

APPENDIX 4: COMPARATIVE INDICATORS ON TERTIARY EDUCATION

	Czech Republic	OECD mean	Czech Republic's rank ¹	% to OECD mean ²
OUTCOMES				
% of the population aged 25-64 with tertiary qualifications (2003)				
Tertiary-type B – Total	n	8	-	-
Males	n	7	-	-
Females	n	8	-	-
Tertiary-type A– Total	11	15	23/30	73
Males	13	16	23/30	81
Females	10	15	25/30	67
Advanced research programmes – Total	1	1	10/12	100
Males	1	1	12/15	100
Females	n	1	-	-
% of the population aged 25-34 with tertiary qualifications (2003)				
Tertiary-type B ¹	-	9	-	-
Tertiary-type A and advanced research programmes	12	20	27/30	60
% of the population aged 55-64 with tertiary qualifications (2003)				
Tertiary-type B ¹	-	5	-	-
Tertiary-type A and advanced research programmes	10	12	17/30	83
% of the population aged 25-64 with tertiary qualifications – time trends				
1991	m	18	-	-
2003	12	24	26/30	50
% of the population aged 25-34 with tertiary qualifications – time trends				
1991	m	20	-	-
2003	12	29	29/30	41
Average years in formal education (2003)³	12.4	12.0	16/30	103
Survival rates in tertiary education (2003)				
Number of graduates divided by the number of new entrants in the typical year of entrance				
Tertiary-type A education	61	70	14/19	80
Tertiary-type B education	77	73	7/16	105
Advanced research programmes	m	58	-	-
Average duration of tertiary studies (in years) (year varies)⁴				
All tertiary education	-	4.21	-	-
Tertiary-type B education	-	2.18	-	-
Tertiary-type A and advanced research programmes	-	4.72	-	-

	Czech Republic	OECD mean	Czech Republic's rank ¹	% to OECD mean ²
Tertiary graduates by field of study⁵ (2002)				
Tertiary-type A				
Education	17.8	-	8/27	
Humanities and arts	7.8	-	20/27	
Social sciences, business and law	26.5	-	21/27	
Science	7.2	-	20/27	
Engineering, manufacturing and construction	16.8	-	8/27	
Agriculture	3.5	-	4/27	
Health and welfare	10.3	-	17/27	
Services	3.3	-	8/27	
Not known or unspecified	6.7	-	2/13	
All fields	100	-	-	
Tertiary-type B				
Education	-	-	-	
Humanities and arts	10.0	-	8/25	
Social sciences, business and law	25.8	-	13/24	
Science	3.9	-	19/23	
Engineering, manufacturing and construction	5.0	-	20/23	
Agriculture	2.9	-	7/22	
Health and welfare	32.9	-	4/22	
Services	7.7	-	14/23	
Not known or unspecified	11.8	-	-	
All fields		-	-	
Advanced research programmes				
Education	1.4	-	18/23	
Humanities and arts	8.9	-	21/27	
Social sciences, business and law	16.2	-	15/26	
Science	25.9	-	10/27	
Engineering, manufacturing and construction	26.7	-	3/26	
Agriculture	7.1	-	9/26	
Health and welfare	12.1	-	20/27	
Services	1.7	-	9/22	
Not known or unspecified	-	-	-	
All fields	-	-	-	

	Czech Republic	OECD mean	Czech Republic's rank ¹	% to OECD mean ²
Tertiary graduates by field of study⁵ per 10,000 population (2002)				
Tertiary-type A				
Education	6.80	-	17/27	
Humanities and arts	2.96	-	23/27	
Social sciences, business and law	1.05	-	24/27	
Science	2.74	-	22/27	
Engineering, manufacturing and construction	6.36	-	14/27	
Agriculture	1.34	-	7/27	
Health and welfare	3.91	-	19/27	
Services	1.26	-	15/27	
Not known or unspecified	2.55	-	3/13	
All fields	37.95	-	2/27	
Tertiary-type B				
Education	-	-	-	
Humanities and arts	0.68	-	11/25	
Social sciences, business and law	1.75	-	16/24	
Science	0.27	-	16/23	
Engineering, manufacturing and construction	0.34	-	20/23	
Agriculture	0.20	-	12/22	
Health and welfare	2.23	-	14/22	
Services	0.52	-	18/23	
Not known or unspecified	-	-	2/7	
All fields	6.77	-	17/26	
Advanced research programmes				
Education	0.02	-	18/23	
Humanities and arts	0.14	-	20/27	
Social sciences, business and law	0.25	-	15/26	
Science	0.39	-	15/27	
Engineering, manufacturing and construction	0.40	-	5/26	
Agriculture	0.11	-	8/26	
Health and welfare	0.18	-	17/27	
Services	0.03	-	9/21	
Not known or unspecified	-	-	-	
All fields	1.52	-	16/27	
Employment ratio and educational attainment⁶ (2003)				
Number of 25 to 64-year-olds in employment as a percentage of the population aged 25 to 64				
Lower secondary education				
Males	54	73	27/30	74
Females	41	49	25/30	91
Upper secondary education (ISCED 3A)				
Males	87	81	7/29	107
Females	70	62	12/29	113
Post-secondary non-tertiary education				
Males	87	84	8/18	104
Females	73	72	9/18	101
Tertiary education, type B				
Males	87	88	13/26	99
Females	74	77	19/26	96
Tertiary education, type A and advanced research programmes				
Males	92	89	3/30	103
Females	79	79	18/30	100

