

OECD LEED Reviews on Universities, Entrepreneurship and Local Development in Moravia-Silesia

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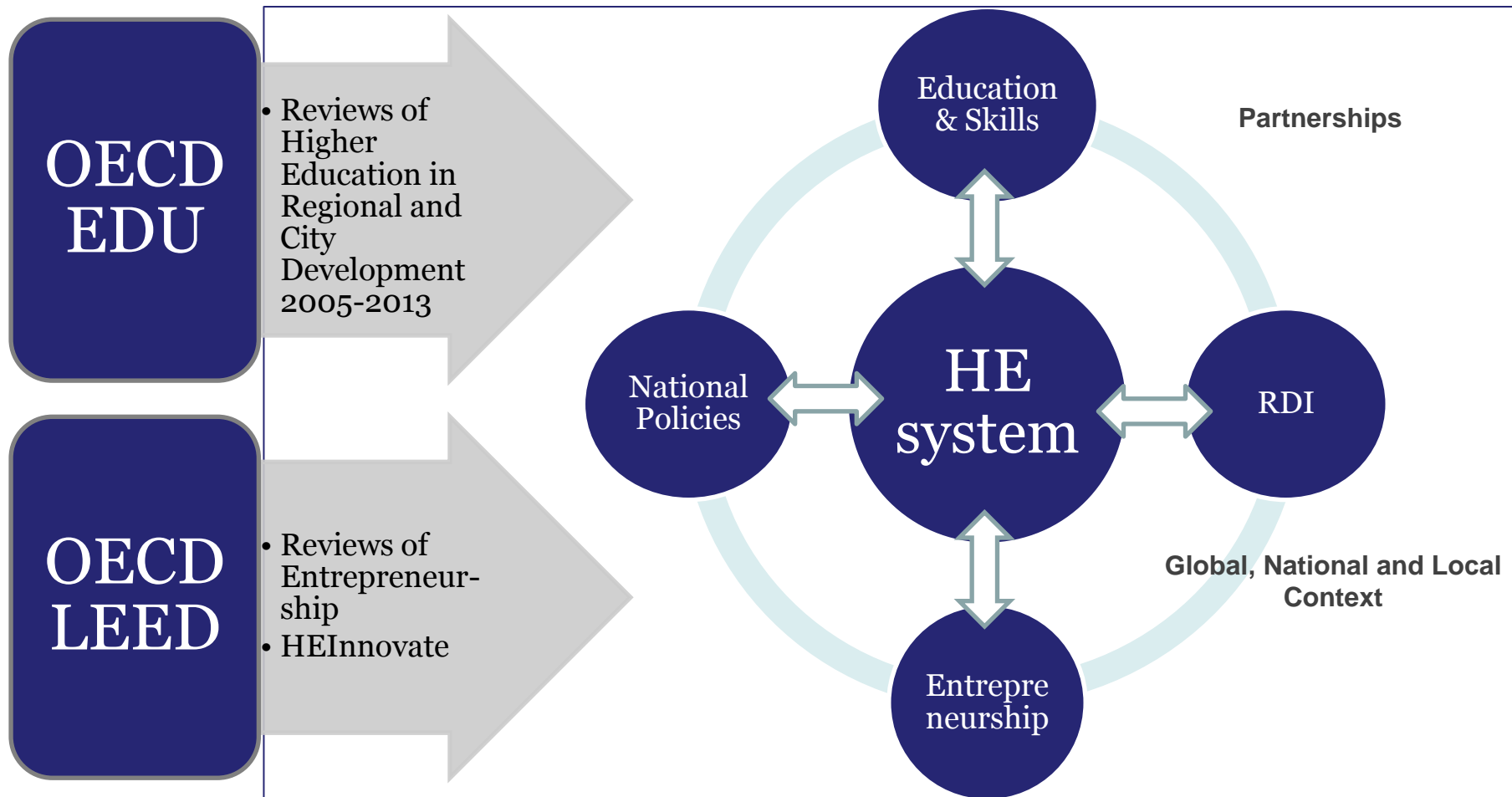
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What was under review?



How was the review conducted?



Background report

Review visit by the OECD-led expert team

OECD Review Report tailored for Moravia-Silesia

Dissemination of outcomes

MSK challenges

TE rate has grown but the brain drain slows the improvement of average education levels.

