

# State of University-**Business Cooperation**

# CZECH REPUBLIC **University Perspective**

Study on the cooperation between higher education institutions and public and private organisations







Science Marketing

Science-to-Business Marketing Research Centre







ngenic







University of Ljubljana

#### The State of Czech University-Business Cooperation: the university perspective

Partners



Authors: Balzhan Orazbayeva, Todd Davey, Radim Ryska, Jan Koucký, Arno Meerman, Victoria Galán Muros and Mihai Melonari.

For further information about the State of European University-Business Cooperation project, national reports or the Global Engagement Monitor, please contact Todd Davey (davey@uiin.org) or Arno Meerman (meerman@uiin.org)

### **Executive summary**

#### Summary

This report provides the findings of a study on the university-business cooperation (UBC) in the Czech Republic from the perspective of higher education institutions (HEIs). The examination of the perceptions of academics, HEI managers and knowledge transfer professionals (KTP) provides positive signs for the future, with 100% of respondents currently involved in UBC planning to increase their cooperation in the future. In this sense, the Czech Republic proves to be an attractive country for UBC.

Yet, currently the Czech UBC is considerably less developed compared to the European average. There is a significant potential for improvement, specifically in supporting academics in their cooperation efforts, including the development of incentive and performance measurement systems for academics engaging in UBC, as well as providing additional financial resources and reducing bureaucracy.

#### About the study

The results presented in this report reflect the perceptions of academics, HEI managers and KTP in the Czech Republic with respect to cooperation between HEIs and business. Data was collected by means of an online survey distributed via email to all registered European HEIs in 33 countries during October-November 2016, leading to a total of 329 Czech responses. The study measured the perceptions of HEI respondents with respect to their cooperation efforts, barriers, drivers, support mechanisms and perceived capabilities.

#### **University-Business Cooperation**

Curriculum co-delivery and mobility of students emerge as the most developed education related UBC activities with 24.2% and 20.9% of academics respectively cooperating on a medium or high level. As for UBC in research, consulting has a higher extent with 25.8% indicating it to be of medium to high development. On the other hand, more than 70% of academics do not undertake any valorisation or management activities at all.

Czech academics and businesses see themselves as the most active initiators of UBC. On the contrary, Czech academics perceive external intermediaries and current students as those stakeholders that never or seldom initiate UBC.

#### **Different barriers to overcome**

All Czech HEI respondents, including collaborating and non-collaborating academics as well as HEI representatives, are considerably hindered by differing motivations between university and business and lack of business resources. While collaborating academics are more hindered by the bureaucracy related to UBC, for their noncollaborating counterparts the biggest barrier is the business focus on producing practical results.

Barriers most strongly perceived by HEI management relate primarily to monetary resources, such as limited resources of SMEs as well as lack of business and government funding. Apart from limited funding, HEI management also identifies differing motivations between two organisations and bureaucracy as strong barriers.

NOTE: This report provides a university perspective on university-business cooperation (UBC), drawing on a survey of European higher education institutions. academics and businesses. While acknowledging limitations relating to the generalisability of the results due to the non-random nature of the sample, the results provide positive signs both of the present and for the future. while also providing an indication as to areas that future require development.

### **Executive summary**

#### **Relationships matter**

Notwithstanding the funding to undertake cooperation as one of the top five facilitators, relationship oriented factors emerge as the most prominent drivers for both academics and HEI representatives. It is the existence of a shared goal, the mutual commitment and the mutual trust alongside prior relations with a partner that facilitate and thus drive cooperation. This ultimately means that any effort dedicated to enable and increase cooperation between businesses and universities should start with and focus on relationship development as the main success factor.

#### Research and society matter

What motivates Czech HEI respondents and academics to engage in university-business cooperation? While collaborating academics strive to improve their own professional profile, their noncollaborating counterparts put more emphasis on motivators related to other stakeholders (e.g. employability of graduates, societal needs and mission of the university), suggesting that they might have a more idealistic perspective. Collaborating academics are also more motivated by the benefits for their own research, as they are willing to advance their scientific outputs.

HEI representatives are also driven by the willingness to apply university's research in practice. They furthermore strive for the improvement of the university's reputation as well as increase of the graduate employability.

#### Strategy first

Universities in the Czech Republic are seen to place a strong emphasis on developing supporting mechanisms for UBC. As evident in the data, highlevel strategic developments such as top-level management commitment for UBC, a documented mission embracing UBC and a coordinated communication approach are perceived as well developed. Yet, specific incentive systems and the reduction of teaching time in exchange for extended cooperation emerge as less developed.

The most developed structural mechanisms in the given sample include agencies related to UBC as well as board members or vice-rector positions in this context. When examining the development of specific activities, a strong focus on educational activities and students emerges, with the highest development reported in relation to information sessions and forums about UBC and student entrepreneurship courses. And yet, student and academic are perceived as the least developed mechanisms.

#### Cooperating with conviction

Czech academic respondents already collaborating with business have a positive perception of their abilities and roles in undertaking UBC. They generally have a positive attitude towards UBC. They believe it is their and universities' role to collaborate with businesses. They are furthermore convinced that they have a lot to offer to business, in both research and education.

### Introduction

#### About the study

The study focuses on the cooperation between higher education institutions (HEIs) and public and private organisations in the 28 European Union Member States and 5 associated countries.

The State of European university-business cooperation (UBC) study is executed for the DG Education and Culture at the European Commission (EAC/10/2015) by a consortium led by the Science-to-Business Marketing Research Centre (S2BMRC), in Germany from January 2016 until November 2017.

The aim of the study is to get a more profound, comprehensive and up to date understanding of the state of UBC in Europe: what is the state of play of a wide range of UBC activities in the different countries, what are the main drivers and barriers for the different stakeholders and at what levels; what is the regulatory framework and socio-economic conditions and what kind of measures/initiatives exist on a national level to support the development of UBC. The project investigates UBC from the perspective of both university and business.