	Czech Republic	OECD mean	Czech Republic's rank ¹	% to OECD mean ²
Employment ratio and educational attainment (2003)				
Number of 30 to 34-year-olds in employment as a percentage of the population aged 30 to 34				
Lower secondary education				
Males	59.3	75.8	24/26	78
Females	40.3	47.6	20/26	85
Upper secondary education (ISCED 3A)				
Males	90.6	84.2	4/26	108
Females	65.4	58.3	7/26	112
Post-secondary non-tertiary education				
Males	90.8	85.2	4/26	107
Females	65.4	59.9	10/26	109
Tertiary education, type B				
Males	90.7	86.5	5/26	105
Females	65.5	62.8	13/26	104
Tertiary education, type A and advanced research programmes				
Males	92.6	88.4	4/26	105
Females	66.2	67.3	18/26	98
Unemployment ratio and educational attainment⁷ (2003)				
Number of 25 to 64-year-olds who are unemployed as a percentage of the population aged 25 to 64				
Lower secondary education				
Males	21.7	9.8	3/28	221
Females	18.6	11.0	3/27	167
Upper secondary education (ISCED 3A)				
Males	2.8	7.1	21/23	39
Females	5.8	10.6	13/25	55
Post-secondary non-tertiary education				
Males	c	5.9	-	-
Females	3.2	6.9	9/11	46
Tertiary education, type B				
Males	c	3.9	-	-
Females	c	4.4	-	-
Tertiary education, type A and advanced research programmes				
Males	1.7	3.6	25/27	47
Females	2.3	4.1	21/27	56
Unemployment ratio and educational attainment (2003)				
Number of 30 to 34-year-olds who are unemployed as a percentage of the population aged 30 to 34				
Lower secondary education				
Males	20.6	11.0	3/26	187
Females	22.4	9.6	3/26	233
Upper secondary education (ISCED 3A)				
Males	4.9	7.3	22/26	67
Females	8.3	6.8	8/26	122
Post-secondary non-tertiary education				
Males	4.8	6.8	22/26	71
Females	8.1	6.6	8/26	123
Tertiary education, type B				
Males	4.9	6.3	18/26	78
Females	8.0	6.3	6/26	127
Tertiary education, type A and advanced research programmes				
Males	3.8	5.6	21/26	68
Females	6.8	5.7	8/26	119

	Czech Republic	OECD mean	Czech Republic's rank ¹	% to OECD mean ²
Ratio of the population not in the labour force and educational attainment (2002)				
Number of 25 to 64-year-olds not in the labour force as a percentage of the population aged 25 to 64				
Lower secondary education				
Males	30	20	6/30	150
Females	49	46	10/30	107
Upper secondary education (ISCED 3A)				
Males	10	13	22/29	77
Females	25	30	19/29	83
Post-secondary non-tertiary education ⁱⁱ				
Males	-	11	-	-
Females	-	22	-	-
Tertiary education, type B ⁱⁱⁱ				
Males	-	9	-	-
Females	-	21	-	-
Tertiary education, type A and advanced research programmes				
Males	6	8	24/30	75
Females	19	19	8/30	100
Ratio of the population not in the labour force and educational attainment (2002)				
Number of 30 to 34-year-olds not in the labour force as a percentage of the population aged 30 to 34				
Lower secondary education				
Males	16	10	4/29	160
Females	32	39	22/29	82
Upper secondary education (ISCED 3A)				
Males	1	7	26/28	14
Females	25	26	11/28	96
Post-secondary non-tertiary education				
Males	-	3	-	-
Females	-	18	-	-
Tertiary education, type B				
Males	-	3	-	-
Females	-	16	-	-
Tertiary education, type A and advanced research programmes				
Males	1	3	26/29	33
Females	26	15	3/29	173
Earnings of tertiary graduates aged 25-64 relative to upper secondary graduates aged 25-64 (2002) (upper secondary = 100)				
Tertiary-type B	-	-	-	-
Tertiary-type A	-	-	-	-
Earnings of tertiary graduates aged 30-44 relative to upper secondary graduates aged 30-44 (2002) (upper secondary = 100)				
Tertiary-type B	-	-	-	-
Tertiary-type A	-	-	-	-
Trends in relative earnings of tertiary graduates aged 25-64 (upper secondary and post-secondary non-tertiary education = 100)				
1997	179	-	2/18	-
2002	-	-	-	-

