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**WHAT AFFECTS THE EMPLOYABILITY OF
GRADUATES? EXPLORING DEMAND AND SUPPLY
SIDE IN THE CASE OF SLOVENIA**

Ljubljana, 27.9.2012

AGENDA

1. MOTIVATION AND CONTRIBUTION
2. THE SCHOOL-TO-WORK TRANSITION OF GRADUATES WITH A SPECIAL EMPHASIS ON EVIDENCE CONCERNING THE BOLOGNA REFORM
3. DOES STUDY ABROAD INCREASE EMPLOYABILITY?
4. FIELD OF EDUCATION-OCCUPATION MISMATCH
5. CONCLUDING THOUGHTS

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1.1 MOTIVATION

IMPORTANCE OF EDUCATION

Economic growth

(Becker, 1964; Ben-Porath, 1967; and early works of Mincer, 1958 and 1962; Schultz, 1961; Nelson & Phelps, 1966; Denison, 1974; Mankiw, Romer, & Weil, 1992; Lucas, 1988, Benhabib & Spiegel, 1994; Barro & Lee, 2001; Acemoglu, Aghion & Zilibotti, 2006; Vandenbussche, Aghion & Meghir, 2006; Aghion, 2007; Hanushek & Kimko, 2000; Hanushek & Woessmann, 2009).

Individual effects

Higher earnings or wages (Becker, 1964; Mincer, 1974; Keane and Wolpin, 1997; Card, 1999; Black & Smith, 2006 for US, Harmon et al. 2001 for Europe; Boarini & Strauss, 2010 for OECD countries and Bartolj et al. 2011 for Slovenia)

1.1 MOTIVATION cont.

TRENDS IN EDUCATION

Increase in students, graduates and resources devoted to education
(Ryan, 2001; OECD, 2010; World Bank, 2011; SORS, 2011)

Persisting unemployment, overeducation and mismatch

(Smith, McKnight, & Naylor, 2000; Ryan, 2001; Lassibille et al., 2001; Kogan & Unt, 2005; Schomburg & Teichler, 2006; Quintini, Martin, & Martin, 2007; Caroleo & Pastore, 2007; Allen & van der Velden, 2007; Robst, 2007; Nordin, Persson, & Rooth, 2010).

Quality of education

(Hanushek & Kimko, 2000; Solmon & Wachtel, 1973; Solmon, 1975; Loury & Garman, 1995; Brewer, Eide, & Ehrenberg, 1999; Hilmer, 2000; Dale & Krueger, 2002; Chevalier & Conlon, 2003; Black & Smith, 2004; Hussain, McNally, & Telhaj, 2009; Long, 2010).

Spending a part of study abroad

1.2 PURPOSE

To **analyze** the school-to-work transition of Slovenian higher education graduates from the duration of unemployment point of view.

To **investigate** the first employment they secure. The analysis provides an insight into quality of Slovenian higher education.

To **briefly** discuss the effect of international experience on employability

1.3 CONTRIBUTIONS

1. Evidence based on unique dataset of recent generation of Slovenian graduates and their school-to-work transition.
2. Providing first data on horizontal match of Slovenian higher education evidence.
3. Providing some evidence of different quality institutions in the Slovenian higher education environment for a selected field of education.

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2.1 LITERATURE REVIEW AND HYPOTHESIS

- H1: The transition of graduates on average differs when comparing different fields of education with science and technical fields of education, that on average exhibit the shortest duration of unemployment after graduation if controlling for ability.
- H2: Graduates from different higher education institutions exhibit different school-to-work transition paths if controlling for ability and fields of education.
- H3: Graduates of different types of education in the same field of education and same higher education institution exhibit different school-to-work transition paths.
- H4: The probability of employment is not affected by any personal characteristic such as gender if controlling for ability.
- H5: Graduates who spent a part of their study abroad exhibit are more employable.