#### **Main activities**

The main components of the project were a series of expert interviews with 23 recognised UBC experts, 52 good practice case studies, a UBC policy and indicators review as well as a major quantitative survey of stakeholders within both HEIs and business. The survey was translated into 25 languages and sent to all registered European HEIs (numbering over 3,000) in the 33 countries during October-November 2016. Through this, a final sample of 17,410 representatives from within HEIs and business was achieved. This makes the study the largest international study into cooperation between HEIs and business yet completed.

#### Why care about university-business cooperation?

- UBC is considered to be the engine towards knowledge-based societies and economies
- UBC is specially needed in the European context, threatened by increased global competition, with ongoing economic and social problems and high levels of youth unemployment
- UBC helps to create a more connected and functioning relationship between government, business and HEIs, which is at the core of EU funding schemes, such as Horizon 2020 and Erasmus+.
- UBC direct outcomes include:
  - improving the competitiveness of business,
  - increasing the relevance and innovativeness of research and teaching in HEIs,
  - improving the future job prospects of students and graduates,

which can in the longer term:

- create jobs,
- stimulate economic growth,
- increase living standards,
- reduce hindrances to good living.

#### **Study Objectives**

The specific objectives for the study are:

- Chart the current state of play and provide an in-depth analysis of UBC in the countries covered by this study, from the HE and business perspectives;
- Deliver 50 case studies of UBC (representative sample, balanced distribution among countries and organisations, balanced distribution of HEI and business led cases);
- Review indicators measuring UBC and propose possible scenarios for the implementations of UBC monitoring in Europe;
- Provide policy conclusions and recommendations for the furthering of UBC and the best approaches to take.



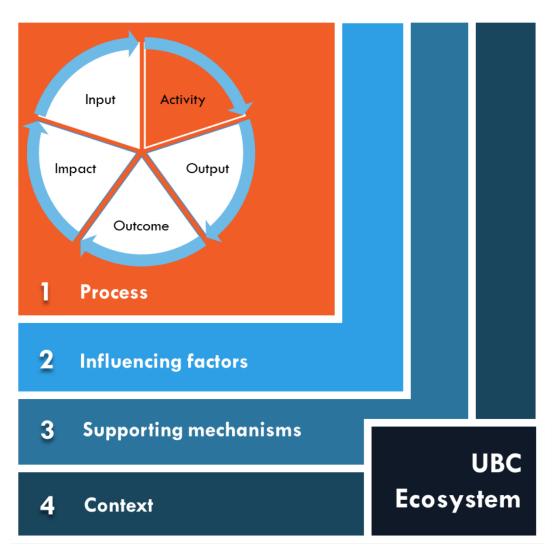
#### UBC Ecosystem Framework <sup>™</sup>

In order to best organise the project results, a project conceptual framework was chosen.

The UBC Ecosystem Framework possess a number of interrelated elements including the process of undertaking UBC, factors that are influencing UBC, mechanisms supporting UBC and finally the context in which UBC occurs.

The framework ties together the respective project activities, providing a common thread for reporting results and making recommendations.

# **UBC** activities



Source: Galán-Muros, V.; Davey, T. (2017) The UBC Ecosystem: Putting together a comprehensive framework for university-business cooperation. Journal of Technology Transfer. https://doi.org/10.1007/s10961-017-9562-3

### **UBC Activities**

Fourteen UBC activities are recognised and categorised into the areas of education, research, valorisation and management.

Area	Activity		
Education		curriculum co- <u>design</u>	
	2.	curriculum co- <u>delivery</u> (e.g. guest lectures)	
	3.	mobility of students (i.e. student internships/placements)	
	4.	dual education programmes (i.e. part theory, part practical)	
	5.	lifelong learning for people from business (e.g. executive education, industry training and professional courses)	
Desservels	6.	joint R&D (incl. joint funded research)	
Research	7.	consulting to business (incl. contract research)	
	8.	mobility of professionals ( <i>i.e. temporary mobility of academics to business and vice versa</i> )	
Valorisation	9.	commercialisation of R&D results (e.g. licencing/patenting)	
valorisation	10.	academic entrepreneurship (e.g. spin offs)	
	11.	student entrepreneurship (e.g. start-ups)	
Management	12.	governance (e.g. participation of academics on business boards and business people participation in university board)	
	13.	shared resources (e.g. infrastructure, personnel, equipment)	
	14.	industry support (e.g. endowments, sponsorship and scholarships)	
	17.	maustry support (e.g. endowments, sponsorsnip and senotarsnips)	

The extent of UBC is presented in a range of cooperation activities, on four levels of development: None, Low, Medium and High.

In the Czech Republic, education related UBC activities such as curriculum co-delivery and mobility of students are the most developed, with respectively 24.2% and 20.9% of academics reporting them of a medium and high level.

As for research UBC activities, consulting has a higher extent with 25.8% indicating it to be of medium and high development.

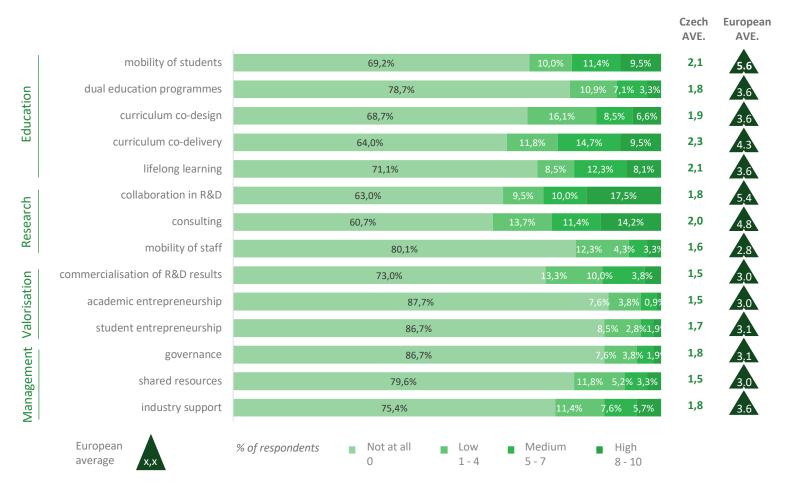
On the other end of the scale, almost 70% of academics do not undertake any UBC activities at all.