	Czech Republic	OECD mean	Czech Republic's rank ¹	% to OECD mean ²
PATTERNS OF PARTICIPATION				
Participation rates of all persons aged 15 and over by programme (2002)				
Per cent of all persons aged 15 and over in tertiary type-5A programmes	2.7	-	22/26	-
Per cent of all persons aged 15 and over in tertiary type-5B programmes	0.3	-	14/26	-
Per cent of all persons aged 15 and over in tertiary type-6 programmes	0.2	-	4/23	-
Per cent of all persons aged 15 and over in all tertiary programmes	3.3	-	21/26	-
Index of change in total tertiary enrolment (2003) (1995 = 100)				
Total				
Attributable to change in population ⁸	93	96	13/19	97
Attributable to change in enrolment rates ⁹	174	143	5/16	122
Enrolment rates (2003)				
Full-time and part-time students in public and private institutions, by age				
Students aged 15-19 as a percentage of the population aged 15-19	90.1	79.1	2/28	114
Students aged 20-29 as a percentage of the population aged 20-29	16.6	23.6	24/28	70
Students aged 30-39 as a percentage of the population aged 30-39	2.9	5.4	18/28	54
Students aged 40 and over as a percentage of the population aged 40 and over	0.2	1.6	20/25	13
Age distribution of enrolments (2003)				
Persons aged 35 and over as a per cent of all enrolments in tertiary type-5A programmes	4.3	10.3	18/24	42
Persons aged 35 and over as a per cent of all enrolments in tertiary type-5B programmes	3.3	16.2	19/21	20
Persons aged 35 and over as a per cent of all enrolments in tertiary type-6 programmes	18.1	30.2	18/22	60
Persons aged 35 and over as a per cent of all enrolments in total tertiary programmes	5.2	11.7	20/24	44
Persons aged less than 25 as a per cent of all enrolments in tertiary type-5A programmes	74.7	63.9	7/26	117
Persons aged less than 25 as a per cent of all enrolments in tertiary type-5B programmes	85.7	58.9	5/26	146
Persons aged less than 25 as a per cent of all enrolments in tertiary type-6 programmes	14.4	10.2	8/21	141
Persons aged less than 25 as a per cent of all enrolments in total tertiary programmes	71.4	61.5	7/27	116
Persons aged less than 20 as a per cent of all enrolments in tertiary type-5A programmes	10.6	13.9	18/27	76
Persons aged less than 20 as a per cent of all enrolments in tertiary type-5B programmes	16.2	17.2	13/27	94
Persons aged less than 20 as a per cent of all enrolments in tertiary type-6 programmes	0.2	0.4	-	50
Persons aged less than 20 as a per cent of all enrolments in total tertiary programmes	10.4	15.0	19/27	69

	Czech Republic	OECD mean	Czech Republic's rank ¹	% to OECD mean ²
Gender distribution of enrolments (2003)				
Females as a per cent of enrolments in tertiary type-5A programmes	50.0	53.2	24/29	94
Females as a per cent of enrolments in tertiary type-5B programmes	66.9	54.8	3/29	122
Females as a per cent of enrolments in tertiary type-6 programmes	36.1	44.0	26/28	82
Females as a per cent of total tertiary enrolments	50.7	53.2	23/29	95
Net entry rates into tertiary education¹⁰ (2003)				
Tertiary-type B				
Total	9.3	15.6	13/23	60
Males	6.5	14.2	16/22	46
Females	12.2	17.0	12/23	72
Tertiary-type A				
Total	30.3	52.5	24/26	58
Males	31.5	46.6	21/25	68
Females	34.6	57.1	22/25	61
Distribution of students in tertiary education by type of institution¹¹ (2003)				
Tertiary-type B education, public	67.8	67.5	17/27	100
Tertiary-type B education, government-dependent private	31.2	19.5	9/19	160
Tertiary-type B education, independent private	1.0	13.1	14/14	8
Tertiary-type A and advanced research programmes, public	95.8	77.6	8/27	123
Tertiary-type A and advanced research programmes, government-dependent private	n	11.5	-	-
Tertiary-type A and advanced research programmes, independent private	4.2	10.9	12/17	39
Distribution of students in tertiary education by mode of study (2003)				
Tertiary-type B education				
Full-time	97.1	78.3	13/29	124
Part-time	2.9	22.5	17/18	13
Tertiary-type A and advanced research programmes				
Full-time	96.6	83.4	12/29	116
Part-time	3.4	16.6	18/18	20
Age distribution of net entrants into tertiary education, tertiary-type A (2003)				
Age at 20 th percentile (20% of new entrants are below this age)	19.6	19.2	7/23	102
Age at 50 th percentile (50% of new entrants are below this age)	20.7	20.8	12/23	100
Age at 80 th percentile (80% of new entrants are below this age)	27.3	24.9	4/19	110
Foreign students as a percentage of all students (2003) (foreign and domestic students)¹²				
	4.3	6.4	13/27	67
Index of change in foreign students as a percentage of all students (2003) (foreign and domestic students) (1998 = 100)				
	229	-	3/22	-
National students enrolled abroad in other reporting countries relative to total tertiary enrolment¹³ (2003)				
	2.4	4.0	19/29	60
Expected changes of the 20-29 age group by 2012 relative to 2002 (2002 = 100)¹⁴				
	77	96	25/30	80
Upper secondary attainment rates (2003)				
% of persons aged 25-34 with at least upper secondary education	92	75	5/30	123
Expected years of tertiary education under current conditions (2002)				
Full-time and part-time ¹⁵	1.9	2.8	24/28	68

