Strong vocational education – a safe way to the labour market? A case study of the Czech Republic

Jana Straková

Institute for Research and Development of Education, Charles University in Prague jana.strakova@pedf.cuni.cz

ET 2020

- combating low educational achievement in basic competences providing young people with the right mix of skills
- an increasing demand for employees with tertiary education
- endorsing vocational education and increasing the number of young people enrolled in apprenticeship training

Findings on education systems with high vocational specificity

Shavit and Müller 2000; Müller and Gangl 2003; Müller, 2005; Brunello and Checchi 2007; van de Werfhorst and Mijs 2010

Educational systems that allocate students into academic or vocational tracks with different curricula

- Improve the destinations of school leavers into the labour market and smooth the school-to-work transition
- Increase the effect of social origin on educational performance

Research questions

1. Does apprenticeship education in the Czech Republic facilitate the transition from school to work?

2. Is apprenticeship education in the Czech Republic successful in preparing students for the modern labour market and life in modern society? Does it equip students with solid basic skills?

3. How does the high vocational specificity of the Czech education system contribute to educational inequalities? How socially selective is the apprenticeship track? What are the trends with respect to its selectivity?

Data from adult surveys

- International Adult Literacy Survey (1998, 3132 adults aged 16-65, 845 adults aged 16-34 not in education)
- Programme for the International Assessment of Adult Competencies (2012, 6102 adults aged 16-65, 1730 adults aged 16-34 not in education)

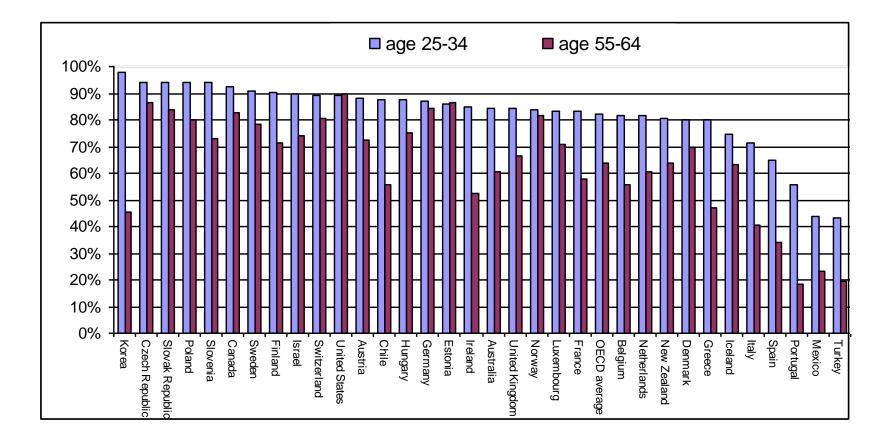
Vocational education in the Czech Republic

Upper secondary education in the Czech Republic (2015)

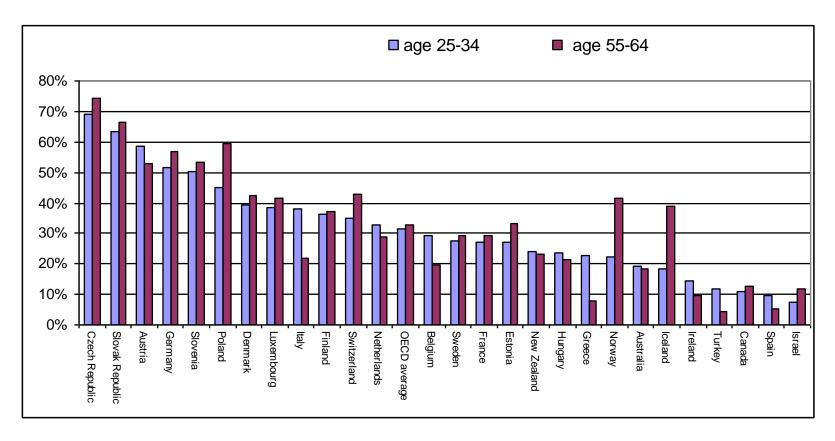
3 tracks:

- Academic ISCED 3A 25 % of students
- Vocational ISCED 3A 45 % of students
- Apprenticeship ISCED 3C 30 % of students

