



CHARLES UNIVERSITY IN PRAGUE
FACULTY OF EDUCATION
EDUCATION POLICY CENTRE

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*What do graduates do
in the Czech Republic?
(competency*

Radim Ryška

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DEHEMS

Ljubljana, 27 & 28. September, 2012



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1. Methodology: Professional groups
2. General situation at labour market for tertiary graduates
3. Graduates in professions – change 2006-2010
4. Professions and faculty of graduates
5. Paths in the labour market for graduates
6. Conclusions

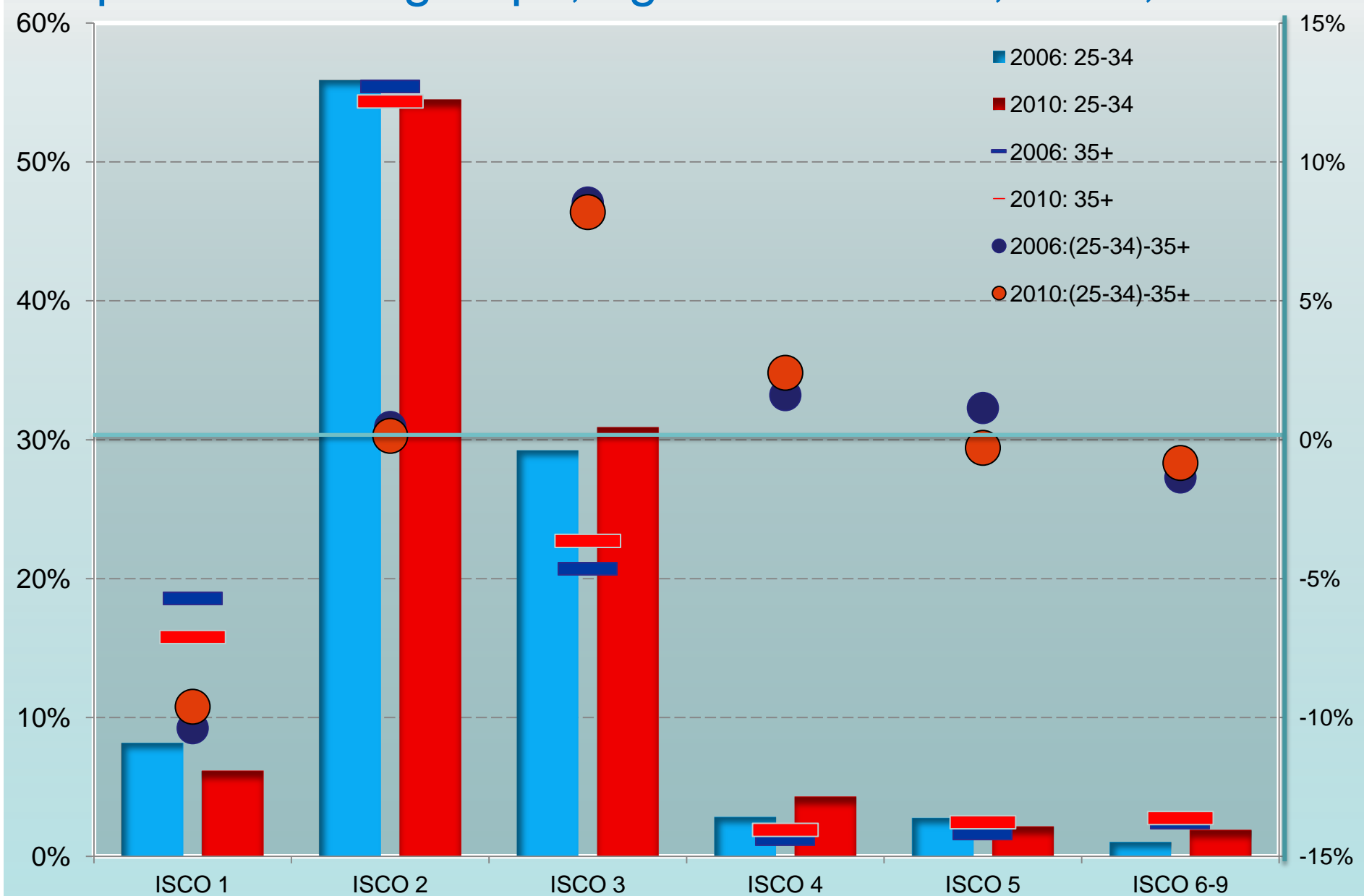
DEHEMS

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Professional groups

	Group Num.	Occupational groups	ISCO 88				ISCO 08			
ISCO 1	1	Legislators and senior officials	11				111			
	2	Managers	12	13			112	12	13	14
ISCO 2	3	Professionals in natural sciences and mathematics	211	212	221		211	212	213	
	4	Information and communications technology professi	213				25			
	5	Engineers	214				214	215	216	
	6	Doctors and health specialists	222				22 (without 222)			
	7	Nursing professionals	323				222			
	8	University and higher education teachers	231				231			
	9	Teachers	23 (without 231)		33		23 (without 231)			
	10	Financial and human resources professionals	241	247			241	242	243	
	11	Lawyers, attorneys, notaries	242				261			
	12	Professionals in the social sciences	243	244	246		263			
	13	Artistic professions	245				264	265		
ISCO 3	14	Technicians	31 (without 312)		321		31			
	15	ICT technicians	312				35			
	16	Health associate professionals	322	324			32			
	17	Professional administration	341	342	343	344	331	332	333	334
	18	Police inspectors and investigators	345				335			