Population decline & brain drain. Old age dependency ratio

Economic activities face global price competition & cause environmental stress

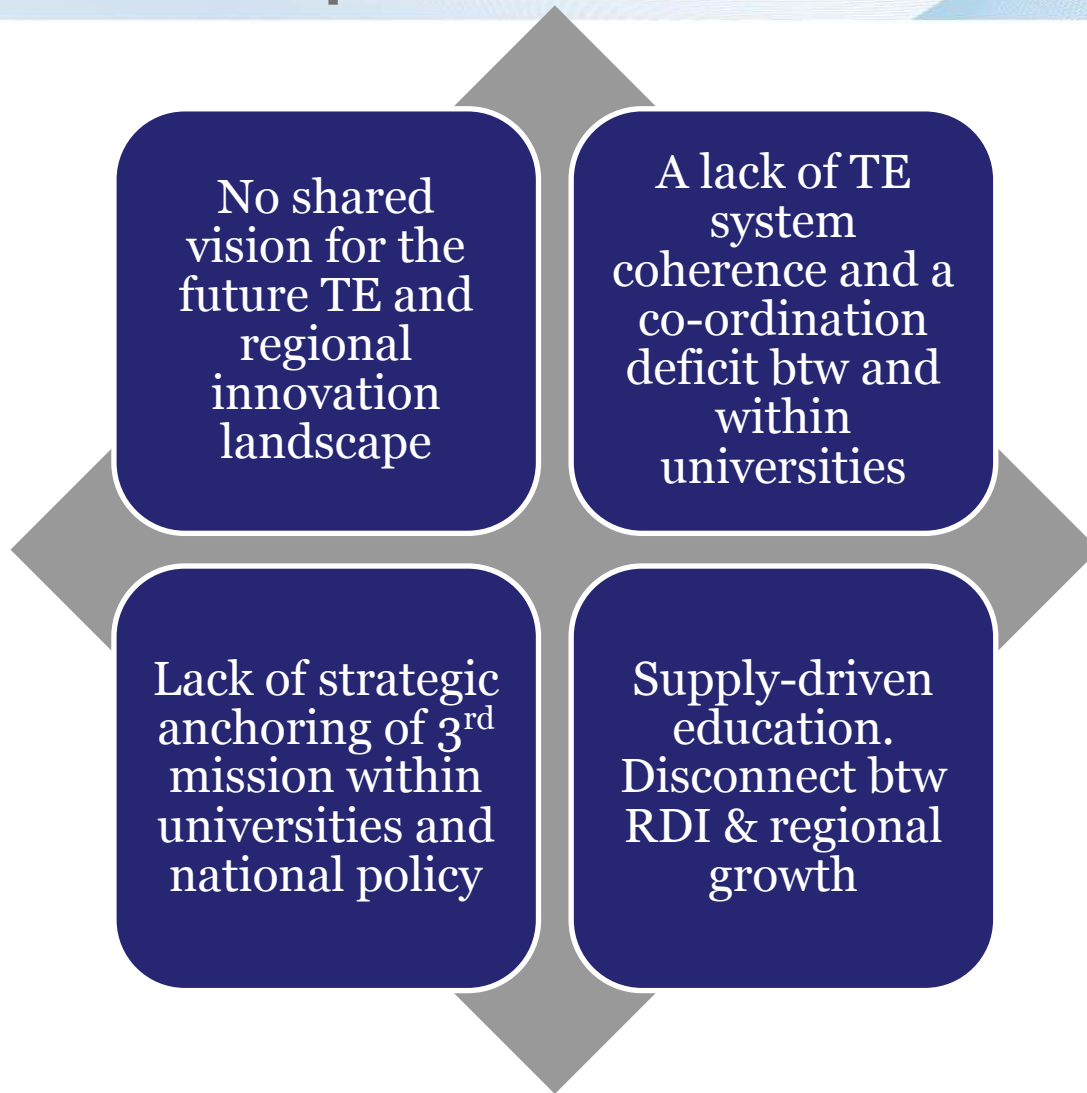
Low HR involvement in economic activities: low employment

Low intensity of business activity & lack of innovative knowledge-based firms



Demographic decline
global competition and
economic crisis
call for a greater emphasis on
knowledge, new enterprise and access
to relevant skills.