2.2 DATA

Micro data from Statistical Office of the Republic of Slovenia 2007-2009

Data on education

- Field of education (ISCED)
- Higher education institution
- Type of education
- Mode and duration of study
- Personal characteristics

Data on employment

- Statistical Register of Labour Active Population

2.3 DATA

Sample characteristics for graduates of generations 2007, 2008 and 2009: sample size, gender, field of education type of education, higher education institution in percent

	2007	2008	2009
Observations	5,903	5,644	6,505
Female	66.29	66.62	68.38
<i>Fields of Education</i>			
Education	11.50	11.52	10.32
Arts	2.42	2.00	1.63
Humanities	6.61	6.34	7.13
Social and Behavioural science	11.05	10.05	11.35
Journalism and Information	0.98	0.82	1.38
Business and Administration	21.29	22.06	23.75
Law	6.93	7.02	5.63
Science	6.17	6.18	5.95
Engineering and Construction	10.98	10.74	9.72
Manufacturing and Processing	3.00	3.38	2.86
Agriculture	2.86	3.08	2.66
Veterinary	0.76	0.76	0.85
Health and Welfare	11.27	11.75	11.11
Personal services	0.91	0.94	1.25
Transport services	1.39	1.65	2.28
Environmental protection and Security services	1.88	1.72	2.15

2.3 DATA

	2007	2008	2009
Observations	5,903	5,644	6,505
Female	66.29	66.62	68.38
<i>Types of Education</i>			
Professional higher (former)	31.12	27.55	28.78
Professional higher (1 st Bologna cycle)	0.29	0.88	3.17
Academic higher (former)	68.34	64.56	57.69
Academic higher (1 st Bologna cycle)	0.25	2.63	10.36
<i>Higher Education Institutions</i>			
University 1	73.73	70.73	72.49
University 2	21.89	20.77	26.50
University 3	2.83	2.57	3.83
University 4	0.36	0.34	0.30
Independent higher education institutions	1.20	1.20	2.00

Source: SORS, 2010; own calculations

2.4 METHODOLOGY

Probit model with marginal effects (Smith, McKnight & Naylor, 2000; Johnston & DiNardo, 1997)

Specification: $\Pr_t(y_i = 1 | X_i) = \Pr_t(y_i = 1 | gen, HEI, living_cond, dev_f_av_dur)$

gen ... gender of a graduate

HEI...higher education institution

dev_f_av_dur ... deviation from average duration

living_cond ... living conditions of a graduate during study.

2.5 RESULTS

(graduates with university degree)

Probit estimates of the probability of employment within the first three months of graduation (marginal effects) for graduates who took a matriculation exam after secondary school.

		2007		2008		2009		Pooled 2007-2009	
Number of observations		1,403		2,153		3,585		7,141	
Pseudo R2		0.0723		0.1048		0.1781		0.1338	
Probability of employment for the base group		0.5431		0.5972		0.3517		0.4801	
Variables		dy/dx	St. Err.	dy/dx	St. Err.	dy/dx	St. Err.	dy/dx	St. Err.
<i>Personal Characteristics</i>									
Female	#	-0.0179	.0334	-0.0533 ^b	.0264	-0.0423 ^b	.0211	-0.0428	.0152
Age		-0.0058	.0132	-0.0045	.0086	0.0256 ^a	.0097	-0.0010	.0058
Final Exam Score		-0.0018	.0031	-0.0036	.0026	0.0009	.0021	-0.0008	.0015
<i>Graduation Characteristics</i>									
Duration		-0.0024	.0014	-0.0010	.0008	-0.0051 ^a	.0010	-0.0023	.0006
Second quarter (April to June)	#	-0.0910 ^c	.0486	-0.1430 ^a	.0409	-0.0791 ^a	.0304	-0.1008	.0225
Third quarter (July to September)	#	-0.0283	.0479	-0.0260	.0395	0.0063	.0304	-0.0135	.0222
Fourth quarter (October to December)	#	-0.0072	.0488	-0.1044 ^b	.0414	0.0019	.0321	-0.0355	.0230

2.5 RESULTS

(graduates with university degree)