	19	Social and legal professionals	346	349			341			
	20	Athletes, coaches	348				342			
	21	Professional workers in the field of culture	347				343			
ISCO 4	22	Clerical support workers	4				4			
ISCO 5	23	Service and sales workers	5				5			
ISCO 6	24	Skilled agricultural, forestry and fishery workers	6				6			
ISCO 7	25	Craft and related trades workers	7				7			
ISCO 8	26	Plant and machine operators, and assemblers	8				8			
ISCO 9	27	Elementary occupations	9				9			

CZ: GENERAL SITUATION: Employment in the main professional groups, age 25-34 x 35+; 2006, 2010



GENERAL SITUATION: Employment in the main professional groups, age 25-34 x 35+; 2006, 2010

	2010											
	Austria			Belgium			Denmark			Czech Republic		
	20-34	35+	(20-34)-35+	20-34	35+	(20-34)-35+	20-34	35+	(20-34)-35+	20-34	35+	(20-34)-35+
ISCO 1	9,3%	13,1%	-3,7%	12,0%	18,7%	-6,8%	2,0%	6,5%	-4,5%	6,0%	15,9%	-9,9%
ISCO 2	51,8%	51,6%	0,2%	47,7%	52,6%	-4,8%	59,3%	63,6%	-4,3%	52,8%	56,3%	-3,4%
ISCO 3	18,1%	14,8%	3,3%	14,2%	11,0%	3,2%	22,3%	19,2%	3,1%	32,3%	22,1%	10,2%
ISCO 4	6,9%	4,5%	2,5%	18,2%	13,1%	5,1%	7,3%	2,0%	5,2%	4,7%	1,0%	3,7%
ISCO 5	4,8%	4,0%	0,9%	3,9%	2,8%	1,1%	5,6%	3,5%	2,0%	2,5%	2,5%	0,0%
ISCO 6-9	8,9%	12,1%	-3,2%	4,0%	1,8%	2,2%	3,6%	5,1%	-1,5%	1,6%	2,1%	-0,6%
	2006											
ISCO 1	9,8%	13,4%	-3,6%	11,3%	18,6%	-7,3%	4,4%	12,9%	-8,5%	7,7%	18,5%	-10,8%
ISCO 2	49,4%	47,9%	1,5%	48,6%	49,9%	-1,3%	57,0%	54,9%	2,2%	54,5%	55,1%	-0,6%
ISCO 3	20,7%	14,6%	6,1%	13,9%	11,5%	2,4%	26,1%	18,0%	8,1%	31,1%	20,8%	10,3%
ISCO 4	5,5%	4,6%	0,9%	19,1%	13,3%	5,7%	6,2%	3,6%	2,6%	3,3%	1,3%	2,0%
ISCO 5	3,9%	3,8%	0,0%	3,5%	2,8%	0,7%	3,6%	4,3%	-0,7%	2,6%	1,7%	0,9%
ISCO 6-9	10,8%	15,7%	-4,9%	3,7%	3,8%	-0,2%	2,6%	6,3%	-3,7%	0,9%	2,6%	-1,7%