When comparing Czech and European averages, it can be seen that the extent of UBC extremely differs for both samples, with Czech UBC being underdeveloped.

# **Development of UBC activities**

#### The extent of development of UBC activities

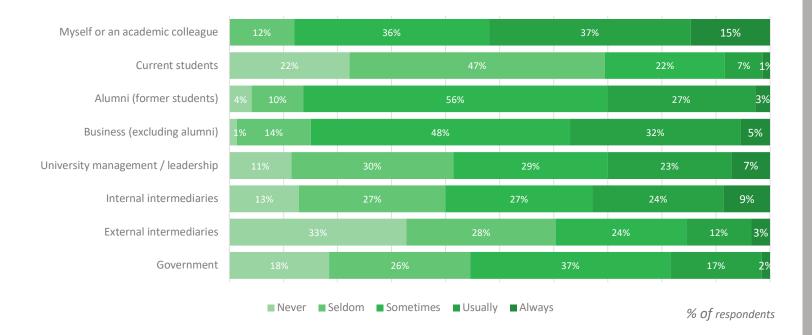
'Which UBC activities do you collaborate with businesses in?' – as answered by academics



# **Initiation of UBC**

#### How UBC is initiated

'How often various stakeholders initiate UBC activities' – as answered by academics



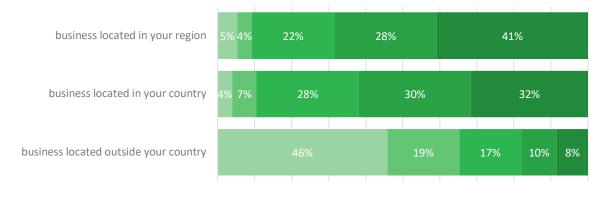
Czech academics and businesses are the two biggest groups of stakeholders who 'usually' or 'always' initiate collaborative activities (52% and 37% respectively). Internal intermediaries represent the third most active UBC initiator with 44%.

While current students are generally seen as UBC initiators, their contribution in the Czech Republic is very limited, with 69% of academics reporting that they 'never' or 'seldom' engage themselves in initiating UBC.

While internal intermediaries take a very active role in starting cooperation, the contribution of the external intermediaries is very limited.

# Location of cooperating partners

#### Location of business partners

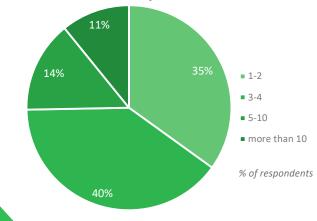


■ Not at all ■ To a minimum extent ■ To a moderate extent ■ To a significant extent ■ To a large extent

% of respondents

Czech academics undertake cooperation of a 'significant' and 'large extent' with businesses from the Czech Republic and the region with 69% and 62% respectively. The cooperation with international business partners lags considerably behind (18%).



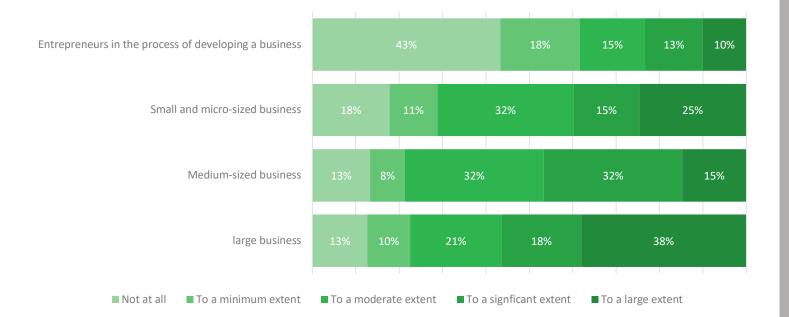


Czech academics cooperate mostly with smaller number of companies (1 to 4 - 83%), whilst only 25% have relations with 5 or more partners.

# Size of cooperating partners

#### Size of cooperating partner

*'With whom do you collaborate?' – as answered by academics* 



Czech academics undertake UBC with companies of varying size. Large businesses have the biggest share with 56% of academics reporting the cooperation with them of a 'large' and 'significant' extent.

Medium-sized and small/micro-sized businesses are also seen as the primary partners for Czech academics.

As for entrepreneurs in the process of developing a business, 43% of Czech academics do not cooperate with them at all.

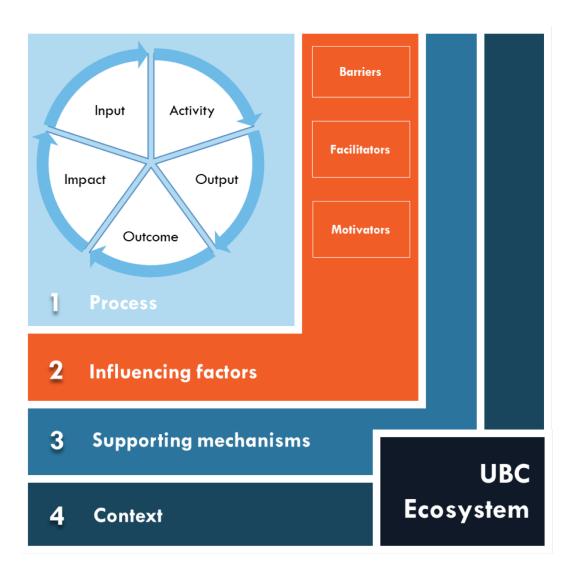
# **Factors influencing UBC**

This section outlines the extent to which various factors affect UBC.

Generally, a barrier provides a hindrance or obstacle to do something. Drivers comprise facilitators, which enable or ease the process, and the motivators, which triggers the starting of an activity and are often related to the expected outcome(s).

At the European level, this study has found that removing a barrier does not necessarily create UBC but rather it makes UBC possible. Instead, it is the facilitators and motivators (drivers) that initiate UBC.