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Variables		dy/dx	St. Err.	dy/dx	St. Err.	dy/dx	St. Err.	dy/dx	St. Err.
<i>Fields of Education</i>									
Education	#	-0.0155	.0545	0.0289	.0436	0.1008 ^a	.0372	0.0562 ^b	.0252
Arts	#	-0.0892	.1144	-0.2742 ^a	.0867	-0.1001	.0704	-0.1633	.0498
Humanities	#	-0.3456 ^a	.0845	-0.2749 ^a	.0686	-0.1190 ^a	.0412	-0.2033	.0333
Social Sciences	#	-0.1617 ^a	.0607	-0.2125 ^a	.0497	-0.1326 ^a	.0349	-0.1574	.0266
Journalism and information	#	-0.1318	.1222	-0.2368 ^b	.1125	-0.1079	.0686	-0.1486	.0553
Law	#	0.0654	.0581	0.0395	.0471	0.1445 ^a	.0423	0.0944 ^a	.0276
Life and physical science	#	0.0185	.0883	-0.0551	.0695	0.1605 ^a	.0536	0.0566	.0383
Mathematics, statistics and computing	#	0.0748	.0889	0.1570 ^a	.0590	0.3376 ^a	.0546	0.2206 ^a	.0367
Engineering, Architecture and building	#	0.1985 ^a	.0602	0.1603 ^a	.0480	0.2410 ^a	.0412	0.2013 ^a	.0277
Manufacturing and processing	#	-0.0264	.1414	-0.0065	.0751	0.0449	.0613	0.0075	.0455
Agriculture and Veterinary Science	#	0.0689	.1168	-0.1482 ^c	.0879	-0.1345 ^b	.0654	-0.0993 ^c	.0509
Forestry	#					0.0572	.1590	-0.0135	.1607
Health	#	0.3216 ^a	.0674	0.2806 ^a	.0516	0.3704 ^a	.0454	0.3227 ^a	.0303
Social services	#			-0.1231	.2077	0.1566 ^c	.0921	0.0007	.0814
Personal and Security services	#	-0.1224	.1096	-0.1995	.1372	-0.1012	.0645	-0.1683 ^a	.0516
Transport services	#	-0.0438	.1610	-0.1175	.1322	-0.0393	.0920	-0.1023	.0672

2.5 RESULTS

(graduates with university degree)

		2007		2008		2009		Pooled 2007-2009		
Number of observations		1,403		2,153		3,585		7,141		
Pseudo R2		0.0723		0.1048		0.1781		0.1338		
Probability of employment for the base group		0.5431		0.5972		0.3517		0.4801		
Variables		dy/dx	St. Err.	dy/dx	St. Err.	dy/dx	St. Err.	dy/dx	St. Err.	
<i>Types of Education</i>										
Professional higher (former)	#	-0.1730 ^a	.0616	-0.1809 ^a	.0516	-0.1032 ^b	.0399	-0.1192 ^a	.0279	
Professional higher (1 st Bologna cycle)	#			-0.1415	.2317	-0.1637 ^c	.0947	-0.2855 ^a	.0747	
Academic higher (1 st Bologna cycle)	#	-0.2669	.1697	-0.4833 ^a	.0536	-0.2335 ^a	.0362	-0.3791 ^a	.0264	
<i>Higher Education Institutions</i>										
Public University 2	#	-0.1029 ^a	.0372	-0.1086 ^a	.0304	-0.1097 ^a	.0232	-0.1045 ^a	.0169	
Public University 3	#	-0.0668	.0854	0.0751	.0761	0.0826	.0573	0.0579	.0402	
Independent HEI	#	0.0662	.1525	0.1255	.1066	-0.0734	.1030	0.0385	.0730	

Note:

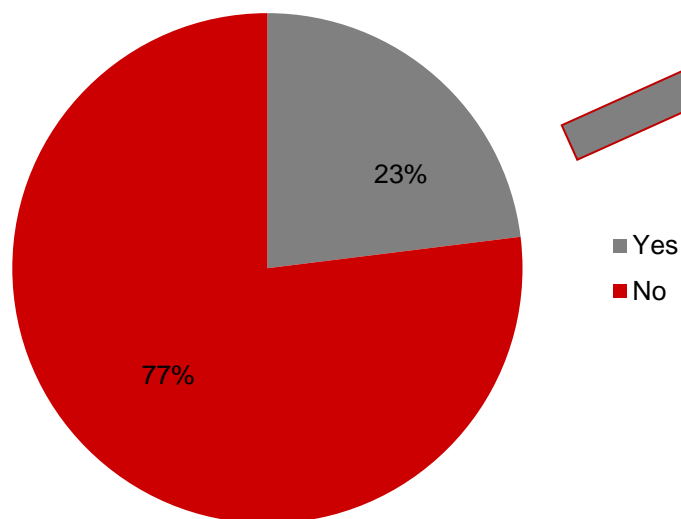
1. dy/dx is for a discrete change of the dummy variable from 0 to 1, standard errors are reported in parentheses.
2. The base group consists of average-age, male graduates from Business and Administration who finished the former higher academic type of education at Public University 1, had an average score at a professional matriculation exam and graduated in the first quarter.
3. ^c significant at 10%; ^b significant at 5%; ^a significant at 1%

