history of the de-merged company can only go back as far as the date of the de-merger to avoid double counting of figures (e.g. Freescale Semiconductor, USA; TRW Automotive, USA).
5. In case of an acquisition or merger, pro-forma figures for the year of acquisition are used along with pro-forma comparative figures if available (e.g. Sanofi-Aventis).
6. For the *Scoreboard*, the exclusion of companies which are subsidiaries of any other company applies also to companies for which the ultimate parent company is outside the EU, such as Ford, UK and IBM, Germany. These foreign-owned companies have been excluded on the additional criterion that transfer pricing of R&D services renders their interpretation significantly different from the other companies.
7. The R&D investment included in the *Scoreboard* is the cash investment which is funded by the companies themselves. It excludes R&D undertaken under contract for customers such as governments or other companies. It also excludes the companies' share of any associated company or joint venture R&D investment. Where part or all of R&D costs have been

capitalised, the additions to the appropriate intangible assets are included to calculate the cash investment and any amortisation eliminated.

8. Companies are allocated to the country of their registered office. In some cases this is different from the operational or R&D headquarters. Examples are EADS, which is registered in the Netherlands but has operations in Germany, France, Spain and the UK; and AstraZeneca, which is registered in the UK but has its R&D headquarters in Sweden; or, at the time of publication of the accounts, Royal Dutch Shell, which is registered in the UK but has its operational headquarters in The Netherlands.
9. The focus of the *Scoreboard* on R&D investment as reported in group accounts means that the results are independent of the location of the R&D activity.

## Sources

The database consists of information extracted from the audited annual reports and accounts of EU and non-EU companies, using rigorous financial reporting practice verification processes. The companies are those which are identified as having an R&D activity and which either (i) respond to a request for their annual accounts or (ii) have their accounts available at a public registry from which low-cost copies can be obtained. The database contains many times more companies than are listed in the *Scoreboard* to ensure that the top companies by R&D investment can be identified in each case.

The data has been gathered by Company Reporting Ltd, an independent corporate financial reporting specialist based in Edinburgh, Scotland. In 2005, a partnership<sup>1</sup> was formed with European organisations to extend the monitoring process to a deeper level in all EU economies.

The market capitalisation data have been extracted from both the Financial Times London Share Service and Reuters. These reflect the market capitalisation of each company at the close of trading on 15 August 2005.

In the case of EU and Non-EU companies, the database is supplemented by a feed service from Standard & Poor's Compustat Global Vantage database to identify potential new entrants to the ranking. In addition, the Amadeus and the Experian databases have been used; and recognised stock exchanges are monitored also.

The industry sectors are based on the Financial Times Stock Exchange (FTSE) Global Classification System. In this year's *Scoreboard*, we have introduced – experimentally – an equivalent classification of companies according to the NACE (the European Classification of Sectors of Economic Activity). The table of equivalence between FTSE and NACE was prepared at the level of FTSE 3-digit dis-aggregation, and the assignment of NACE sectors to companies was estimated based on the declared main activity of each company (from their annual financial reports). This assignment is presented in Tables II.1.2 and II.1.6 in Volume II.

<sup>1</sup> Company Reporting Ltd (UK) - the main contractor - with the support of the following partner organisations: Inno AG (D), Sociedade Portuguesa de Inovação (P), KMU Forschung (A), West Hungarian Research Institute (HU), National Agency for Development of Small and Medium Enterprises (SK), IRP Institute for Entrepreneurship Research (SI) and Etlatieto Oy/Ltd (FI).

## Limitations

There are some limitations inherent in the approach used in preparing data of the *Scoreboard*. These can be broadly classified as disclosure, measurement, timing and availability:

### 1. Disclosure

The main limitation is the reliance on disclosure of R&D investment in published annual reports and accounts. In the UK, a significant minority of companies with evidence of R&D activities disclose no figures for R&D investment. In some cases, the R&D investment is not material enough to warrant disclosure; in others, this is permitted by current accounting standards. However, the number of such companies making voluntary disclosure suggests that perceived issues of definition and competitive pressure are surmountable.

A few companies are known to have substantial R&D investment but disclose this investment elsewhere than in their annual report & accounts and so are not included in the *Scoreboards*. There are also companies with a significant R&D investment that disclose this investment only as a percentage figure (often to only 1 significant figure); an example of this is Rhoen-Klinikum, Germany. These companies are not included in the *Scoreboard*.