	Czech Republic	OECD mean	Czech Republic's rank ¹	% to OECD mean ²
Admission to tertiary education ¹⁶ Source: Eurydice (2005)				
Limitation of the number of places available in most branches of public and grant-aided private tertiary education (2002/03)				
Limitation at national level with direct control of selection		1/35	-	-
Selection by institutions (In accordance with their capacity or national criteria)		23/35	-	-
Free access to most branches	√	11/35	-	-
EXPENDITURE				
Annual expenditure on tertiary education institutions per student, public and private institutions (2002)				
In equivalent US dollars converted using PPPs, based on full-time equivalents				
All tertiary education (including R&D activities)	6236	10655	21/26	59
Tertiary-type B education (including R&D activities)	2703	-	15/15	-
Tertiary-type A and advanced research programmes (including R&D activities)	6671	-	14/16	-
All tertiary education excluding R&D activities	4963	7299	16/24	68
Annual expenditure on tertiary education institutions per student relative to GDP per capita, public and private institutions (2002)				
Based on full-time equivalents				
All tertiary education (including R&D activities)	38	43	17/26	88
Tertiary-type B education (including R&D activities)	16	29	13/15	55
Tertiary-type A and advanced research programmes (including R&D activities)	40	42	10/16	95
All tertiary education excluding R&D activities	30	34	10/21	88
Cumulative expenditure on educational institutions per student over the average duration of tertiary studies ¹⁷ (2002)				
In equivalent US dollars converted using PPPs				
All tertiary education	-	45812	-	-
Tertiary-type B education	-	-	-	-
Tertiary-type A and advanced research programmes	-	-	-	-
Change in tertiary education expenditure per student relative to different factors				
Index of change between 1995 and 2002 (1995 = 100, 2002 constant prices)				
Change in expenditure	118	-	17/24	-
Change in the number of students	170	-	4/25	-
Change in expenditure per student	69	-	23/23	-
Change in tertiary education expenditure per student				
In equivalent US dollars converted using PPPs (2001 constant prices and 2001 constant PPPs)				
1995	8785	9284	12/22	95
2001	5555	10052	21/26	55
Expenditure on tertiary education institutions as a percentage of GDP, from public and private sources				
All tertiary education, 2002	0.9	1.4	27/28	64
Tertiary-type B education, 2002	n	0.1	-	-
Tertiary-type A education, 2002	0.9	1.1	14/17	82
All tertiary education, 1995	1.0	-	19/25	-

	Czech Republic	OECD mean	Czech Republic's rank ¹	% to OECD mean ²
Relative proportions of public and private expenditure on educational institutions, for tertiary education				
Distribution of public and private sources of funds for educational institutions after transfers from public sources				
Public sources, 2002	87.5	78.1	11/27	112
Private sources, household expenditure, 2002	7.4	18.5	17/24	40
Private sources, expenditure of other private entities, 2002	5.1	7.6	10/16	67
Private sources, all private sources, 2002	12.5	21.9	17/27	57
Private sources, private, of which subsidised, 2002	m	1.3	-	-
Public sources, 1995	71.5	80.8	15/19	88
Private sources, household expenditure, 1995	3.3	14.4	12/15	23
Private sources, expenditure of other private entities, 1995	25.2	11.0	2/10	229
Private sources, all private sources, 1995	28.5	19.2	5/19	148
Private sources, private, of which subsidised, 1995	8.7	5.4	2/8	161
Distribution of total public expenditure on tertiary education (2002)				
Public expenditure on tertiary education transferred to educational institutions and public transfers to the private sector, as a percentage of total public expenditure on tertiary education				
Direct public expenditure on public institutions	92.1	71.1	4/25	130
Direct public expenditure on private institutions	0.9	11.5	18/20	8
Indirect public transfers and payments to the private sector	7.0	17.4	23/27	40
Expenditure on tertiary education institutions as a proportion of total expenditure on all educational institutions (2002)				
Public and private institutions	21	24	16/23	88
Total public expenditure on tertiary education (2002)				
Direct public expenditure on tertiary institutions plus public subsidies to households (which include subsidies for living costs, and other private entities)				
As a percentage of total public expenditure ¹⁸	1.9	3.0	22/26	63
As a percentage of GDP	0.9	1.3	24/28	69
Subsidies for financial aid to students as a percentage of total public expenditure on tertiary education (2002)				
Scholarships / other grants to households	7.0	9.2	17/26	76
Student loans	a	7.6	-	-
Scholarships / other grants to households attributable for educational institutions	m	1.1	-	-
Annual expenditure per student on instruction, ancillary services and R&D (2002)				
Expenditure on tertiary education institutions in US dollars converted using PPPs from public and private sources, by type of service				
Educational core services	4308	7173	19/22	60
Ancillary services (transport, meals, housing provided by institutions)	654	342	4/7	191
Research and development	1273	2795	16/22	46