Source: SORS, 2010; own calculations

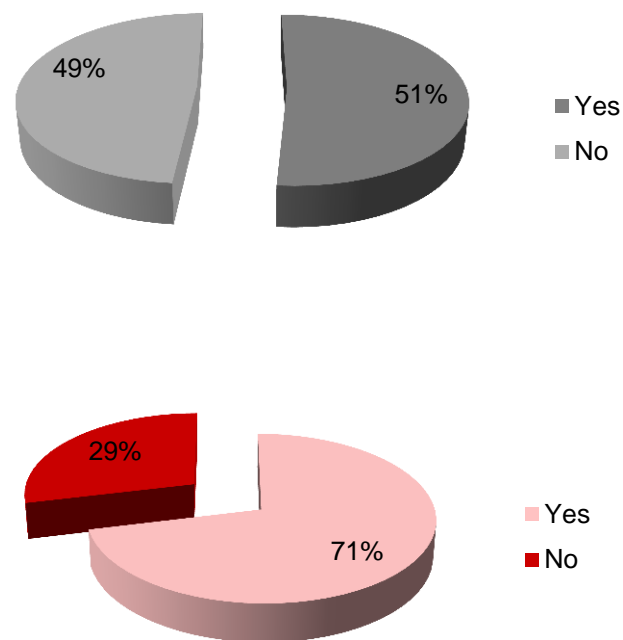
What role do practical and international experiences play in graduates employability?

Survey of alumni members at FELU (graduates in 2009/10)

Did you study abroad?



Do you have a job at the time of survey?

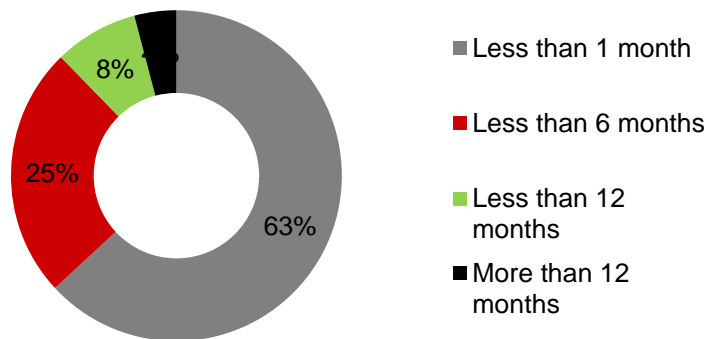


Complete sample

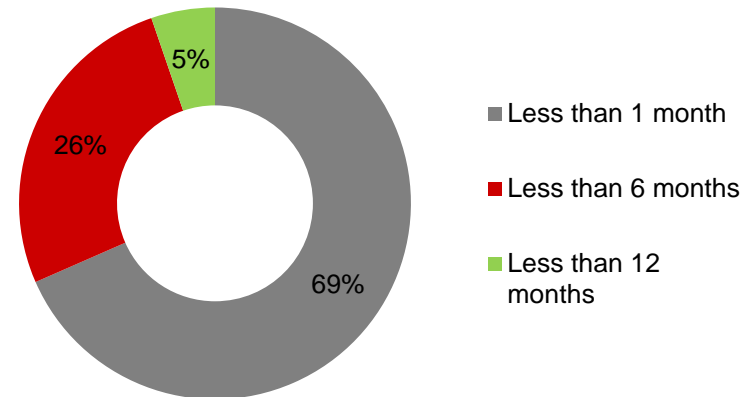
What role do practical and international experiences play in graduates employability?

Survey of alumni members at FELU (graduates in 2009/10)

How long did it take to get a first job?



Complete sample

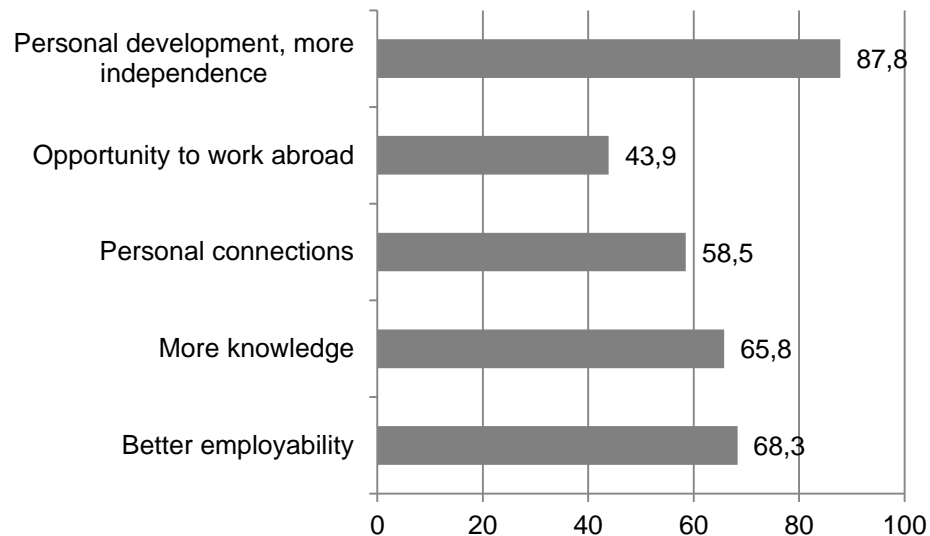


Graduates who studied abroad

What role do practical and international experiences play in graduates employability?