The companies of some countries are less likely than others to disclose R&D investment, or to disclose it consistently. The converse appears to apply to UK practice, where an R&D *Scoreboard* has been published by the UK Government for the last 15 years; the impact of which is that there is a higher incidence of voluntary disclosure in the UK than elsewhere and a consequent over representation of UK companies in this *Scoreboard*.

As a result of these disclosure limitations, the *Scoreboard* cannot set out to capture systematically all companies with R&D activity. There is evidence to suggest that the distribution of R&D activity is highly skewed towards larger companies, with a “long tail” of smaller companies. The *Scoreboard* captures the more significant R&D investing companies and therefore allows reasonable comparisons to be made.

For many diversified groups, the R&D investment disclosed in their accounts arises from only part of their activities, whereas sales, profit before tax and market capitalisation are in respect of all their activities. Unless all such groups disclose additionally their R&D investment with the other information in segmental analyses, it is not possible to relate the R&D more closely to the results of the individual activities which give rise to it. The impact of this is that some statistics for these groups, e.g. R&D as a percentage of sales, are possibly understated relative to the R&D based activities and so comparisons with non-diversified groups will be limited.

The R&D investment disclosed in some companies' accounts follows the US practice of including engineering costs relating to product improvement. Where these engineering costs have been disclosed separately, they have been excluded from the *Scoreboard*. However, the incidence of non-disclosure is uncertain and the impact of this practice is a possible overstatement of some overseas R&D investment figures in comparison with the EU. Microsoft for example is known to include translation expenses in its R&D expenditure;



these have not been disclosed separately and are therefore part of the R&D investment shown in the 2005 EU Industrial R&D Investment *Scoreboard*.

The R&D investment included in the *Scoreboard* excludes R&D undertaken under contract for customers such as governments or other companies. Where R&D income can be clearly identified as a result of customer contracts it is deducted from the R&D expense stated in the annual report and accounts. However, the disclosure practise differs and R&D income from customer contracts cannot always be clearly identified. This means a possible overstatement of some R&D investment figures in the *Scoreboard* for companies with directly R&D related income.

The EU is currently in the transition period leading up to the adoption of International Financial Reporting Standards (IFRSs) by listed companies. Once fully adopted, the disclosure of R&D in annual reports will be less variable and so reduce the number of those companies which disclose their R&D expenditure in the annual report but outside the financial statements; or disclose this figure as a percentage of sales or operating profit; or aggregate R&D costs with other amounts.

Changes in financial accounting standards may result in significant differences in company data from one year to the next. This is the case of the new directive issued by the US Financial Accounting Standards Board, introduced in December 2004 and compulsory for annual reports released after June 15, 2005, requiring companies to declare stock options given to R&D employees as an expense. The most important example is Microsoft, which reported an increase of 67 % in their R&D expenditure in 2004 in the wake of this new regulation.

## **2. Measurement**

In implementing the definition of R&D, companies exhibit variability arising from three principal sources:

- (i) Natural variability - which arises from differing interpretations of definition; some companies view a process as an R&D process while other companies may view the same process as an engineering or other process.
- (ii) Data capture variability - which arises from differing information systems; some companies will have in place better systems than others for measuring the costs associated with R&D processes. This problem of data capture systems appears most challenging for companies in the new EU countries e.g. Poland, Czech Republic, Slovakia.
- (iii) Fiscal variability - which arises from fiscal incentives based on the treatment of costs.

## **3. Timing**

The accounts of the companies included in the current year set are their latest published accounts and are intended to be their fiscal year 2004 accounts. Companies from most countries have discretion in the choice of accounting period end and as a result the current year set can include accounts ending on a range of dates from mid-2004 to early 2005. Furthermore, the accounts of some companies are publicly available more promptly than others; as a result the current year set represents a heterogeneously timed set of data.

#### 4. Availability

The accounts of companies which are not listed on any recognised stock exchange are significantly more difficult to capture. There is considerable variability between countries in relation to the existence of and, where they exist, the administrative procedures and costs associated with capturing accounts. This results in the smaller private companies from the “long tail” being under represented; and this is the case with a smaller number of significant but private enterprises, such as Servier, France.

## Interpretation

There are some fundamental aspects of data in the *Scoreboard* which affect their interpretation.

### 1. Funding vs. activity

The focus of the *Scoreboard* on R&D investment as reported in group accounts means that the results can be independent of the location of the R&D activity. The data in the *Scoreboard* indicate the level of R&D funded by companies, not all of which is carried out in the country in which the company is registered. This enables inputs such as R&D and Capex investment to be related to outputs such as Sales, Profit, productivity ratios and market capitalisation. The information in the *Scoreboard* differs therefore from other information such as the Business Enterprise R&D (BERD) data generated by the OECD, Eurostat and by National Statistics Offices. The BERD data focus on R&D activity within the countries, independent of the source of funding and, at the national level, exclude R&D carried out by companies in other countries. In brief, the distinction can be seen as “funding vs. activity”.