For example, even when a lack of funds is often named as a major barrier to cooperation, the presence of funds may not be enough for cooperation to happen if the perceived facilitators or motivators are not sufficient.



# **Barriers hindering UBC**

**Barriers** 

What is inhibiting your cooperation with business?' – as answered by academics

Academics collaborating with business		Academics not collaborating with business	
1.	Bureaucracy related to UBC	The focus on producing practical results by business	
2.	Differing motivation / values between university and business	Differing motivation / values between university and business	
3.	The focus on producing practical results by business	Bureaucracy related to UBC	
4.	Limited resources of SMEs	Limited resources of SMEs	
	Lack of business funding for UBC	Lack of business funding for UBC	
Lowest	Universities lack awareness of opportunities arising from UBC	Frequent staff turnovers within my university or the business	

Comparing the top five barriers to UBC named by cooperating and noncooperating Czech academics, both similarities and discrepancies can be seen between their perceptions.

Cooperating academics are hindered mostly by the bureaucracy related to UBC, while for their non-cooperating counterparts the biggest barrier is the business focus on producing practical results.

Both groups of academics are hindered by the differing motivations between university and business as well as by the lack of business resources.

# Czech and European academics perceive most of the barriers differently.

In the Czech Republic academics are more hindered than their European counterparts by the bureaucracy related to UBC and differing motivations between university and business. Focus on producing practical results by business is another barrier hindering cooperation for Czech academics.

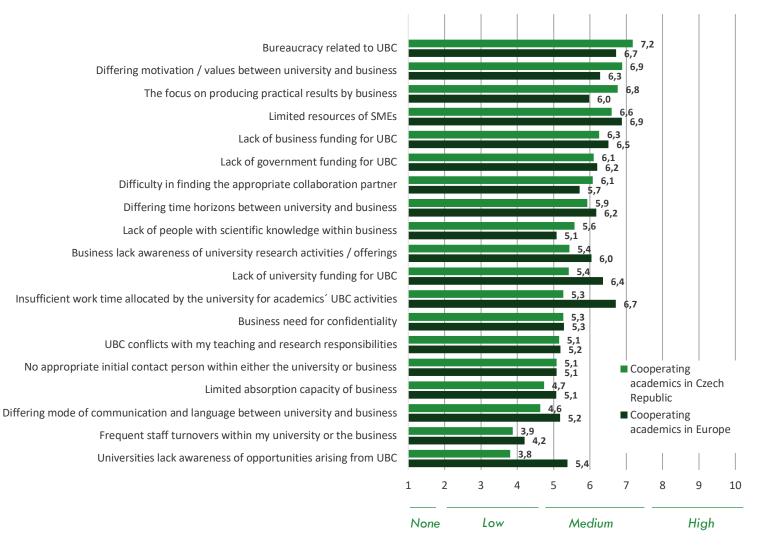
While funding related barriers bare significant importance for both groups, lack of university funding appears to be less important for Czech academics.

Czech academics are less hindered by universities lack of awareness of opportunities arising from UBC.

# **Barriers hindering UBC**

#### **Barriers**

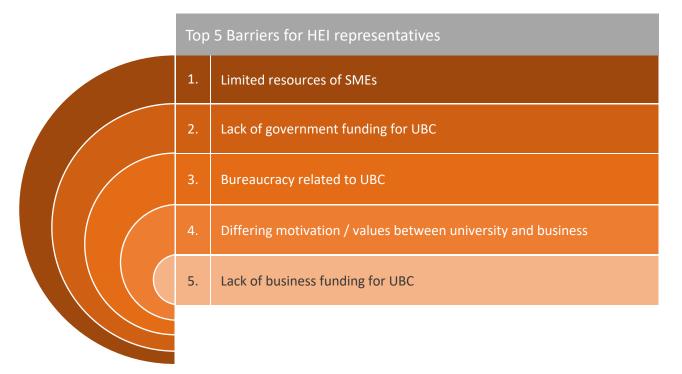
'What is inhibiting your cooperation with business?' - as answered by academics



# **Barriers hindering UBC**

#### **Barriers**

*'What is inhibiting your HEI cooperation with business?' – as answered by HEI representatives* 



For HEI representatives in the Czech Republic resources related factors are the strongest barriers. They include limited resources of SMEs, lack of government and business funding for UBC.

They are also hindered by administrative issues related to UBC and differing motivations between university and business. The majority of barriers for Czech and European HEI representatives slightly differs. Yet, the lack of SME resources is the strongest barrier for both groups.

Overall, European HEI representatives perceive the funding related factors as the strongest barriers. As much as the Czech HEI representatives are also hindered by the funding related factors, the barriers related bureaucracy to UBC (6.9) and differing motivations (6.8) are perceived stronger.

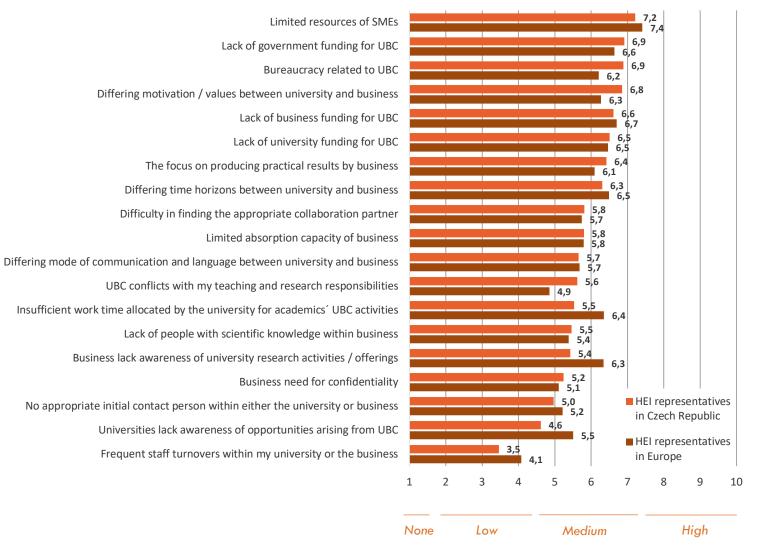
Compared to European average, Czech HEI representatives are less hindered by the insufficient time work allocated for academics' UBC activities and business' lack of awareness of university research offerings.