Gaps in the current system



Shrinking student population which will affect educational provision and labour market

Lack of adequate data on student access, progress & completion, employability, labourmarket foresight

The Big Question

To what extent the current policy framework facilitates the development of internationally competitive HE sector which

- delivers relevant skills
- responds to industry needs
- generates new businesses
- helps restructure the economy

Policy challenges

Leadership and Governance

- **A lack of external presence in HEI governance** encourages supply-driven education & research
- **HEI governance system** reduces the ability to launch HEI-wide reforms and leads to underresourced central services

Funding policies

- **Complex funding policy** lacks stability
- **R&D funding and evaluation methodology** offers perverse incentives
- **Decentralized budget allocation** within HEIs with non-strategic processes

QA

- **Accreditation system not fit for purpose**, drives academically oriented provision and limits the flexibility in delivery

Recommendations for the Government

REFORM HE LEGISLATION

- Modernise HEI governance and funding system to ensure sustainability, system coherence and TE diversification

CREATE A STABLE FINANCIAL FRAMEWORK

- Align funding with strategic goals. Ensure compatibility among/and proper mix of funding mechanisms. Rely on performance-based & competitive mechanisms & performance agreements

REFORM QA SYSTEM AND CAREER STRUCTURE

- Ensure fitness for purpose and labour market relevance. Distinguish QA for improvement and QA for accreditation. Develop a diverse career system based on a tenure system.

INCENTIVISE HEIS TO PLAY AN ACTIVE ROLE

- Develop indicators, funding mechanisms, mobility schemes

ENCOURAGE CONSOLIDATION AND COLLABORATION

- HE/research training provision, joint programmes, RDI activities, shared services/facilities, mobility

Recommendations for institutions

STRENGTHEN INSTITUTIONAL PROFILE

- Focus on areas of strength and address the needs of the society. Identify engagement as part of the institutional mission depending on the profile.

SEEK A SYSTEM APPROACH TO MSK HUMAN CAPITAL AND INNOVATION SYSTEM

- Collaborate with regional stakeholders, HEIs and other education institutions

TAKE STEPS TO TRANSFORM THE INSTITUTIONAL BUSINESS MODEL

- Do not rely on public funds only. Diversify funding streams: LLL, industry collaboration, competitive funds. Introduce a more strategic funding allocation system. Lower the institutional costs.

REVIEW RECRUITMENT, HIRING AND REWARD SYSTEMS

- Include 3rd mission activities. Develop a performance management system for staff to ensure return on investment whether high quality research, teaching or 3rd mission

MAINSTREAM ENGAGEMENT

- through teaching and RDI.

Human capital and skills development

Strength and Achievements

- Rapid increase in tertiary education demand and participation rate as elsewhere in the Czech Republic.
- Relatively good graduate employability in international comparison despite the adverse economic situation
- Important individual efforts in:
 - Engagement with external stakeholders
 - International (outgoing) mobility
 - Soft skills acquisition by the students
- Range of HEIs which together offer a comprehensive set of subject
- Student presence