	Czech Republic	OECD mean	Czech Republic's rank ¹	% to OECD mean ²
Expenditure on tertiary education institutions by resource category (2002)				
Distribution of total and current expenditure on tertiary education institutions from public and private sources				
Percentage of total expenditure				
Current	88.3	88.4	18/26	100
Capital	11.7	11.6	9/26	101
Percentage of current expenditure				
Compensation of teachers	27.7	42.3	14/26	65
Compensation of other staff	20.6	22.2	11/15	93
Compensation of all staff	48.3	66.1	26/27	73
Other current	51.7	33.9	2/27	153
Registration and tuition fees (2002/03) ¹⁹ Source: Eurydice (2005)				
Registration and tuition fees and other payments made by students of full-time undergraduate courses, public sector				
Neither fees nor compulsory contributions	√	9/35	-	
Solely contributions to student organisations		3/35	-	
Registration and/or tuition fees (and possible contributions to student organisations)		23/35	-	
LITERACY LEVELS				
IALS achievement levels of graduates aged 25-34 (1994-1995) Source: IALS				
Graduates aged 25-34 at IALS levels 1 and 2 as a per cent of total graduates aged 25-34				
	5	19	19/21	26
Graduates aged 25-34 at IALS levels 4 and 5 as a per cent of total graduates aged 25-34				
	71	40	1/21	178
PATTERNS of PROVISION				
Ratio of students to teaching staff in tertiary education ²⁰ (2003)				
Based on full-time equivalents, Public and private institutions.				
Type B	16.9	14.4	3/15	117
Type A and advanced research programmes	17.3	15.7	6/18	110
Tertiary education all	17.3	14.9	7/23	116
EXPECTATIONS OF 15-YEAR-OLD STUDENTS				
Students' expected educational levels (2003) Source: PISA 2003 (OECD, 2004)				
Per cent of 15-year-old students who expect to complete secondary education, general programmes (ISCED 3A)				
	39.0	48.9	22/28	80
Per cent of 15-year-old students who expect to complete secondary education, vocational programmes (ISCED 3B or C)				
	11.4	29.9	24/26	38
Per cent of 15-year-old students who expect to complete post-secondary non-tertiary education (ISCED 4)				
	a	16.4	-	-
Per cent of 15-year-old students who expect to complete tertiary-type B education (ISCED 5B)				
	10.5	20.5	23/26	51
Per cent of 15-year-old students who expect to complete tertiary-type A education or an advanced research qualification (ISCED 5A or 6)				
	36.6	44.0	19/29	85

	Czech Republic	OECD mean	Czech Republic's rank ¹	% to OECD mean ²
RESEARCH AND DEVELOPMENT				
Gross domestic expenditure on Research and Development (R&D) as a percentage of GDP Source: OECD (2005)				
2003	1.26	2.24	14/19	56
1991	1.90	2.21	16/26	86
Higher education²¹ expenditure on R&D as a percentage of GDP Source: OECD (2005)				
2003	0.19	0.42	17/19	45
1991	0.03	0.36	23/23	8
Percentage of gross domestic expenditure on R&D by sector of performance (2003) Source: OECD (2005)				
higher education	15.3	18.7	15/18	87
(higher education in 1991)	1.6	16.3	23/23	10
business enterprise	61.0	67.3	10/18	91
government	23.3	10.9	5/18	214
private non-profit sector	0.4	3.1	9/14	13
Percentage of higher education expenditure on R&D financed by industry Source: OECD (2005)				
2003	1.0	5.6	14/15	18
1991	-	5.5	-	-
Total researchers per thousand total employment Source: OECD (2005)				
2003	3.2	7.4	11/11	43
1993	2.7	5.9	18/19	49
Researchers as a percentage of national total (full time equivalent) (2003) Source: OECD (2005)				
higher education	27.3	50.9	8/11	54
(higher education in 1993)	10.2	23.8	23/23	43
business enterprise	41.5	29.0	7/11	143
government	30.6	17.1	2/11	179
Share in OECD total "triadic" patent families²² (%) Source: OECD (2005)				
2001	0.03	-	23/30	-
1991	0.03	-	22/30	-
Foreign PhD students as a per cent of total PhD enrolments (2003)				
	7.3	13.7	12/17	53

NOTES FOR THE TABLE

Sources:

All data are from Education at a Glance, OECD Indicators 2004 and 2005, unless indicated otherwise in the table.

Other sources:

Eurydice (2005), *Key data on education in Europe 2005*, Eurydice, Brussels

IALS, *International adult literacy survey database*

OECD (2004), *Learning for Tomorrow's World, First Results from PISA 2003*, OECD, Paris

OECD (2005), *Main Science and Technology Indicators, volume 2005/2*, OECD, Paris

Missing data:

- a: Data not applicable because the category does not apply.
- c: There are too few estimates to provide reliable estimates.
- m: Data not available.
- n: Magnitude is either negligible or zero.