Both groups however agree on the insignificance of frequent staff turnovers within the university or business as a barrier hindering UBC.

# **Barriers hindering UBC**

#### **Barriers**

*'What is inhibiting your cooperation with business?' – as answered by academics and HEI representatives* 



# **Drivers stimulating UBC**

*Drivers* are those factors that encourage businesses, academics or HEIs to engage in UBC.

Drivers of UBC are divided into two factors:

- 1. <u>Facilitators</u> factors that enable or ease cooperation
- 2. <u>Motivators</u> incentives or benefits that the respective stakeholders would like from the cooperation

Together, these two factors provide a comprehensive picture of what compels businesses to cooperate.

The 2010-11 State of European UBC study showed that for European universities the existence of strong UBC drivers can overcome the presence of barriers to UBC.

#### **Facilitators**

*'What is facilitating your cooperation with business?' – as answered by academics and HEI representatives* 

Acade	mics cooperating	HEI representatives	
1.	Existence of mutual trust	Existence of mutual trust	
2.	Prior relation with the business partner	Prior relation with the business partner	
3.	Existence of a shared goal	Existence of a shared goal	
4.	Interest of business in accessing scientific knowledge	Existence of funding to undertake the cooperation	
5.	Existence of funding to undertake the cooperation	Interest of business in accessing scientific knowledge	

Both academics and HEI representatives in the sample rank the same factors within their top five.

First three facilitators focus on the relationship component of the UBC, with access to scientific knowledge and funding emerging as the forth and fifth facilitators. This result highlights the importance of building relationships in developing successful UBC in the Czech Republic.

Overall perspectives of Czech academics and HEI representatives align with respect to drivers facilitating UBC.

# Perceptions of Czech and European academics with regards to UBC facilitators slightly differ.

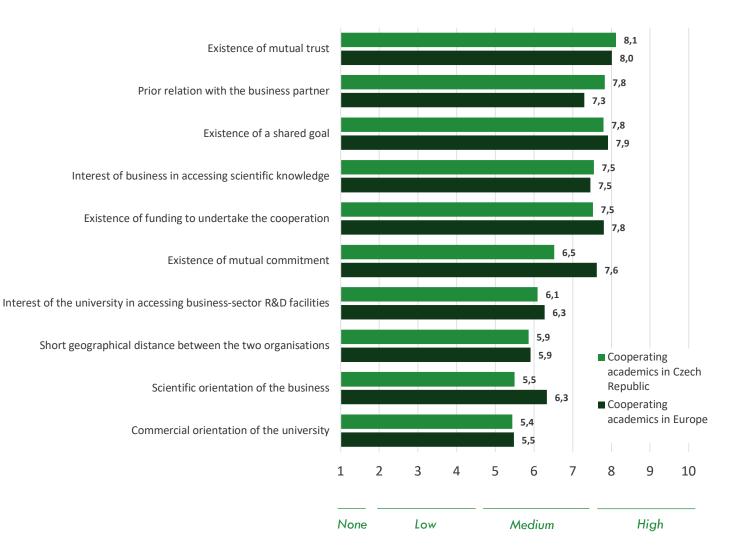
Yet, both groups agree the importance of the relationship facilitators. However, compared to European average, Czech academics are clearly less driven by the existence of mutual commitment.

Commercial orientation of the university and scientific orientation of the business also play less important role as the drivers for Czech academics.

# **Drivers stimulating UBC**

#### Facilitators

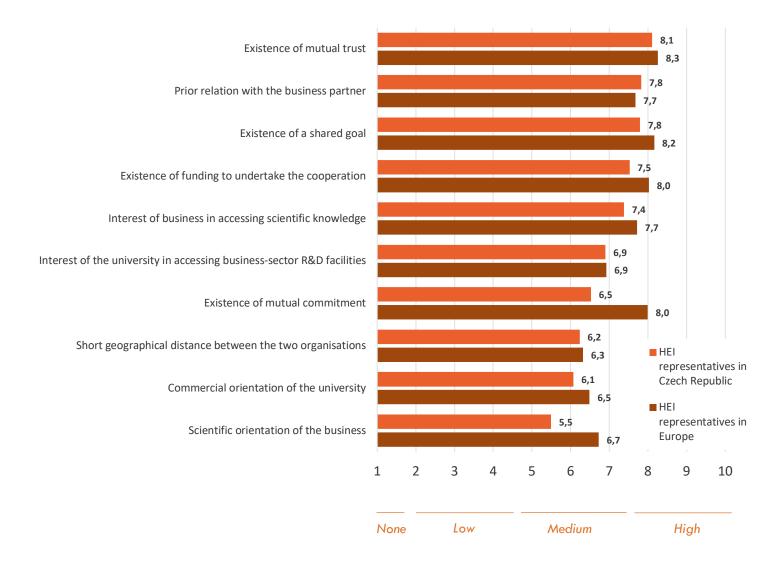
'What is facilitating your cooperation with business?' – as answered by academics



# **Drivers stimulating UBC**

#### **Facilitators**

*'What is facilitating your cooperation with business?' – as answered by HEI representatives* 



Czech HEI representatives and their European counterparts perceive the facilitators in a slightly different way. Yet, for both groups the existence of mutual trust is the strongest facilitator.

For European HEI representatives the existence of mutual trust and shared goal plays more important role than for their Czech counterparts, who perceive prior relation with the business partner and interest of university in accessing business-sector R&D facilities as the strongest drivers.

Yet, the perspectives of both groups align in relation to the weakest facilitators that include commercial orientation of the university, scientific orientation of the business and short geographical distance between two organisations. While Czech academics who cooperate with businesses strive to improve their own professional profile, the noncooperating academics put more emphasis on the motivators related to other stakeholders.