Number of students in HE 2001-2012

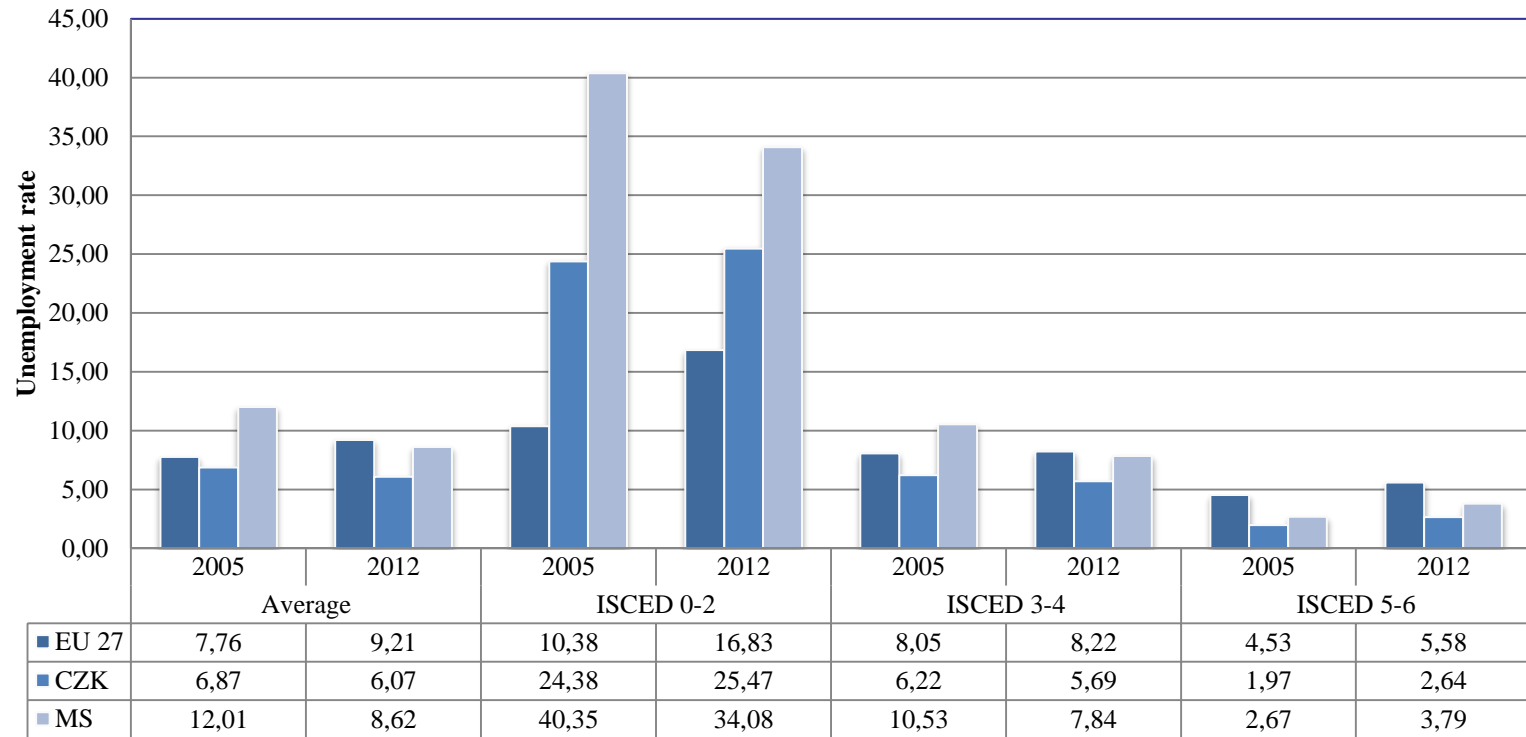
Number of Students	2001	2005	2009	2010	2011	2012	% of change since 2009
VSB - TUO	13 914	18 973	23 143	22 341	21 307	20 539	-11.3%
UO	5 498	8 092	9 688	10 218	10 384	10 409	7.4%
SUiO	3 367	4 712	8 902	8 810	8 430	7 884	-11.4%
BSO	482	2 093	3 430	2 976	2 090	1 194	-65.2%
CoSaAA	n.a.	n.a.	261	404	399	347	33.0%
Total	23 261	33 870	45 424	44 749	42 610	40 373	-11.1%

Source: *Own universities and Ministry of Education, Youth and Sport.*

Challenges (I)