GENERAL SITUATION: Employment in professional groups, age 20-34 x 35+; 2006, 2010

			Czech Republic						Austria		
			2006			2010			2006	2010	
			20-34	35+	(20-34)-35+	20-34	35+	(20-34)-35+	(20-34)-35+		
ISCO 1	1	Legislators and senior officials	0,4%	2,3%	-1,9%	0,2%	2,0%	-1,8%	-0,3%	0,0%	
	2	Managers	7,3%	16,2%	-8,9%	5,9%	14,0%	-8,1%	-3,3%	-3,7%	-
ISCO 2	3	Professionals in natur.sciences and math.	2,4%	2,8%	-0,5%	2,3%	2,5%	-0,1%	0,4%	0,2%	
	4	ICT professionals	6,0%	2,6%	3,4%	7,1%	4,0%	3,1%	2,4%	2,6%	+
	5	Engineers	6,3%	6,3%	0,0%	6,5%	5,4%	1,1%	0,7%	1,7%	
	6	Doctors and health specialists	5,2%	8,1%	-2,9%	5,2%	6,6%	-1,4%	-1,5%	-2,5%	-
	7	Nursing professionals	1,2%	0,5%	0,7%	1,9%	0,8%	1,1%	0,0%	0,5%	+
	8	University and higher education teachers	1,3%	3,1%	-1,7%	1,9%	2,4%	-0,5%	0,0%	-0,7%	
	9	Teachers	14,2%	17,1%	-3,0%	11,2%	18,2%	-7,0%	-3,1%	-5,6%	-
	10	Financial and human resources professionals	7,1%	5,7%	1,4%	7,7%	6,9%	0,8%	0,8%	1,8%	+
	11	Lawyers, attorneys, notaries	3,3%	3,1%	0,2%	2,3%	2,9%	-0,6%	1,2%	1,1%	
	12	Professionals in the social sciences	5,7%	3,8%	2,0%	4,9%	4,5%	0,4%	-1,4%	0,5%	
	13	Artistic professions	1,8%	2,1%	-0,3%	1,8%	2,0%	-0,2%	2,0%	0,6%	
ISCO 3	14	Technicians	8,3%	8,3%	0,0%	8,8%	7,1%	1,7%	0,3%	0,8%	
	15	ICT technicians	2,4%	1,5%	0,9%	2,3%	1,4%	0,8%	0,2%	0,1%	+ CZ
	16	Health associate professionals	1,8%	0,3%	1,5%	1,9%	0,6%	1,3%	2,0%	0,0%	+
	17	Professional administration	16,0%	9,8%	6,2%	16,4%	11,3%	5,1%	2,6%	1,6%	+
	18	Police inspectors and investigators	1,1%	0,4%	0,7%	0,4%	0,6%	-0,2%	0,0%	0,0%	
	19	Social and legal professionals	1,0%	0,1%	1,0%	1,2%	0,2%	1,0%	1,0%	0,2%	
	20	Athletes, coaches	0,1%	0,0%	0,0%	0,0%	0,1%	-0,1%	-0,1%	0,0%	
	21	Professional workers in the field of culture	0,3%	0,4%	0,0%	1,2%	0,8%	0,5%	0,0%	0,8%	
ISCO 4	22	Clerical support workers	3,3%	1,3%	2,0%	4,7%	1,0%	3,7%	0,9%	2,5%	+
ISCO 5	23	Service and sales workers	2,6%	1,7%	0,9%	2,5%	2,5%	0,0%	0,0%	0,9%	

