

## Annex B: European Innovation Scoreboard 2008 – Growth performance

	EU27	BE	BG	CZ	DK	DE	EE	IE	GR	ES	FR	IT	CY	LV	LT	LU	HU
<b>Average annual growth rate</b>	2.3	2.0	7.0	3.9	0.0	2.2	4.2	2.8	4.3	2.1	1.7	1.8	6.2	5.2	1.2	1.6	2.9
<b>ENABLERS</b>	5.4	5.3	6.4	7.4	3.0	4.4	5.6	8.5	5.8	3.7	3.6	5.5	8.1	9.9	5.6	8.3	1.5
<b>Human resources</b>	4.0	1.0	2.6	5.4	2.8	4.8	4.1	6.0	0.1	0.2	2.2	7.2	6.8	7.3	3.2	1.4	0.8
1.1.1 S&E and SSH graduates	6.7	0.3	-1.4	14.1	5.3	12.1	5.6	5.7	4.6	-1.2	1.4	8.8	2.9	8.2	10.8	--	7.1
1.1.2 S&E and SSH doctorate graduates	6.7	5.6	11.2	7.0	3.8	5.0	12.4	12.8	-3.1	-0.7	5.1	22.7	18.0	25.7	1.1	--	-1.1
1.1.3 Tertiary education	3.1	3.3	1.5	3.6	0.2	0.3	2.3	4.7	4.3	3.7	3.2	4.5	3.0	5.5	5.6	2.9	4.4
1.1.4 Life-long learning	3.4	-4.3	0.0	2.8	4.8	6.8	1.1	6.5	-5.2	-0.2	1.0	-0.4	9.2	-2.3	-2.6	1.9	-5.4
1.1.5 Youth education	0.4	0.4	2.2	-0.1	0.0	0.3	-0.2	0.5	0.1	-0.4	0.3	1.8	1.9	1.6	1.4	-0.6	-0.2
<b>Finance and support</b>	7.1	10.8	13.2	10.0	3.3	3.9	8.2	11.7	13.3	8.3	5.3	3.5	10.2	14.2	9.9	15.8	2.3
12.1 Public R&D expenditures	0.0	0.9	-4.7	3.5	3.1	-0.3	4.8	3.7	1.3	3.5	-1.0	0.0	6.6	13.8	2.3	10.7	-1.1
12.2 Venture capital	9.6	23.1	--	-9.6	-1.1	0.3	--	-4.7	-1.6	2.4	0.3	-8.2	--	--	--	--	-8.3
12.3 Private credit	5.4	5.6	25.2	11.8	7.5	-0.9	16.8	14.6	9.1	12.7	6.8	5.3	5.9	23.4	27.9	16.8	9.9
12.4 Broadband access by firms	13.7	15.1	21.5	40.1	3.8	17.5	3.5	37.5	51.6	15.3	16.1	18.6	18.5	6.1	1.5	20.0	9.9
<b>FIRM ACTIVITIES</b>	1.2	0.5	13.6	4.1	-0.4	1.6	5.7	0.4	1.3	1.4	1.5	1.1	6.5	5.6	-0.1	1.1	3.5
<b>Firm investments</b>	-0.9	-3.0	7.7	-0.6	-2.1	0.0	16.5	-1.6	-10.2	5.5	0.0	0.0	1.8	7.4	0.1	-0.5	1.9
2.1.1 Business R&D expenditures	-0.4	-0.2	10.7	6.6	-1.9	0.1	20.0	2.7	-4.5	3.7	-0.9	1.4	9.3	12.7	13.2	-1.9	9.6
2.1.2 IT expenditures	0.0	0.0	7.5	3.4	-0.8	0.0	1.8	-1.6	-2.0	0.0	0.8	-1.4	--	2.3	4.7	--	1.0
2.1.3 Non-R&D innovation expenditures	-2.4	-8.5	5.0	-11.0	-3.6	0.0	29.3	-5.7	-22.7	13.4	0.0	0.0	-5.1	--	-15.4	0.9	-4.5
<b>Linkages &amp; entrepreneurship</b>	0.0	0.7	7.8	0.8	-1.9	1.6	1.8	-1.1	6.4	-2.2	0.7	0.4	8.6	-9.9	-2.6	-6.8	2.5
2.2.1 SMEs innovating in-house	-0.5	-1.2	0.0	-3.1	0.0	0.1	-2.1	-5.1	-0.6	-1.8	0.0	0.0	2.7	--	-4.2	--	0.1
2.2.2 Innovative SMEs collaborating with others	1.0	0.1	5.0	-2.5	-8.0	1.0	3.1	-7.0	12.2	-3.0	0.0	-0.3	12.3	-2.2	-8.7	0.6	-0.2