Survey of alumni members at FELU (graduates in 2009/10)

How did study abroad affect your career?



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3.1 MOTIVATION

Vertical mismatch

(Sicherman, 1991; Hersch, 1991; Robst, 1995, Alba-Ramirez, 1993; Cohn & Kahn, 1995; Sloane, Battu & Seaman, 1999; Groot & Maason van den Bring, 2000; Coroleo & Pastore, 2011)

Horizontal mismatch

(Robst, 2007; Nordin, Persson, & Rooth, 2010)

3.2 LITERATURE REVIEW AND HYPOTHESIS

H1: The likelihood of a field of education-occupation match varies for different fields of education also in the first occupation a graduate secures.

H1.1: The likelihood of a field of education-occupation match is higher for graduates from ISCED 72 (Health).

H1.2: The likelihood of a field of education-occupation match is higher for graduates from ISCED 5 (Engineering, Manufacturing and Construction).

H2: The likelihood of a field of education-occupation match is constant over time.

H3: The probability of a mismatch increases with the duration of unemployment.

3.3 DATA

VERTICAL MATCH:

- SCO (SKP)
 - (1) legislators, senior officials and managers
 - (2) professionals
 - (3) technical and associate professionals

HORIZONTAL MATCH:

- ISCED & SCO

3.5 RESULTS

The match between the graduates' field of study and first occupation in percent

	Matched (%)	Weakly Matched (%)	Mismatched (%)	Overeducated (%)
Total	48.57	6.98	44.45	40.10
Men	49.25	9.11	41.64	36.37
Women	48.18	5.78	46.04	42.20
Year				
2007	58.67	8.27	33.05	27.50
2008	52.11	7.24	40.53	36.35
2009	36.00	5.57	58.43	55.03

Source: SORS, 2010; own calculations

2.5 RESULTS

(graduates with university degree)

*Ordered logit results for the likelihood of an education-occupation match (marginal effects)
for graduates who took a matriculation exam after secondary school*

	Specification 1	Specification 2	Specification 3
Number of observations	13,761	13,761	13,761
Pseudo R ²	0.1182	0.1381	0.1397
Probability of education- Occupation match for base group	0.434	0.421	0.421
Variables			
	<i>Marg. Eff.</i> (<i>Std. Err.</i>)	<i>Marg. Eff.</i> (<i>Std. Err.</i>)	<i>Marg. Eff.</i> (<i>Std. Err.</i>)
<i>Personal Characteristics</i>			
women	-0.020 ^c (0.011)	-0.023 ^b (0.011)	-0.024 ^b (0.011)
test score	0.002 (0.002)	0.001 ^c (0.000)	0.001 ^c (0.001)
<i>Graduation Characteristics</i>			
year of graduation	-0.159 (0.159)	-0.141 ^a (0.015)	-0.141 ^a (0.048)
<i>Types of Education</i>			
Higher Vocational		-0.173 ^a (0.014)	-0.175 ^a (0.015)
Professional higher (former)		-0.107 ^a (0.012)	-0.119 ^a (0.012)
Professional higher (1 st Bologna cycle)		-0.233 ^a (0.022)	-0.256 ^a (0.020)
Academic higher (1 st Bologna cycle)		-0.350 ^a (0.011)	-0.356 ^a (0.011)

2.5 RESULTS

(graduates with university degree)