GRADUATES: Distribution in professional groups by field of study, 2006

2006							
<i>Fields of study</i>	ISCO 1	ISCO 2	ISCO 3	ISCO 4	ISCO 5	ISCO 6-9	ISCO 1+2+3
Law	8%	72%	20%	0%	0%	0%	100%
Art	5%	92%	3%	0%	0%	0%	100%
Computer science and electrical fields	6%	90%	4%	0%	0%	0%	100%
Medical and pharmaceutical	2%	90%	8%	0%	0%	0%	100%
Chemical technology	2%	80%	19%	0%	0%	0%	100%
Natural sciences	2%	83%	15%	0%	0%	0%	100%
Theology	17%	60%	23%	0%	0%	0%	100%
Civil engineering and Architecture	4%	89%	7%	0%	0%	1%	99%
Mechanical engineering	6%	81%	13%	0%	0%	1%	99%
Humanities	3%	82%	15%	0%	0%	0%	99%
Agricultural	7%	64%	28%	0%	0%	0%	99%
Economics	13%	62%	24%	1%	0%	0%	99%
Total	7%	76%	16%	0%	0%	0%	99%
Health	13%	39%	46%	0%	2%	0%	98%
Pedagogical	5%	82%	11%	0%	1%	1%	98%
Physical Education	9%	58%	31%	1%	1%	0%	98%



9 groups over 80 %

GRADUATES: Distribution in professional groups by field of study, 2010

2010

<i>Fields of study</i>	ISCO 1	ISCO 2	ISCO 3	ISCO 4	ISCO 5	ISCO 6-9	ISCO 0	ISCO 1+2+3
Computer science and electrical fields	5%	65%	29%	0%	0%	0%	0%	99%
Medical and pharmaceutical	1%	83%	13%	0%	0%	1%	1%	98%
Civil engineering and Architecture	7%	73%	17%	3%	1%	0%	0%	96%
Chemical technology	10%	62%	23%	3%	1%	1%	0%	95%
Health	3%	74%	17%	2%	3%	1%	0%	94%
Art	4%	81%	8%	1%	3%	2%	0%	94%
Mechanical engineering	13%	47%	33%	1%	2%	2%	3%	93%
Pedagogical	10%	69%	14%	5%	1%	0%	1%	93%
Law	13%	68%	9%	9%	0%	0%	0%	90%
Natural sciences	4%	70%	16%	8%	1%	1%	1%	90%
Total	12%	54%	21%	8%	1%	1%	2%	86%
Physical Education	19%	36%	29%	6%	2%	2%	5%	85%
Humanities	9%	60%	14%	12%	3%	0%	1%	84%
Theology	8%	48%	27%	10%	3%	3%	1%	83%
Economics	20%	35%	24%	16%	2%	0%	3%	80%
Agricultural	12%	39%	23%	12%	3%	10%	0%	75%

The most suitable education for the profession

Scale: 1: Higher second.educ.; 2: Higher Professional educ.; 3: Bc.; 4: Master's degree; 5: Ph.D.