2.2.3 Firm renewal (SMEs entries +exits)	-3.3	--	--	1.5	--	--	-9.4	--	--	-6.0	--	-1.7	--	-18.6	2.8	-6.0	2.7
2.2.4 Public-private co-publications	3.0	3.3	19.4	7.8	2.6	3.7	17.3	9.5	8.0	2.4	2.1	3.4	11.0	-8.1	0.1	-14.3	7.7
<b>Throughputs</b>	4.0	3.1	23.0	11.3	2.8	2.9	2.0	3.0	6.8	1.9	3.2	2.7	7.3	17.9	2.2	8.4	5.9
2.3.1 EPO patents	0.1	1.4	-4.4	0.6	0.6	0.5	-2.9	0.1	0.1	4.0	0.1	1.1	-3.5	13.7	2.1	1.7	-2.5
2.3.2 Community trademarks	5.5	5.1	67.6	7.1	5.4	6.1	17.6	3.4	6.8	3.2	3.8	4.7	12.1	29.4	19.4	10.2	10.9
2.3.3 Community designs	4.3	1.4	31.0	26.0	2.4	4.0	-0.9	6.9	26.2	3.9	4.9	3.2	30.5	19.2	-10.9	13.5	8.9
2.3.4 Technology Balance of Payments flows	6.4	4.8	8.9	13.1	--	1.0	-4.4	1.8	-3.4	-3.2	4.2	1.8	-6.2	10.3	0.4	8.4	6.7
<b>OUTPUTS</b>	0.6	0.3	0.5	0.2	-2.6	0.6	1.3	0.1	6.1	1.4	-0.1	-1.2	4.3	0.2	-0.8	-2.2	3.4
<b>Innovators</b>	-1.3	-0.8	4.5	-2.6	-5.7	-0.7	-0.3	-3.3	1.9	-2.1	0.0	-0.4	-4.3	0.0	-6.1	-2.3	-1.1
3.1.1 SMEs introducing product or process innovations	-1.3	-0.8	4.5	-2.6	-5.7	-0.7	-0.3	-3.3	1.9	-2.1	0.0	-1.3	-4.3	0.0	-6.1	-2.3	-1.1
3.1.2 SMEs introducing marketing or organisational innovations																	
3.1.3 Resource efficiency innovators																	
3.1.3a Reduced labour costs																	
3.1.3b Reduced use of materials and energy																	
<b>Economic effects</b>	1.1	0.6	0.0	0.7	-2.9	1.0	2.0	0.7	9.0	2.6	-0.1	-1.6	7.2	0.3	-0.2	-3.0	5.3
3.2.1 Employment in medium-high & high-tech manufacturing	-0.9	-0.4	2.4	5.6	-0.4	-0.8	3.9	-4.4	3.9	-3.1	-0.1	0.5	-7.9	0.4	-5.3	-6.4	1.6
3.2.2 Employment in knowledge-intensive services	1.2	-0.5	3.4	1.8	0.0	1.5	-2.8	1.2	1.6	4.0	0.3	4.9	3.2	6.7	6.3	1.4	1.4
3.2.3 Medium-tech and high-tech manufacturing exports	0.6	-0.9	-0.9	1.4	-0.9	-0.6	1.4	-2.9	2.8	-0.1	-0.7	0.1	2.0	12.7	-2.2	-2.5	1.2
3.2.4 Knowledge-intensive services exports	1.3	1.3	4.6	1.9	0.7	1.2	3.8	-0.4	5.8	--	--	--	3.2	1.9	-11.7	0.4	9.6
3.2.5 New-to-market sales	4.1	6.6	-5.7	6.7	-7.7	4.8	0.4	6.3	32.8	17.7	0.0	-7.8	29.1	-12.3	8.4	-2.1	17.0
3.2.6 New-to-firm sales	0.1	-2.5	-3.1	-11.9	-8.5	0.2	5.2	4.8	9.9	-4.0	0.0	-5.3	17.7	-5.6	4.7	-8.0	1.9

For indicators 3.1.2 and 3.1.3 growth rates could not be calculated (cf. Section 8.2).