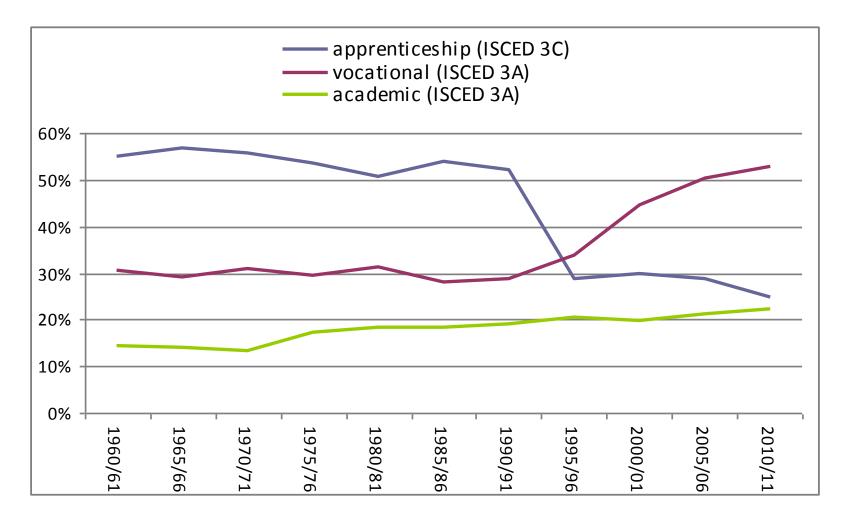
Trends in completion of upper secondary education, EaG 2013



Trends in proportions of VET students (apprenticeship ISCED 3C and vocational ISCED 3A) in upper secondary education, EaG 2013



Trends in participation in upper secondary tracks, the Czech Republic, Statistical Yearbook 2012



Current situation

- Proportion of upper secondary school leavers of ISCED 3A programmes increased from 40% to 70% in the last two decades
- Net entry rates to tertiary education increased from 20% to 60%
- Complaints about decreasing prestige of ISCED 3A leaving examination and tertiary education
- Strong intention of employers and policy makers to force students into apprenticeship ISCED 3C education (strategical document for 2011-2015 sets the target to reduce the proportion of students in ISCED 3A tracks to 68% and retain proportion of students in the academic track at 25%)

Apprenticeship ISCED 3C education has not changed in the last decades:

- three years study
- 275 (highly specialized) fields
- general subjects 30-35% of the instruction time, vocational subjects 20-30%, practical training 35-45%
- practical training takes place mostly at specially designed school training facilities

 Does apprenticeship education in the Czech Republic facilitate the transition from school to work?

Chances for employment (adults not in education 16-34)

	model 1				model 2			
	В	S.E.	Sig.	Exp(B)	В	S.E.	Sig.	Exp(B)
ISCED 3A	0,228	0,058	0,000	1,256	0,284	0,049	0,000	1,328
literacy score	0,080	0,058	0,165	1,083				
gender (f)	-0,883	0,058	0,000	0,414	-0,899	0,056	0,000	0,407
SES	0,030	0,056	0,596	1,030				
year (2012)	-0,141	0,052	0,007	0,868	-0,158	0,049	0,001	0,584
year*ISCED 3A					0,041	0,046	0,377	1,042
Constant	1,137	0,056	0,000	3,116	1,115	0,053	0,000	3,048
Nagelkerke R square				0,179				0,182
% of predicted cases				72,5				72,4

Statistics

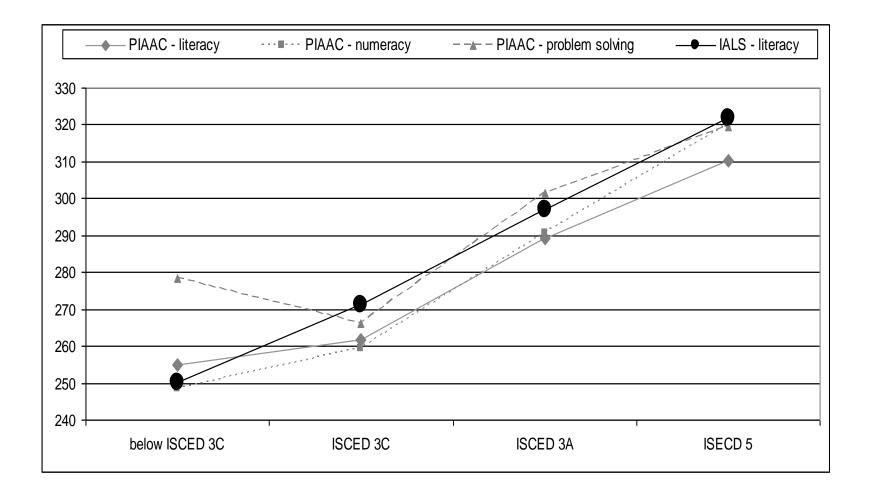
- High unemployment of school leavers (2012): ISCED 3C 27.4%; ISCED 3A 12.4%
- Less than half of ISCED 3C school leavers would choose the same study programme again (strong preference of ISCED 3A education)
- 3 years after school leaving only 45% of apprentices work in the field studied
- The length of job search is above OECD average
- 12.7% NEETs (vs. OECD average 15.7%)