### 2. Growth

At the aggregate level, the growth statistics reflect the nominal growth of the set of companies in the current year set, without taking into account the effect of exchange rates on the separate financial results of the same companies obtained in different currency areas. Companies which may have existed in the base year but which are not represented in the current year set are not part of the *Scoreboard* (a company may continue to be represented in the current year set if it has been acquired by or merged with another). These are therefore “successful efforts” aggregates rather than economic estimates of market aggregates.

### 3. Currency effects

Currency translations have been applied using the exchange rates at a single reference date and this has been applied to all historical data also. The result is that the *Scoreboard* data reflect the domestic currency results of the companies rather than economic estimates of current purchasing parity results. The original domestic currency data can be derived simply by reversing the translations at the relevant rates set out in the glossary of definitions below and users can then apply their own preferred current purchasing parity transformation models; the transformations will be subject to the timing limitations set out above and will be highly influenced by

exchange rate movements (appreciations or depreciations of one currency against another).

## Glossary of definitions

1. **“R&D investment”** - research & development (R&D) investment included in the *Scoreboard* is the cash spend, as described in “Scope of the EU Industrial R&D Investment *Scoreboard*” above. Being that disclosed in the annual report and accounts, it is subject to the accounting definitions of R&D. For example, a definition is set out in International Accounting Standard (IAS) 38 “Intangible assets” and is based on the OECD “Frascati” manual.
2. **“(Net) Sales”** - the usual accounting definition of sales, excluding sales taxes and shares of sales of joint ventures & associates. For banks, sales are defined as the “total (operating) income” plus any insurance income. For insurance companies, sales are defined as “Gross premiums written” plus any banking income.
3. **“Operating profit (or loss)”** - this is calculated as net profit (or loss) before taxation, plus net interest cost (or minus net interest income), less gains (or plus losses) arising from the sale/disposal of businesses or fixed assets.
4. **“Annual growth (Change Year/Previous Year)”** - simple growth over the previous year, expressed as a percentage =  $100 * ((C/B) - 1)$ ; where C = current year amount, and B = previous year amount. Annual growth is calculated only if data exist for both the current and previous year. At the aggregate level, annual growth is calculated only by aggregating those companies for which data exist for both the current and previous year.
5. **“CAGR 3yrs (growth)”** - compound annual growth over the previous 3 years, expressed as a percentage =  $100 * (((C/B)^{(1/t)} - 1)$ ; where C = current year amount, B = base year amount (where base year = current year - 3), and t = number of time periods (= 3). CAGR 3yrs growth is calculated only if data exist for the current and base years. At the aggregate level, CAGR 3yrs growth is calculated only by aggregating those companies for which data exist for the current and base years.
6. **“Capex”** - capital expenditure, disclosed in accounts as additions to tangible fixed assets.
7. **“Employees”** - the total consolidated average employees, or year end employees if average not stated.
8. **“R&D/sales ratio”** – the ratio between R&D investment and net sales of a given company or group of companies. At the aggregate level, R&D/sales ratio is calculated only by aggregating those companies for which data exist for both R&D and sales in the specified year.
9. **“R&D per employee”** - the simple ratio of R&D spend over Employees. At the aggregate level, R&D per employee and the other non-growth statistics are calculated only by aggregating those companies for which data exist for both the numerator and the denominator.

10. **“Market capitalisation”** - share price multiplied by the number of shares issued at a given date. Figures for each company in the *Scoreboard* are taken as at 15 August 2005. The gross market capitalisation amount is used to take account of those companies for which not all the equity is available on the market. Companies not listed on a recognised stock exchange have been distinguished separately by the use of italics.

11. **“Exchange rates”** - All foreign currency amounts have been translated at the Euro exchange rates ruling at 31 December 2004. This applies also to the historical comparative data. The principal rates used are:

Sweden: 9.03 (Kronor)	Denmark: 7.44 (Danish Kronor)
Japan: 139.28 (Yen)	Switzerland: 1.55 (Franc)
UK: 0.71 (Pound Sterling)	USA: 1.36 (\$)

12. **“Number of companies for calculation”** – indicates the number of companies available for calculations of aggregate data (based on groups of companies).



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