		Profes. in natural sciences and math.	ICT profes.	Engineers	Doctors and health specialists	University and higher education teachers	Teachers	Financial and human resources profes.	Lawyers, attorneys, notaries	Profes. in the social sciences	Artistic professions
ISCO 2	Natural sciences	4,5	4,1			4,9	3,9	4,0		4,5	
	Technical	4,3	4,0	3,9		4,8	4,1	3,7			
	Agricultural	4,0		3,7	3,0	4,9	4,0	4,0			
	Medical	4,5			4,0						
	Economics	4,1	4,0	4,1		4,9	3,7	3,9		4,1	3,6
	Humanities					4,8	3,9	3,9		4,2	4,0
	Law							4,0	4,1		
	Pedagogical *					4,9	4,0	3,8		3,8	3,4
Art						3,9				3,9	

		Technicians	ICT technicians	Health associate profess.	Professional administrat.	Social and legal profes.
ISCO 3	Natural sciences	3,8	3,5		3,6	
	Technical	3,9	3,7		3,4	
	Agricultural	3,5			3,4	
	Medical					
	Economics	3,5	4,0		3,7	
	Humanities		3,4		3,9	3,7
	Law					
	Pedagogical *			3,7	3,6	3,8
Art						

- highest required education
- same in Engineers and Technicians
- Humanities lower in ISCO 3

* Pedagogical and Physical Education profes. = professionals

Scale: 1: higher second.educ.; 2: Higher Professional educ.; 3: Bc.; 4: master's degree; 5: Ph.D.

Saleries

		Profes. in natural sciences and math.	ICT profes.	Engineers	Doctors and health specialists	University and higher education teachers	Teachers	Financial and human resources profes.	Lawyers, attorneys, notaries	Profes. in the social sciences	Artistic professions
ISCO 2	Natural sciences	1097	2148			675	735	1104		1213	
	Technical	1279	1815	1308		775	772	1535			
	Agricultural	858		1053	1135	740	888	1064			
	Medical	1109			1371						
	Economics	1721	1850	1516		941	908	1767		1987	1280
	Humanities				1040	889	829	1450		994	1054
	Law							2018	1494		
	Pedagogical *					833	839	1121		1140	1275
Art						774				734	

		Technicians	ICT technicians	Health associate profess.	Professional administrat.	Social and legal profes.
ISCO 3	Natural sciences	1247	1529		1788	
	Technical	1364	1764		1661	
	Agricultural	1025			1178	
	Medical					
	Economics	1663	1635		1688	
	Humanities		1437		1713	889
	Law					
	Pedagogical *			1091	1581	847
Art						

- as teacher less than in other professions, even in ISCO 3 ... similar in Natural sciences
- University teachers: lowest level of salary in case of each type of faculty
- Technical faculty: no big difference ISCO 2 and ISCO 3
- Professional administration: high level in most of the faculty types comparing to other professions

Required level of professional competency

		Profes. in natural sciences and math.	ICT profes.	Engineers	Doctors and health specialists	University and higher education teachers	Teachers	Financial and human resources profes.	Lawyers, attorneys, notaries	Profes. in the social sciences	Artistic professions
ISCO 2	Natural sciences	7,0	6,6			7,5	6,3	6,1		7,0	
	Technical	7,2	6,3	6,3		7,0	6,2	5,9			
	Agricultural	6,4		6,3	6,7	7,5	5,3	6,3			
	Medical	7,8			6,6						
	Economics	6,7	6,3	7,3		7,8	6,2	6,2		6,6	4,9
	Humanities				7,4	7,3	6,0	5,7		6,6	5,3
	Law							5,9	6,6		
	Pedagogical *					7,0	6,4	6,1		6,4	7,2
	Art						6,0				6,5

		Technicians	ICT technicians	Health associate profess.	Professional administrat.	Social and legal profes.
ISCO 3	Natural sciences	6,3	5,7		4,5	
	Technical	6,4	5,9		5,3	
	Agricultural	6,0			5,3	
	Medical					
	Economics	6,9	6,3		5,8	
	Humanities		6,8		5,3	6,1
	Law					
	Pedagogical *			5,9	5,5	6,4
	Art					

- High level of required level in professions of natural science and math. and of University teachers
- Teachers: very similar level in most of the types of faculty - Pedagogical: highest
- Professional admin.: considerably lower level



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Thank You for your attention