2. Is apprenticeship education in the Czech Republic successful in preparing students for the modern labour market and life in modern society? Does it equip students with solid basic skills?

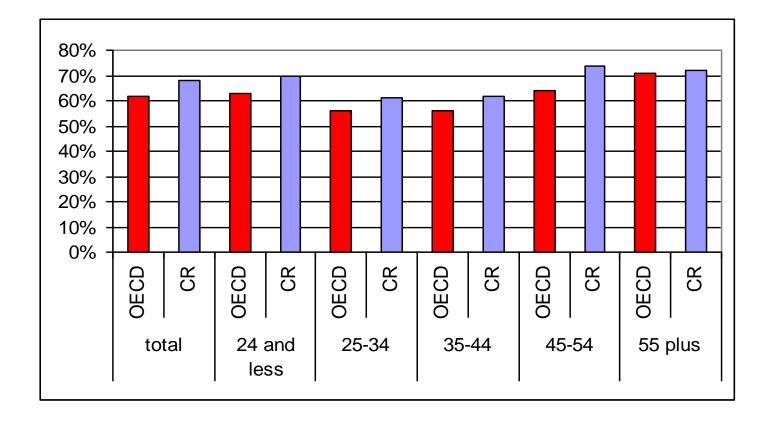
Educational attainment, IALS, PIAAC

education	IALS (%)	PIAAC (%)
ISCED 2 and bellow	4,8	7,7
ISCED 3C	49,7	30,8
ISCED 3A	35,1	35,2
ISCED 5,6	10,1	25,9
other	0,2	0,2

Achievement by ISCED 3 track, young adults (16-34), IALS 1998, PIAAC 2012



Literacy achievement, proportion of low achievers (bellow proficiency level 3) among adults with ISCED 3C education by age cohorts, PIAAC 2012



Chances for a completion of ISCED 3A programmes, school leavers 16-34, (IALS, PIAAC)

	model 1				model 2			
	В	S.E.	Sig.	Exp(B)	В	S.E.	Sig.	Exp(B)
literacy score	0.986	0.002	0.000	2.681	0.983	0.002	0.000	2.672
gender (f)	0.321	0.001	0.000	1.378	0.328	0.001	0.000	1.388
SES	0.819	0.002	0.000	2.269	0.843	0.002	0.000	2.322
year (2012)	0.558	0.001	0.000	1.747	0.575	0.001	0.000	1.778
year*SES					0.095	0.002	0.000	1.100
year*gender					0.092	0.001	0.000	1.096
year*literacy score					-0,068	0.002	0.000	0.934
constant	0.438	0.001	0.000	1.549	0.441	0.001	0.000	1.554
Nagelkerge R square				0.399				0.402
% of predicted cases				76.1				76.1

Conclusions

- The chances for employment are much higher for ISCED 3A school leavers compared to ISCED 3C school leavers; the specialized skills are not fully utilized
- Czech apprentices have low general skills compared to other upper secondary tracks and also internationally
- There is a big social and gender selectivity of ISCED
 3C education and has been increasing
- Presented findings do not support the idea of forcing young people into vocational tracks without modifying ISCED 3C programmes to make them more useful

Conclusions – cont.

- A general recommendation to strengthen vocational education without specifying what its desirable features are and what the desirable balance between the vocational and academic focus is may send the wrong message to policymakers in European countries, including the Czech Republic.
- EQUAVET indicators do not tackle some important chacacteristics: the level of basic skills, long-term employability

Thank you !