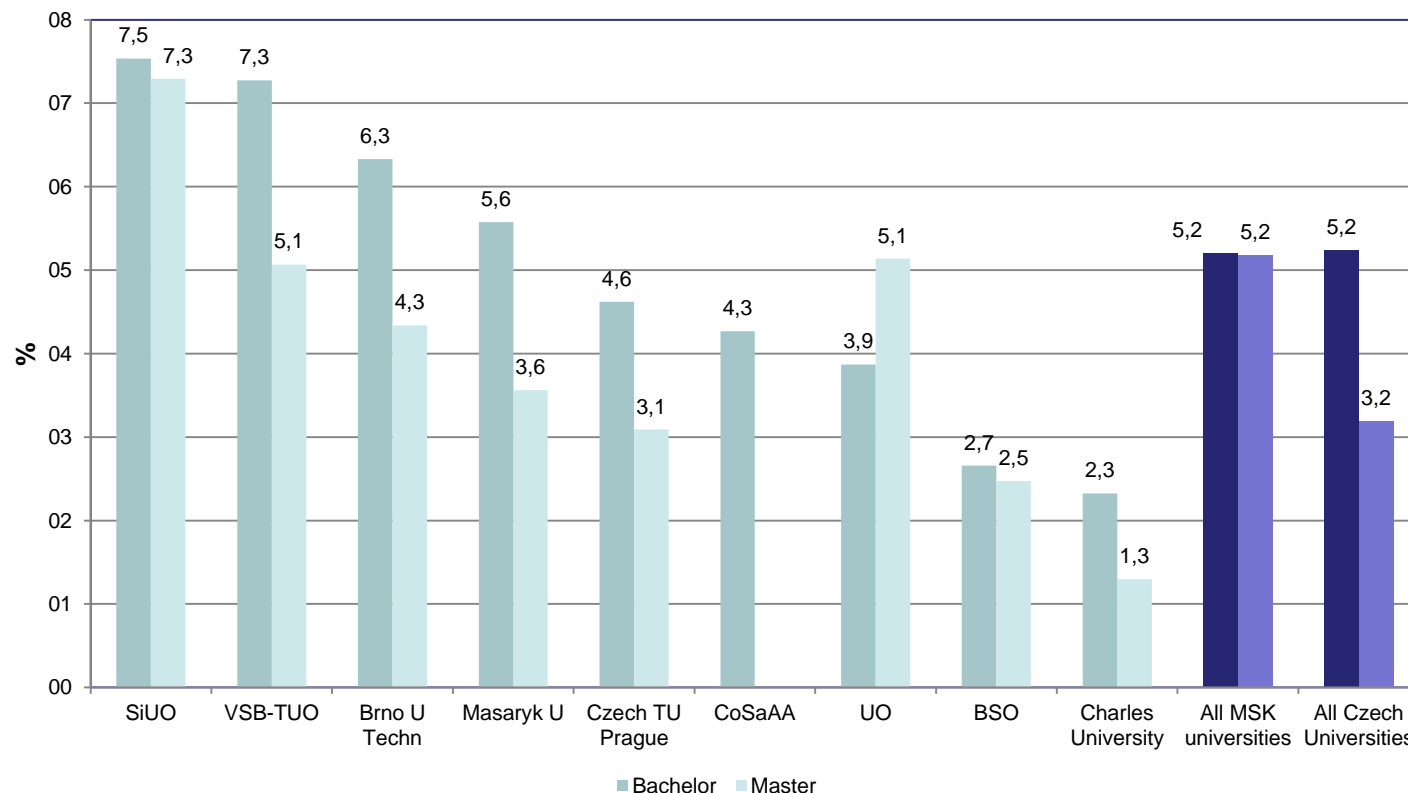
- Emerging signs of a mismatch between the supply & demand of high skills:
 - Unemployment has gone down for individuals of all levels but higher education (2005-2012).
 - Unemployment rates for Bachelor-level graduates are at the same level or below graduates from master and doctoral programmes.
 - Mismatch in the development of technical professional skills.
- Insufficient HEI-level tracking of student progression and employment outcomes.

Unemployment rate of 25-64 years old, by educational level, 2005-2012



Note: Unemployment rate according to the Labour Force Survey; ISCED 1997 is used to classify educational levels. Source: Eurostat Regional Statistics.