## Annex B: European Innovation Scoreboard 2008 – Growth performance

	EU27	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	HR	TR	IS	NO	CH
<b>Average annual growth rate</b>	2.3	4.7	1.5	2.3	-3.1	4.9	6.9	3.3	3.9	2.2	12	1.1	1.5	4.4	4.2	1.2	2.8
<b>ENABLERS</b>	5.4	3.4	4.3	2.8	2.8	7.7	9.9	6.0	5.7	1.8	3.9	7.1	4.6	3.1	8.7	5.5	3.8
<b>Human resources</b>	4.0	2.0	4.3	3.7	5.2	7.7	5.7	3.6	4.5	1.7	2.4	1.3	5.8	1.5	5.7	5.5	2.7
1.1 S&E and SSH graduates	6.7	7.9	11.3	7.9	5.9	9.8	16.8	6.6	8.7	1.5	7.4	0.8	7.6	3.0	7.4	4.8	3.9
1.2 S&E and SSH doctorate graduates	6.7	-16.8	6.8	2.5	12.2	19.2	2.1	2.6	7.7	2.8	2.8	5.0	7.8	-2.4	24.8	20.6	8.2
1.1.3 Tertiary education	3.1	8.0	3.1	-1.6	7.7	6.9	5.1	5.8	5.7	2.6	1.4	1.2	0.5	-0.1	0.8	2.4	3.9
1.1.4 Life-long learning	3.4	8.7	0.3	10.5	0.5	0.6	4.3	2.7	1.3	1.1	0.2	-0.2	12.7	5.7	-1.4	1.3	-2.3
1.1.5 Youth education	0.4	4.9	0.4	0.0	0.4	2.8	0.8	0.2	-0.8	0.3	0.4	-0.2	1.0	1.2	-0.9	-0.1	0.2
<b>Finance and support</b>	7.1	5.8	4.3	1.6	-0.1	7.7	15.5	10.2	7.2	2.1	5.9	14.9	1.4	5.9	13.9	5.3	5.1
12.1 Public R&D expenditures	0.0	3.9	-2.8	1.0	-0.6	3.6	18.0	7.5	0.9	-1.3	0.5	1.6	-4.8	0.0	-0.8	1.3	0.0
12.2 Venture capital	9.6	--	-8.3	-8.2	-21.8	-1.0	3.5	--	-8.5	-5.2	9.1	22.9	--	--	--	1.8	18.1
12.3 Private credit	5.4	4.1	7.2	3.6	9.2	4.8	17.4	17.3	8.1	6.6	5.2	6.9	8.1	18.9	25.1	3.0	3.2
12.4 Broadband access by firms	13.7	9.5	23.8	10.7	17.3	25.1	24.3	6.2	32.0	8.8	8.8	30.4	--	0.0	18.9	16.0	0.0
<b>FIRM ACTIVITIES</b>	1.2	11.2	0.3	2.5	7.5	4.5	8.3	3.3	4.3	3.8	0.6	0.3	-0.1	6.4	3.8	1.0	2.9
<b>Firm investments</b>	-0.9	5.2	-0.4	2.1	1.8	6.9	0.8	1.6	-4.3	0.5	-1.8	-0.3	-1.8	8.4	-0.5	-2.8	0.0
2.1.1 Business R&D expenditures	-0.4	2.7	0.5	4.3	4.7	26.3	0.0	3.8	-13.4	0.9	-1.5	-0.7	-3.6	17.5	-0.5	-4.7	0.0
2.1.2 IT expenditures	0.0	--	0.0	0.0	8.2	0.0	7.0	1.2	4.5	0.0	0.0	0.0	--	--	--	-3.8	0.0
2.1.3 Non-R&D innovation expenditures	-2.4	7.6	-1.5	--	-6.9	-3.2	-4.2	0.0	-3.2	--	-3.9	--	0.0	0.0	--	0.0	0.0
<b>Linkages &amp; entrepreneurship</b>	0.0	0.9	-0.1	2.3	5.7	1.7	2.4	1.5	2.3	3.2	-1.9	-1.0	3.3	0.4	-0.8	-1.9	0.7
2.2.1 SMEs innovating in-house	-0.5	--	1.0	-0.8	-3.0	0.5	2.6	--	2.8	4.8	0.0	--	0.0	0.0	--	-2.0	0.0
2.2.2 Innovative SMEs collaborating with others	1.0	1.9	0.5	0.0	0.8	-2.4	0.6	9.5	1.4	12.4	-4.5	-3.9	0.0	0.0	0.0	-3.6	0.0