	Specification 1	Specification 2	Specification 3
Number of observations	13,761	13,761	13,761
Pseudo R ²	0.1182	0.1381	0.1397
Probability of education- Occupation match for base group	0.434	0.421	0.421
<i>Higher Education Institutions</i>			
Public University 2			-0.024 ^b (0.011)
Public University 3			0.111 ^a (0.024)
Private University 1			0.222 ^c (0.133)
Independent higher education institutions			0.081 ^b (0.035)
<i>Fields of Education</i>			
Education	0.195 ^a (0.014)	0.052 ^a (0.016)	0.052 ^a (0.016)
Arts	-0.038 (0.035)	-0.161 ^a (0.029)	-0.165 ^a (0.029)
Humanities	-0.206 ^a (0.020)	-0.289 ^a (0.015)	-0.303 ^a (0.014)
Social and behavioural science	-0.245 ^a (0.012)	-0.312 ^a (0.011)	-0.316 ^a (0.011)
Journalism and information	-0.097 ^b (0.041)	-0.152 ^a (0.039)	-0.157 ^a (0.039)
Law	0.185 ^a (0.019)	0.038 (0.023)	0.040 ^c (0.023)
Life sciences	0.163 ^a (0.036)	0.000 (0.037)	-0.007 (0.038)
Physical sciences	0.180 ^a (0.046)	0.031 (0.049)	0.022 (0.049)
Mathematics and statistics	0.057 (0.050)	-0.051 (0.047)	-0.048 (0.047)

2.5 RESULTS

(graduates with university degree)

	Specification 1	Specification 2	Specification 3
Number of observations	13,761	13,761	13,761
Pseudo R ²	0.1182	0.1381	0.1397
Probability of education- Occupation match for base group	0.434	0.421	0.421
Computing	0.210 ^a (0.028)	0.115 ^a (0.030)	0.120 ^a (0.030)
Engineering and engineering trades	0.104 ^a (0.018)	0.023 (0.019)	0.028 (0.019)
Manufacturing and processing	-0.132 ^a (0.021)	-0.188 ^a (0.019)	-0.186 ^a (0.019)
Architecture and building	0.233 ^a (0.022)	0.109 ^a (0.025)	0.107 ^a (0.026)
Agriculture, forestry and fishery	-0.163 ^a (0.022)	-0.218 ^a (0.019)	-0.216 ^a (0.019)
Veterinary	0.376 ^a (0.104)	0.248 ^c (0.150)	0.241 (0.152)
Health	0.363 ^a (0.015)	0.301 ^a (0.018)	0.301 ^a (0.018)
Personal services	-0.010 (0.027)	0.003 (0.028)	-0.032 (0.029)
Transport services	-0.296 ^a (0.017)	-0.299 ^a (0.016)	-0.296 ^a (0.016)
Environmental protection	-0.328 ^a (0.040)	-0.320 ^a (0.038)	-0.337 ^a (0.035)
Security services	-0.248 ^a (0.024)	-0.285 ^a (0.019)	-0.272 ^a (0.021)

1. y is the likelihood of a match for a male graduates from Business and Administration who finished the old university programme at Public University 1, and had an average test score at a matriculation exam

2. c significant at 10%; b significant at 5%; a significant at 1%

Source: SORS, 2010; own calculations

2.5 RESULTS

(graduates with professional degree)

Ordered logit results for the likelihood of an education-occupation match (marginal effects) for graduates who took a final exam after secondary school

	Specification 1		Specification 2		Specification 3	
Number of observations	10,971		10,971		10,971	
Pseudo R ²	0.0986		0.1026		0.1046	
Probability of education- Occupation match for base group	0.531		0.531		0.531	
Variables						
	<i>Marg. Eff.</i> <i>(Std. Err.)</i>		<i>Marg. Eff.</i> <i>(Std. Err.)</i>		<i>Marg. Eff.</i> <i>(Std. Err.)</i>	
<i>Personal Characteristics</i>						
women	-0.031	a	-0.029	b	-0.033	a
	(0.011)		(0.011)		(0.011)	
test score	0.010	c	0.007		0.005	
	(0.006)		(0.006)		(0.006)	
<i>Graduation Characteristics</i>						
year of graduation	-0.090	a	-0.089	a	-0.089	a
	(0.006)		(0.004)		(0.011)	
<i>Types of Education</i>						
Higher Vocational			-0.107	a	-0.117	a
			(0.023)		(0.023)	
Professional higher (former)			-0.118	a	-0.111	a
			(0.013)		(0.013)	
Professional higher (1 st Bologna cycle)			-0.124		-0.137	
			(0.093)		(0.095)	
Academic higher (1 st Bologna cycle)			-0.171	c	-0.168	c
			(0.093)		(0.094)	

2.5 RESULTS

(graduates with professional degree)