Thus, cooperating academics are more motivated by research and teaching related benefits, whereas their noncooperating counterparts want to improve graduate employability and contribute to the mission of the university.

While they are also motivated to address societal challenges and issues, the cooperating academics strive for more funding and financial resources.

# **Drivers stimulating UBC**

#### Motivators

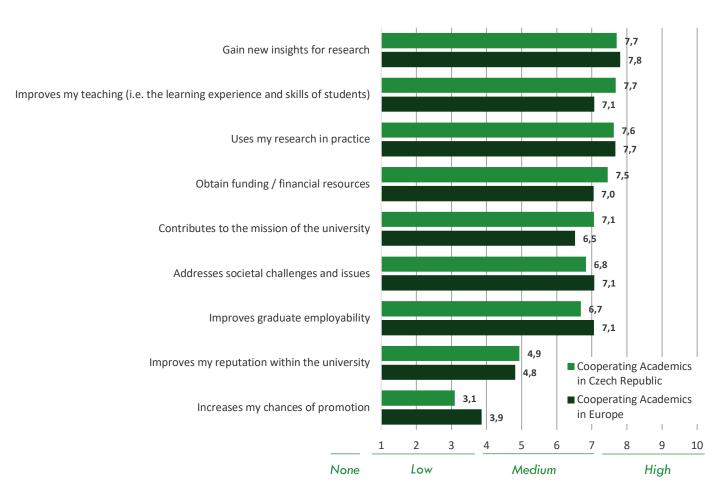
'What motivates you to cooperate with business?'- as answered by academics

Academics who cooperate		Academics who <u>do not</u> cooperate	
1.	Gain new insights for research	Improves graduate employability	
2.	Improves my teaching (i.e. the learning experience of students)	Contributes to the mission of the university	
3.	Uses my research in practice	Improves my teaching (i.e. the learning experience and skills of students)	
4.	Obtain funding / financial resources	Addresses societal challenges and issues	
5.	Contributes to the mission of the university	Improves my future research	

# **Drivers stimulating UBC**

#### Motivators

'What motivates you to cooperate with business?'- as answered by academics



Perspectives of Czech and European academics slightly differ in respect to motivators. Yet the strongest motivator for both group is the willingness to gain new insights for research.

Czech academics strive to improve their own professional profile, and obtain funding, whereas European academics are more motivated by the willingness to address societal challenges and issues and improvement of graduate employability.

Promotion and reputation related motivators are the weakest drivers for both Czech and European academics. The top five motivators identified by Czech HEI representatives relate to different types of outcomes.

Thus the highest motivator for them is the willingness to use the university's research in practice. Furthermore, HEI representatives want to improve reputation of the university and increase graduate employability.

The funding related motivator is another reason for Czech HEI representatives to cooperate with businesses.

# **Drivers stimulating UBC**

#### Motivators

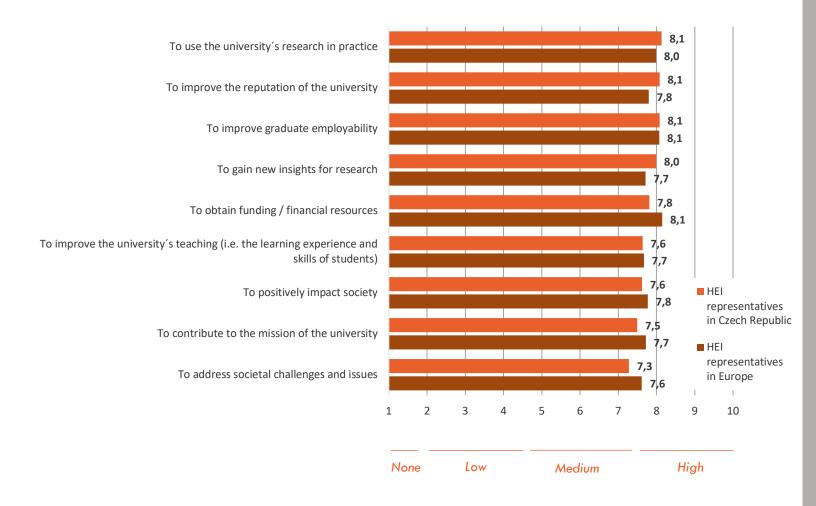
'What motivates your HEI to cooperate with business?'- As answered by HEI representatives



# **Drivers stimulating UBC**

#### **Motivators**

'What motivates your HEI to cooperate with business?'- as answered by HEI representatives



Overall the perceptions of European and Czech HEI representatives in respect to the majority of UBC motivators align.

While for Czech HEI representatives the highest motivation is to use the university's research in practice, their European counterparts are more motivated by the willingness to obtain financial resources.

Notably, motivators related to the mission of the university and contribution to society have less importance for Czech HEI representatives.

While Czech academics see businesses as the main beneficiaries, HEI representatives see most benefits of UBC for students.

Yet, both groups agree that academics, society and government receive less positive outcomes from cooperation with businesses.

As for universities, both academics and HEI representatives consider them as one the most primary UBC beneficiary in the Czech Republic.

# **Benefits of UBC**

**Benefits** are the perceived positive outcomes (financial and non-financial) from undertaking UBC as relevant for the different stakeholder groups that can potentially participate in UBC.

The perception regarding who benefits from such cooperation can influence the decision to increase or decrease their participation or the involvement of other groups. For example, if academics perceive their own *benefits* to be low, they may refrain from engaging in UBC. Yet, if they perceive *benefits* for students to be high, they might undertake actions that contribute to students' involvement in UBC.