General notes:

1. "Czech Republic's rank" indicates the position of Czech Republic when countries are ranked in descending order from the highest to lowest value on the indicator concerned. For example, on the first indicator "*% of the population aged 25-64 with tertiary qualifications, Tertiary-type B - Total*", the rank "*x/x*" indicates that Czech Republic recorded the *xx*st highest value of the *xx* OECD countries that reported relevant data. The symbol "*=*" means that at least one other country has the same rank.
2. "% to OECD mean" indicates Czech Republic's value as a per cent of the OECD value. For example, on the first indicator "*% of the population aged 25-64 with tertiary qualifications, Tertiary-type B - Total*", the percentage "*xx*" indicates that Czech Republic's value is equivalent to *xx*% of the OECD mean.
3. The calculation of the average years in formal education is based upon the weighted theoretical duration of schooling to achieve a given level of education, according to the current duration of educational programmes as reported in the UOE data collection.
4. Two alternative methods were employed to calculate the average duration of tertiary studies: the approximation formula and the chain method. For both methods, it should be noted that the result does not give the average duration needed for a student to graduate since all students participating in tertiary education are taken into account, including drop-outs. Hence, the figure can be interpreted as the average length of time for which students stay in tertiary education until they either graduate or drop out.
5. This indicators show the ratio of graduates as a proportion to all fields of studies. The fields of education used follow the revised ISCED classification by field of education.
6. The employed are defined as those who during the survey reference week: *i*) work for pay (employees) or profit (self-employed and unpaid family workers) for at least one hour, or *ii*) have a job but are temporarily not at work (through injury, illness, holiday, strike or lockout, educational or training leave, maternity or parental leave, etc.) and have a formal attachment to their job.
7. The unemployed are defined as individuals who are without work, actively seeking employment and currently available to start work.
8. The impact of demographic change on total enrolment is calculated by applying the enrolment rates measured in 1995 to the population data for 2003: population change was taken into account while enrolment rates by single year of age were kept constant at the 1995 level.
9. The impact of changing enrolment rates is calculated by applying the enrolment rates measured in 2003 to the population data for 1995: the enrolment rates by single year of age for 2003 are multiplied by the population by single year of age for 1995 to obtain the total number of students that could be expected if the population had been constant since 1995.
10. The net entry rates represent the proportion of persons of a synthetic age cohort who enter a certain level of tertiary education at one point during their lives.
11. Educational institutions are classified as either *public* or *private* according to whether a public agency or a private entity has the ultimate power to make decisions concerning the institution's affairs. An institution is classified as *private* if it is controlled and managed by a non-governmental organisation (e.g., a Church, a Trade Union or a business enterprise), or if its Governing Board consists mostly of members not selected by a public agency. The terms "*government-dependent*" and "*independent*" refer only to the degree of a private institution's dependence on funding from government sources. A *government-dependent private institution* is one that receives more than 50 per cent of its core funding from government agencies. An *independent private institution* is one that receives less than 50 per cent of its core funding from government agencies.
12. Students are classified as foreign students if they are not citizens of the country for which the data are collected. Countries unable to provide data or estimates for non-nationals on the basis of their passports were requested to substitute data according to a related alternative criterion, e.g., the country of residence, the non-national mother tongue or non-national parentage.
13. The number of students studying abroad is obtained from the report of the countries of destination. Students studying in countries which did not report to the OECD are not included in this indicator.

14. This indicator covers residents in the country, regardless of citizenship and of educational or labour market status.
15. School expectancy (in years) under current conditions excludes all education for children younger than five years. It includes adult persons of all ages who are enrolled in formal education. School expectancy is calculated by adding the net enrolment rates for each single year of age.
16. In this indicator, the column “OECD mean” indicates the number of Eurydice member countries/areas, in which limitation on admission to tertiary education is adopted, out of 35 countries/areas whose data is available. For example, in the column “Limitation at national level with direct control of selection”, 1/35 indicates that limitation at national level with direct control of selection is adopted in 1 country.
17. The estimates of cumulative expenditure on education over the average duration of tertiary studies were obtained by multiplying annual expenditure per student by an estimate of the average duration of tertiary studies.
18. Total public expenditure on all services, excluding education, includes expenditure on debt servicing (*e.g.* interest payments) that are not included in public expenditure on education.
19. “Registration fees” refers to payments related to registration itself or the certified assessment of each student. By “tuition fees” is meant contributions to the cost of education supported by individual tertiary education institutions. These fees also include any certification fees. Payments for entrance examinations are excluded. In this indicator, the column “OECD mean” indicates the number of Eurydice member countries/areas, in which registration and tuition fees are adopted, out of 35 countries/areas whose data is available. For example, in the column “Membership fees to student organisations”, 5/35 indicates that membership fees are adopted in 5 countries/areas.
20. “Teaching staff” refers to professional personnel directly involved in teaching students.
21. “Higher Education” includes all universities, colleges of technology and other institutions of post-secondary education, whatever their source of finance or legal status. It also includes all research institutes, experimental stations and clinics operating under the direct control of or administered by or associated with higher education institutions. For detail, see OECD (2002), *Frascati Manual 2002: Proposed Standard Practice for Surveys on Research and Experimental Development*.
22. “Triadic patent” means patents filed all together to the European Patent Office (EPO), the US Patent and Trademark Office (USPTO) and the Japanese Patent Office (JPO). This indicator shows each country’s share in total triadic patents filed by OECD countries. Reference year is when the priority patent is filed. Data is estimated by the OECD Secretariat and provisional. Because a few countries share large proportion of triadic patents, other countries have small share.