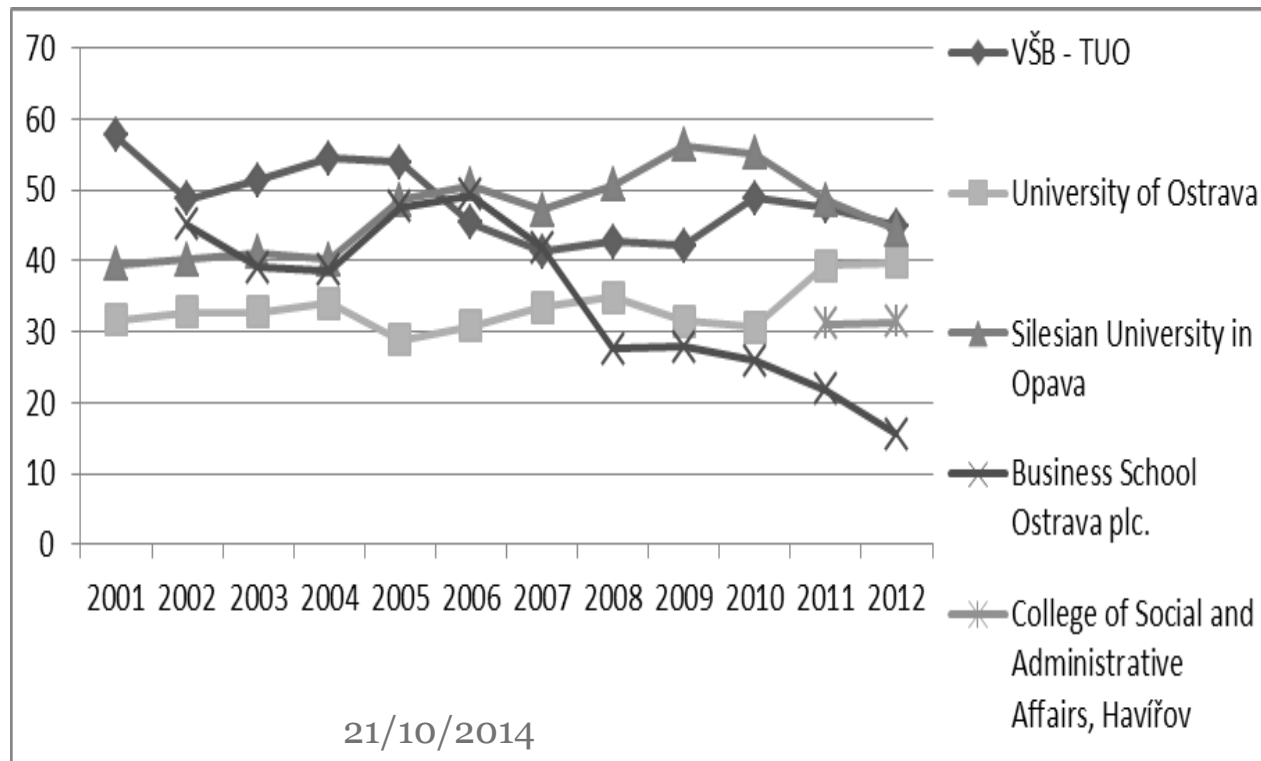
Unemployment rates for graduates by programme MSK universities and selected Czech universities average 2009-2013



Source: Database for unemployment of graduates, published by the Center for Education Policy, University Charles V Prague.

Challenges (II)

- **Supply-driven higher education:** employers not sufficiently involved in the design and delivery of study programmes
- **Inefficiencies in graduate production:** high dropout rates and extended studies
- **Lack of focus on the development of soft skills**



Challenges

- Lack of HE collaboration
- Lack of inter-disciplinarity
- Lack of comprehensive internationalisation strategies that comprise teaching, research and knowledge exchange
- Lack of focus on “internationalisation at home”

Mobility across universities: number of participants in exchange programmes (2012)

	Students		Academic Staff		Total number of students	Total Academic staff
	<i>Outgoing</i>	<i>Incoming</i>	<i>Outgoing</i>	<i>Incoming</i>		
VSB-TUO	331	481	273	131	20 539	1 078
UO	344	300	117	104	10 409	697
SUO	216	41	82	47	7 884	298
BSO	11	8	10	7	1 194	47
CoSaAA	0	0	0	0	347	22
	As % of the total number of students		As % of the total academic staff			
	<i>Outgoing</i>	<i>Incoming</i>	<i>Outgoing</i>	<i>Incoming</i>		
VSB-TUO	1.6%	2.3%	25.3%	12.2%		
UO	3.3%	2.9%	16.8%	14.9%		
SUO	2.7%	0.5%	27.5%	15.8%		
BSO	0.9%	0.7%	21.3%	14.9%		
CoSaAA	0.0%	0.0%	0.0%	0.0%		

Source: Own HEIs

[\(BACK\)](#)