	Specification 1		Specification 2		Specification 3	
Number of observations	10,971		10,971		10,971	
Pseudo R ²	0.0986		0.1026		0.1046	
Probability of education- Occupation match for base group	0.531		0.531		0.531	
<i>Higher Education Institutions</i>						
Public University 2					-0.027	c
					(0.014)	
Public University 3					-0.033	
					(0.042)	
Private University 1					-0.376	a
					(0.041)	
Independent higher education institutions					0.033	
					(0.040)	
<i>Fields of Education</i>						
Education	-0.086	a	-0.156	a	-0.157	a
	(0.018)		(0.019)		(0.019)	
Arts	-0.271	a	-0.323	a	-0.330	a
	(0.024)		(0.022)		(0.022)	
Humanities	-0.353	a	-0.401	a	-0.407	a
	(0.014)		(0.013)		(0.013)	
Social and behavioural science	-0.425	a	-0.462	a	-0.467	a
	(0.011)		(0.010)		(0.010)	
Journalism and information	-0.092	c	-0.164	a	-0.174	a
	(0.054)		(0.053)		(0.052)	
Law	0.152	a	-0.221	a	-0.223	a
	(0.024)		(0.023)		(0.023)	
Life sciences	-0.217	a	-0.279	a	-0.286	a
	(0.032)		(0.029)		(0.029)	
Physical sciences	-0.205	a	-0.255	a	-0.265	a
	(0.035)		(0.033)		(0.032)	
Mathematics and statistics	-0.309	a	-0.306	a	-0.316	a
	(0.046)		(0.047)		(0.045)	

2.5 RESULTS

(graduates with professional degree)

	Specification 1		Specification 2		Specification 3	
Number of observations	10,971		10,971		10,971	
Pseudo R ²	0.0986		0.1026		0.1046	
Probability of education- Occupation match for base group	0.531		0.531		0.531	
Computing	0.017 (0.033)		-0.009 (0.034)		-0.018 (0.034)	
Engineering and engineering trades	-0.082 a (0.019)		-0.097 a (0.019)		-0.107 a (0.020)	
Manufacturing and processing	-0.322 a (0.016)		-0.319 a (0.016)		-0.327 a (0.016)	
Architecture and building	-0.026 (0.028)		-0.055 c (0.028)		-0.063 b (0.028)	
Agriculture, forestry and fishery	-0.366 a (0.017)		-0.373 a (0.017)		-0.379 a (0.017)	
Veterinary	-0.174 a (0.040)		-0.241 a (0.037)		-0.249 a (0.036)	
Health	0.163 a (0.021)		0.136 a (0.022)		0.129 a (0.023)	
Personal services	-0.137 a (0.038)		-0.102 a (0.039)		-0.093 b (0.045)	
Transport services	-0.452 a (0.013)		-0.453 a (0.034)		-0.456 a (0.013)	
Environmental protection	-0.511 a (0.016)		-0.511 a (0.016)		-0.510 a (0.018)	
Security services	-0.324 a (0.031)		-0.307 a (0.033)		-0.313 a (0.033)	

1. *y* is a probability that a male graduate from Business and Administration who finished the old university programme at Public University 1 had an average test score at the final exam

2. *c* significant at 10%; *b* significant at 5%; *a* significant at 1%

Source: SORS, 2010; own calculations

2.5 RESULTS

(graduates with professional degree)

Probit estimates of the probability of education-occupation mismatch (marginal effects)

	Specification 1		Specification 2		Specification 3	
Number of observations	11,438		9,873		9,873	
Pseudo R2	0.1447		0.1572		0.1531	
Probability for the base group	0.322		0.327		0.327	
	dy/dx (Std. Err.)		dy/dx (Std. Err.)		dy/dx (Std. Err.)	
Duration of unemployment	0.028 (0.006)	a	0.023 (0.007)	b	0.023 (0.007)	b
Year of graduation	0.090 (0.005)	a	0.111 (0.006)	a	0.111 (0.006)	a
Test score			-0.003 (0.000)	a	-0.003 (0.000)	a
<i>Types of Education</i>						
Higher Vocational	#		0.153 (0.027)	a	0.158 (0.027)	a
Professional higher (former)	#		0.094 (0.014)	a	0.094 (0.014)	a
Professional higher (1 st Bologna cycle)	#		0.067 (0.014)		0.067 (0.064)	
Academic higher (1 st Bologna cycle)	#		-0.055 (0.046)		-0.054 (0.046)	
<i>Higher Education Institutions</i>						
Public University 2	#				0.011 (0.013)	
Public University 3	#				0.013 (0.034)	
Private University 1	#				0.279 (0.148)	
Independent higher education institutions	#				-0.044 (0.046)	

2.5 RESULTS

(graduates with professional degree)