Country specific notes:

- i “Tertiary-type B” is included in “Tertiary-type A and advanced research programmes”
- ii “Post-secondary education” is included in “Upper secondary education”
- iii “Tertiary-type B” is included in “Tertiary-type A and advanced research programmes”

APPENDIX 5: AN EXTRACT FROM THE AUSTRIAN TECHNOLOGY REPORT 2005

(p. 88ff)

4.3.2 Uni:invent

Under the 2002 University Act, Austrian universities are entitled to exploit inventions made by any of their staff members in the course of employment (which must be reported to the rectorate under Section 106 of the 2002 University Act) by applying for a patent and pursuing appropriate activities towards utilisation. It is incumbent upon the universities themselves to develop regulations on the exploitation and allocation of royalties.

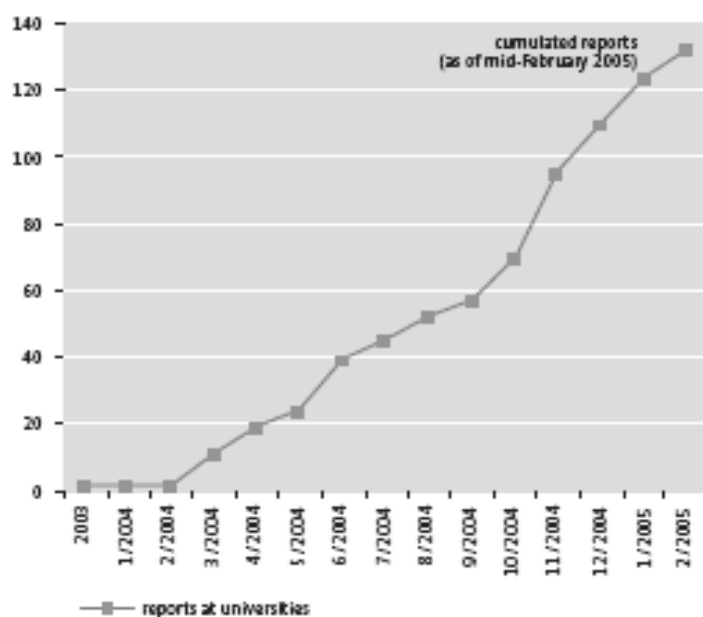
A programme known as uni:invent, initiated by BMBWK and BMWA and in place since early 2004, essentially aims to establish an "exploitation culture" at the universities and to set up efficient utilisation structures. Targeted measures are intended to raise awareness for the potential for economic exploitation that university research results may harbour in them, which can increase the economic use of university research. In order to create the structural prerequisites, so-called "innovation scouts" have been appointed at the universities participating in the uni:invent scheme.

Their purpose is to inform researchers of their legal and organisational situation, institute awareness-raising measures, identify research work of a high economic potential as early as possible, administrate research reports and, in general, act as the contact point for researchers with regard to their intellectual property rights. Innovation scouts also double as interface to the Austria Wirtschaftsservice (aws) and its technology utilisation unit tecma.

As programme organiser of uni:invent, aws-tecma prepares an expert opinion on the patent and marketing potential of innovations reported to it and provides a recommendation. If the university involved intends to utilise the invention, aws-tecma can be instructed to handle all patenting and exploitation proceedings (active search for licensees, contract negotiations, etc.).

The first reports – both to universities and to aws-tecma – were registered in March 2004. So far, a total of 130 inventions have been reported within the frame of the uni:invent scheme, originating from 13 universities and eight technology fields.

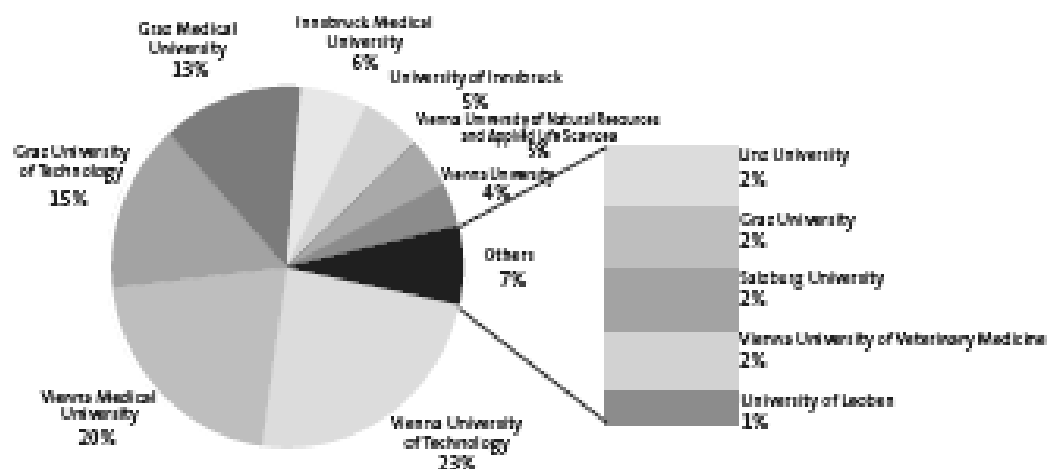
Fig. 43: Innovations reported since the start of the scheme