Recommendations

- Respond to the mismatch in the high skills sector: **introduce a HEI-level system to monitor graduate employability**
- **Increase involvement of regional employers in the design and delivery of study programmes**
International example: World of Work at Liverpool John Moores University (UK)
- **Design and implement a systemic approach to provide internships and other work-based learning opportunities**
- **Expand and institutionalise alumni links**
- Systematically provide early intervention measures to **enhance academic performance and monitor student progress**
International example: Access & Civic Engagement Service of the Dublin Institute of Technology (IR)

Recommendations

- **Enhance the attainment of soft skills** as an integral part of study programmes. Embed employability skills, work-based learning, internship, entrepreneurialism, IP consciousness etc. in all programmes

International example: Mendeberri at Mondragon University (ES)

- **Develop comprehensive internationalisation strategies and resources**
- **Enhance permeability between tertiary professional education and higher education.** Establish learning pathways from secondary education to LLL to widen access and ensure more flexible and adaptable framework for learning, up-skilling and re-training
- **Strengthen collaboration** between HEIs, and between HEIs and city/region

Research, development and innovation

MSK economic context

- Mixed framework conditions
- Industry restructuring and emergence of clusters
- Big business culture
- Supportive national and EU policies
- Limited HEI involvement

Ostrava HEIs' strengths and weaknesses

- Skilled people potential
- Labour market mismatch
- Lack of funding and critical mass in research
- Strengths in a number of niches
- Internationalisation in progress

Ostrava Universities' relative performances

Rank	University	Output	IC	Q1	NI	Spec	Exc	leadership
148	Charles U Prag	16 743	37,1	38,2	1.0	0.6	9.2	9.547
703	Czech TU Prag	4 739	35,7	27,9	1,1	0,8	11,0	2.988
704	Mazaryck U Brno	4 738	31,9	34,5	0,8	0,6	8,3	2.664
1032	Brno TU	3 072	18,2	15,9	0,9	0,7	8,2	2.358
1075	U of Silesia (Pol)	2 966	30,9	37,5	0,8	0,8	5,3	2.038
1868	VSB TUO Ostrava	1 393	26,0	16,6	0,7	0,8	7,0	1.037
2384	Czestochowa U	954	20,0	23,7	0,5	0,9	3,9	761
3239	U of Ostrava	406	35,5	27,8	0,9	0,9	13,4	247

Fragile Regional Innovation System

- RDI constrained by the dispersion of funds
- Difficult HEI interdisciplinary and interinstitutional cooperation
- University/ Business collaboration limited
- Several operational incubators

MSK innovation performances (normalised)

	High er edu.	Publ ic R&D	BER D	Non R&D innovati on	Innovati ng SME	SMEs coop.	EPO paten t	Empl oKIA
Prague	0,646	0,667	0,370	0,212	0,427	0,371	0,14	0,76
South Moravia	0,306	0,176	0,346	0,621	0,374	0,303	0,188	0,633
MSK	0,301	0,140	0,324	0,291	0,409	0,310	0,102	0,397
Sachsen	0,483	0,742	0,467	0,342	0,674	0,449	0,389	0,646
Silesia (Pol)	0,524	0,226	0,155	0,358	0,082	0,148	0,095	0,604
Slaskie (Pol)	0,601	0,215	0,132	0,410	0,113	0,146	0,088	0,520

Recommendations

- **Launch a new HEI strategy for excellence and innovation** based on niches and cultural assets (BP:Dresden)
- **Develop HEI cooperation link with 3rd mission focus** (BP:Finnish consortium)
- **Strengthen knowledge exchange and increase mobility** (BP:Knowledge House, U of Almeria exchange)
- **Encourage HEI to meet regional challenges**, especially in terms of environment (BP: Kitakyushu)
- **Attract talents and facilitate internationalisation** of academic research (BP: ICREA)

Entrepreneurship

Recommendations on Entrepreneurship Education

- Create more academic positions for entrepreneurship
- Focus entrepreneurship education activities more on regional challenges and opportunities; encourage social entrepreneurship
- Increase the attention on business development and succession issues for family businesses
- Make use of HEI-HEI collaboration potential

Recommendations on HEI start-up support provision

- Develop an easily accessible system of fundamental business start-up support
- Increase accessibility and effectiveness of incubation services
- Promote the visibility of student and alumni start-ups
- Make use of HEI-HEI collaboration potential

**thank you for your
attention**