		Specification 1		Specification 2		Specification 3	
Number of observations		11,438		9,873		9,873	
Pseudo R2		0.1447		0.1572		0.1531	
Probability for the base group		0.322		0.327		0.327	
		dy/dx		dy/dx		dy/dx	
		(Std. Err.)		(Std. Err.)		(Std. Err.)	
<i>Fields of Education</i>							
Education	#	0.067	a	0.095	a	0.093	a
		(0.017)		(0.021)		(0.021)	
Arts	#	0.180	a	0.217	a	0.221	a
		(0.043)		(0.050)		(0.050)	
Humanities	#	0.331	a	0.353	a	0.355	a
		(0.023)		(0.026)		(0.027)	
Social and behavioural science	#	0.486	a	0.519	a	0.522	a
		(0.016)		(0.017)		(0.018)	
Journalism and information	#	0.009		0.076		0.080	
		(0.055)		(0.065)		(0.066)	
Law	#	0.015		0.054	b	0.053	b
		(0.020)		(0.024)		(0.024)	
Life sciences	#	0.151	a	0.194	a	0.198	a
		(0.034)		(0.037)		(0.038)	
Physical sciences	#	0.092	b	0.153	b	0.157	b
		(0.038)		(0.045)		(0.045)	
Mathematics and statistics	#	0.335	a	0.366	a	0.367	a
		(0.057)		(0.057)		(0.057)	
Computing	#	-0.049	c	-0.064	b	-0.064	b
		(0.028)		(0.030)		(0.030)	

2.5 RESULTS

(graduates with professional degree)

		Specification 1		Specification 2		Specification 3	
Number of observations		11,438		9,873		9,873	
Pseudo R2		0.1447		0.1572		0.1531	
Probability for the base group		0.322		0.327		0.327	
		dy/dx		dy/dx		dy/dx	
		(Std. Err.)		(Std. Err.)		(Std. Err.)	
Engineering and engineering trades	#	0.163	a	0.145	a	0.146	a
		(0.018)		(0.020)		(0.020)	
Manufacturing and processing	#	0.487	a	0.458	a	0.459	a
		(0.022)		(0.024)		(0.025)	
Architecture and building	#	-0.024		-0.006		-0.005	
		(0.024)		(0.026)		(0.027)	
Agriculture, forestry and fishery	#	0.305	a	0.261	a	0.263	a
		(0.029)		(0.031)		(0.031)	
Veterinary	#	0.145	b	0.174	c	0.178	b
		(0.051)		(0.052)		(0.55)	
Health	#	-0.153	a	-0.164	a	-0.163	a
		(0.014)		(0.015)		(0.016)	
Personal services	#	0.146	b	0.087	c	0.080	
		(0.051)		(0.052)		(0.054)	
Transport services	#	0.579	a	0.559	a	0.558	a
		(0.020)		(0.023)		(0.024)	
Environmental protection	#	0.560	a	0.573	a	0.560	a
		(0.046)		(0.067)		(0.074)	
Security services	#	0.417	a	0.420	a	0.417	a
		(0.038)		(0.045)		(0.045)	

Note:

- # dy/dx is for a discrete change of the dummy variable from 0 to 1
- The base group are graduates of Business and Administration, that finished academic higher(former) at University I.
- c significant at 10%; b significant at 5%; a significant at 1%

Source: SORS, 2010; own calculations

AGENDA

1. MOTIVATION AND CONTRIBUTION
2. MEASURING THE QUALITY OF HIGHER EDUCATION INSTITUTIONS: A LITERATURE REVIEW
3. THE SCHOOL-TO-WORK TRANSITION OF GRADUATES WITH A SPECIAL EMPHASIS ON EVIDENCE CONCERNING THE BOLOGNA REFORM
4. FIELD OF EDUCATION-OCCUPATION MISMATCH
5. CONCLUDING THOUGHTS

CONCLUDING THOUGHTS

1. The transition of graduates on average differs when comparing different fields of education - science and technical fields of education on average exhibit the shortest duration of unemployment after graduation.
2. Graduates of different types of education in the same field of education and same higher education institution exhibit different school-to-work transition paths.
3. Foreign experience (on the first sight) doesn't help much when looking for a first job, but more research on this phenomena needs to be done in the future.
4. The likelihood of a field of education-occupation match varies for:
 - different fields of education being higher for ISCED 72 and ISCED 5
 - different duration of unemployment.

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**THE SCHOOL-TO-WORK TRANSITION OF
SLOVENIAN HIGHER EDUCATION GRADUATES**

Thank you for your attention.