#### Benefits

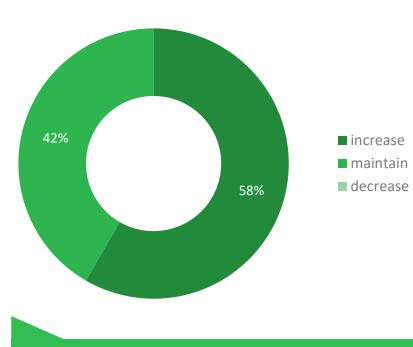
'Who receives the benefits of UBC?'- as answered by academics and HEI representatives

	Academics		HEI representatives
	1.	Businesses	Students
	2.	Universities	Universities
	3.	Students	Businesses
	4.	Academics	Academics
	5.	Society (in general)	Society (in general)
	6.	Government / public authorities	Government / public authorities

# **Future intentions**

#### **Future UBC intentions – CZECH REPUBLIC**

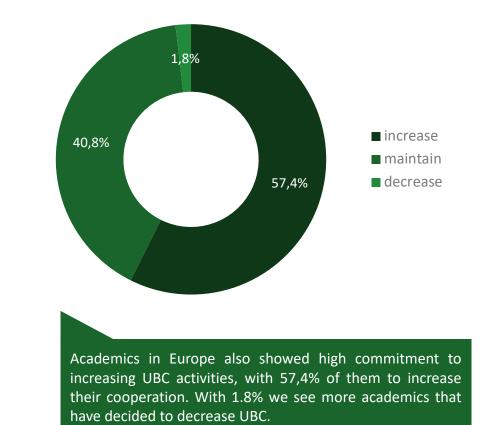
As answered by Czech academics



Czech academics showed a very strong commitment to the UBC, with 100% of them expecting to maintain or increase their cooperation.

#### **Future UBC intentions – EUROPE**

As answered by European academics



The willingness of Czech cooperating academics to recommend to a colleague to engage in UBC highly varies depending on whether this cooperation is in research or in education.

Just like their European counterparts, Czech academics are more satisfied with UBC in research (NPS=19). While 46% of them will promote it positively, 27% would do it negatively.

Both Czech and European academics are considerably less satisfied in education-related UBC (NPS=-15).

# Willingness to recommend UBC

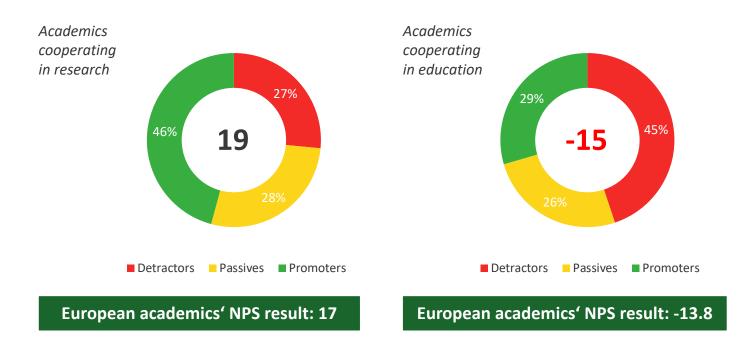
#### *Willingness* to recommend *to an academic colleague cooperation with business in R*&D *and education*

As answered by academics

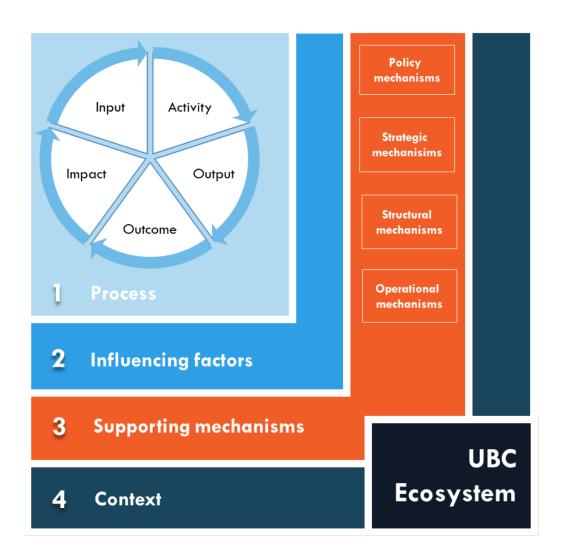
	Detractors	Passives	Promoters
Academics cooperating in E&T	45%	26%	29%
Academics cooperating in R&D	27%	28%	46%

Net promotor score		
-15%		
19%		

#### Satisfaction in cooperation with businesses (net promoter score)



# **Supporting mechanisms for UBC**



Supporting mechanisms are interventions designed to support the development of cooperation between HEIs and business.

There are four types of supporting mechanisms:

- Policy
- Strategic
- Structural
- Operational

This section outlines the extent to which UBC supporting mechanisms are developed in this sample from the HEI perspective.

At the European level, the extent of development of all these mechanisms significantly influences the extent of cooperation.

#### Czech HEI representatives perceive policy mechanisms to be developed to a medium-low level. These perceptions are lower than the perception of their <u>European</u> counterparts.

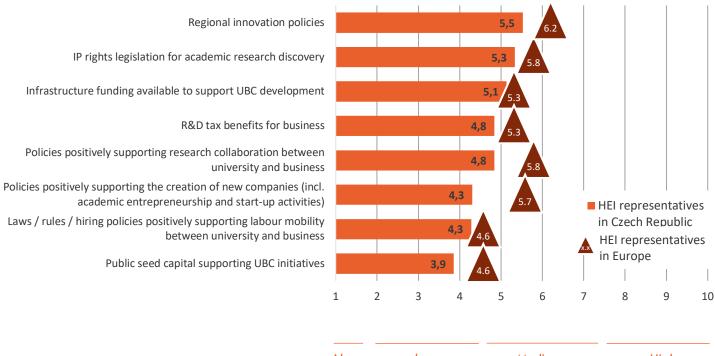
Regional innovation policies are the most developed supporting mechanism (6.2), followed by IP rights legislation for academic research discovery (5.8). These two are also the same for EU.

The least developed mechanism, also lower than the EU average, is the public seed capital supporting UBC initiatives (3.9).