2.2.3 Firm renewal (SMEs entries + exits)	-3.3	--	-4.4	--	--	-10.4	-0.1	-6.7	-5.1	-6.7	-6.1	-0.4	--	--	--	0.0	2.0
2.2.4 Public-private co-publications	3.0	0.0	2.5	7.7	20.6	22.0	6.4	2.4	10.5	3.4	3.4	1.3	10.1	1.2	-1.5	-2.0	0.9
<b>Throughputs</b>	4.0	20.1	1.2	2.9	13.4	5.7	21.0	6.0	13.4	6.2	5.1	1.6	-1.6	10.1	7.3	7.0	7.4
2.3.1 EPO patents	0.1	5.6	-4.0	2.7	9.0	8.4	5.2	3.7	12.5	0.2	-2.9	-0.3	0.1	4.6	-4.3	2.5	0.9
2.3.2 Community trademarks	5.5	8.3	5.5	5.2	11.1	12.1	36.0	7.5	27.4	6.6	7.8	4.5	3.7	8.2	17.6	10.1	8.8
2.3.3 Community designs	4.3	32.4	0.0	7.1	27.3	7.7	44.3	8.6	14.4	1.8	6.1	2.4	-2.6	8.2	1.7	4.9	9.3
2.3.4 Technology Balance of Payments flows	6.4	37.5	3.7	-3.1	7.5	-4.8	3.8	4.4	0.7	17.0	10.1	-0.1	-7.4	19.8	15.7	10.8	10.8
<b>OUTPUTS</b>	0.6	0.2	0.2	1.7	-1.3	2.7	2.4	0.5	1.9	0.5	-0.8	-4.5	0.8	3.6	-0.5	-2.6	1.3
<b>Innovators</b>	-1.3	0.0	1.0	-0.8	-2.1	0.1	2.1	0.0	2.6	4.8	-3.3	-4.2	0.0	0.0	--	-0.8	0.0
3.1.1 SMEs introducing product or process innovations	-1.3	0.0	1.0	-0.8	-2.1	0.1	2.1	0.0	2.6	4.8	-3.3	-4.2	0.0	0.0	--	-0.8	0.0
3.1.2 SMEs introducing marketing or organisational innovations																	
3.1.3 Resource efficiency innovators																	
3.1.3a Reduced labour costs																	
3.1.3b Reduced use of materials and energy																	
<b>Economic effects</b>	1.1	0.3	0.2	2.7	-1.6	4.1	3.3	0.7	2.4	-0.1	-0.6	-5.2	1.3	5.4	-0.5	-3.7	1.5
3.2.1 Employment in medium-high & high-tech manufacturing	-0.9	0.0	-6.0	1.8	2.9	1.7	1.6	0.3	5.4	0.7	-3.1	-3.5	2.6	-0.2	-7.8	-1.8	0.4
3.2.2 Employment in knowledge-intensive services	1.2	4.3	-0.6	0.6	2.7	4.9	8.4	1.9	3.6	1.2	1.6	0.8	3.7	1.1	1.3	1.2	0.4
3.2.3 Medium-tech and high-tech manufacturing exports	0.6	2.7	-1.0	1.2	2.0	-1.8	8.3	0.9	4.3	-0.5	-0.8	0.0	-0.2	3.1	10.2	-7.2	0.5
3.2.4 Knowledge-intensive services exports	1.3	0.0	-4.0	0.0	-3.2	5.4	2.3	5.2	5.3	-3.4	-0.9	-4.7	1.6	31.9	-6.0	4.2	7.9
3.2.5 New-to-market sales	4.1	16.3	10.6	5.8	-13.4	13.0	-9.2	-5.7	-11.6	2.8	0.0	-12.7	0.0	0.0	0.0	-6.5	0.0
3.2.6 New-to-firm sales	0.1	-18.4	2.9	7.1	0.7	2.1	9.6	2.1	8.7	-1.5	0.0	-10.7	0.0	0.0	0.0	-11.0	0.0

For indicators 3.1.2 and 3.1.3 growth rates could not be calculated (cf. Section 8.2).