Not surprisingly, a majority of reports derive from universities of a technological or medical focus (Fig. 44). Their share of service invention reports is correspondingly high. At more than a third of all reports, biotechnology is clearly the number one technology field, followed by

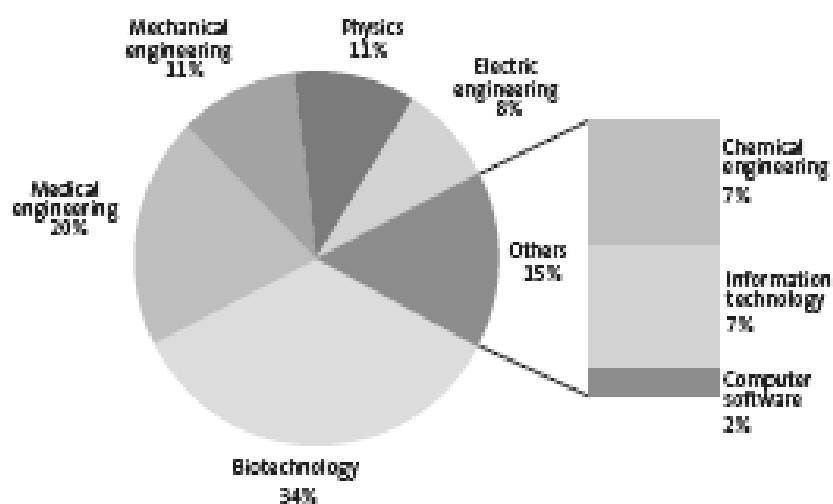
medical technology and (clearly relegated to the ranks) mechanical engineering, physics and electric engineering. Computer software is involved in 2 percent of the 130 reports (Fig. 45).

Fig. 44: Inventions reported, broken down by universities, 2004/05



Source: aws-tecma; tip calculations.

Fig. 45: Invention reports by technology fields, 2004/05

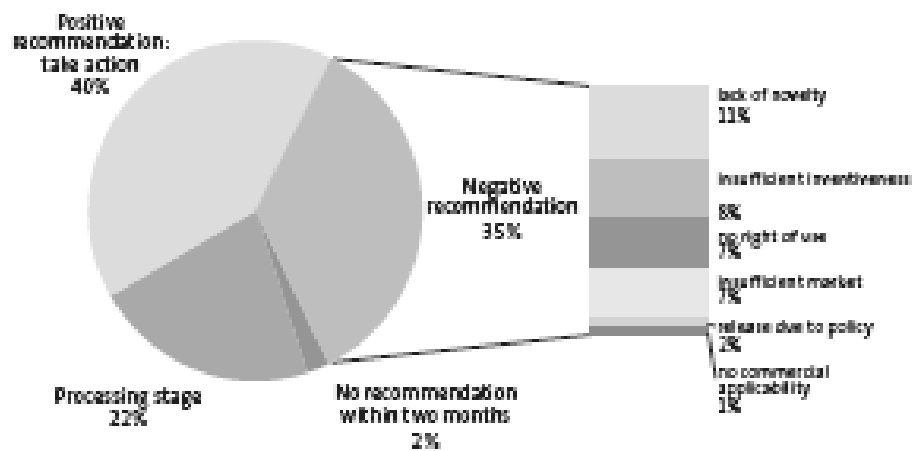


Source: aws-tecma; tip calculations.

From the totality of invention reports, aws-tecma recommended that an application be made for a service invention by the university in 40 percent of the cases. For 35 percent, the recommendation was negative, with reasons given

ranging chiefly from “no novelty”, to “insufficient level of inventiveness”, “lack of rights” and “insufficient market”. Currently, 31 invention reports are in their review stage.

Fig. 46: aws-tecma recommendations, 2004/05



Source: aws-tecma; tip calculations.

The accompanying programme evaluation finds much to praise the programme (Schibany 2004, Schibany and Streicher 2005b) and emphasises the need for public financing to launch such measures. Similarly positive words are found for the establishment of innovation scouts directly at the universities. Advice and awareness-raising measures require a local presence, a trust-based working relationship with scientists and measures tailored to the content and dimensions of a given university. The highly goal-oriented work performed by the innovation scouts should thus be supplemented by a greater emphasis on exploitation activities.