# **Supporting mechanisms for UBC**

#### Policy mechanisms

'To what extent do these mechanisms support UBC in your HEI?' - as answered by HEI representatives

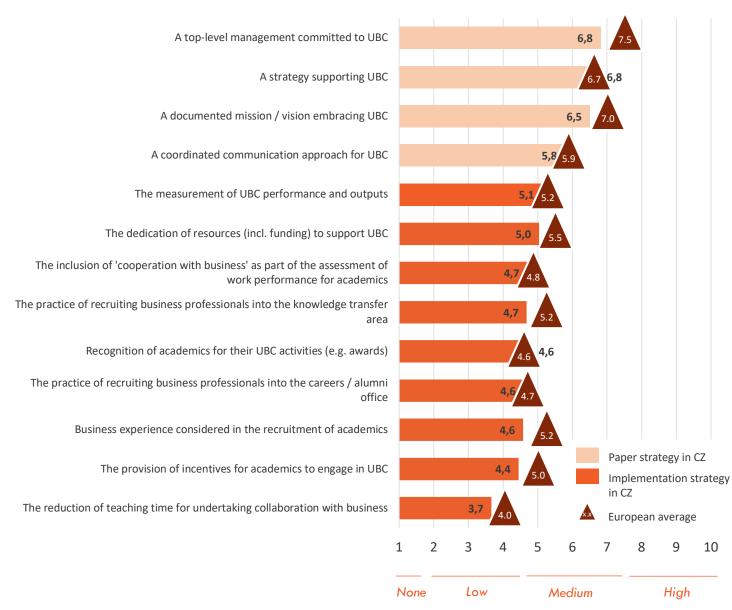


None	Low	Medium	High

# **Supporting mechanisms for UBC**

#### Strategic mechanisms

'To what extent do these mechanisms support UBC in your HEI?' - as answered by HEI representatives



Overall, the development of the strategic mechanisms in Czech and European HEIs is similar.

Notably, the paper strategies are substantially more developed than implementation strategies, showing the official commitment of Czech HEIs to UBC above the actual dedication of resources.

The least developed mechanisms are related to the provision of academic incentives to undertake UBC (4.4), and the reduction of teaching time (3.7).

The development of structural mechanisms is slightly lower in Czech HEIs than in European HEIs.

Czech HEI representatives indicated the bridging structures to be the most developed mechanisms in universities. Thus, agencies dedicated to UBC are being gradually established in Czech universities. They are part of the national platform Transfera<sup>1</sup>, which supports interests of the transfer community in the Czech Republic in order to strengthen and develop activities in the field of technology and knowledge transfer.

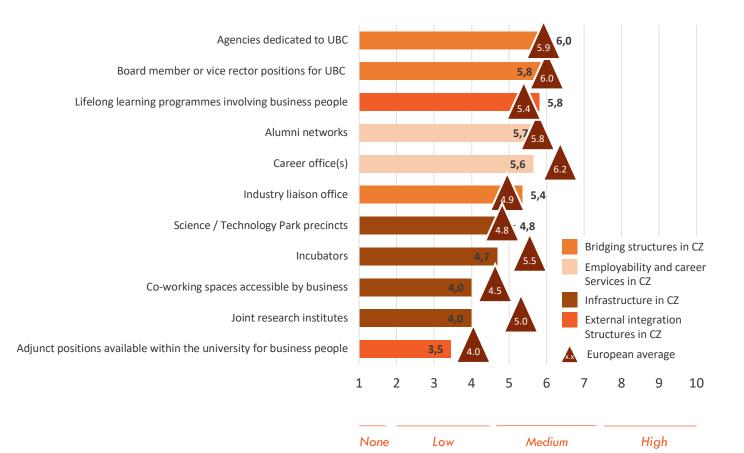
Employability and career services in the Czech Republic are less developed than in European HEIs. All infrastructure related mechanisms as well as adjunct positions within the HEI for business people are the least developed mechanisms.

<sup>1</sup>Transfera. URL: https://www.transfera.cz/

# **Supporting mechanisms for UBC**

#### Structural mechanisms

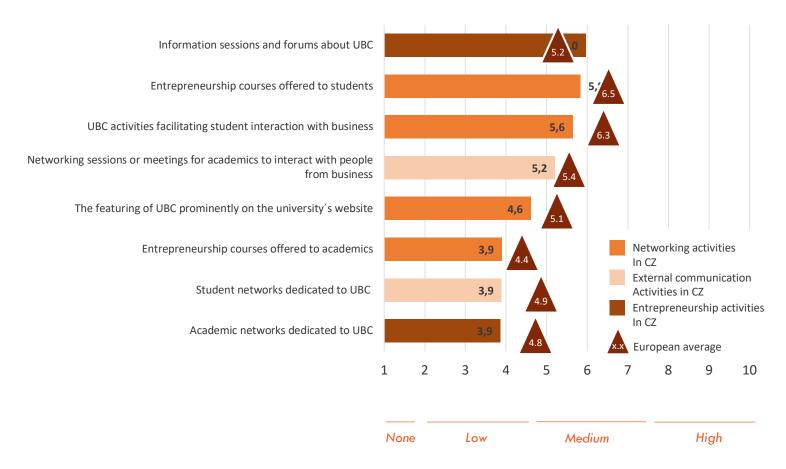
'To what extent do these mechanisms support UBC in your HEI?' - as answered by HEI representatives



# **Supporting mechanisms for UBC**

#### **Operational mechanisms**

'To what extent do these mechanisms support UBC in your HEI?' - as answered by HEI representatives



Overall, the perspectives of Czech and European HEI representatives align in respect to the development of operational mechanisms. Yet. information sessions and forums about UBC are better developed in Czech HEIs than in Europe. For example, a new portal Spoluprace<sup>1</sup> has been recently created to inform about the possibilities of cooperation between the academic, commercial and R&D spheres, as well as the EU subsidies and help to find partner on both HEI and business side.

Student-centred activities also emerge as well developed operational mechanisms, with entrepreneurship courses offered to students (5.9) and UBC activities facilitating student interaction with businesses (5.6) being ranked as the second and third mechanisms respectively.

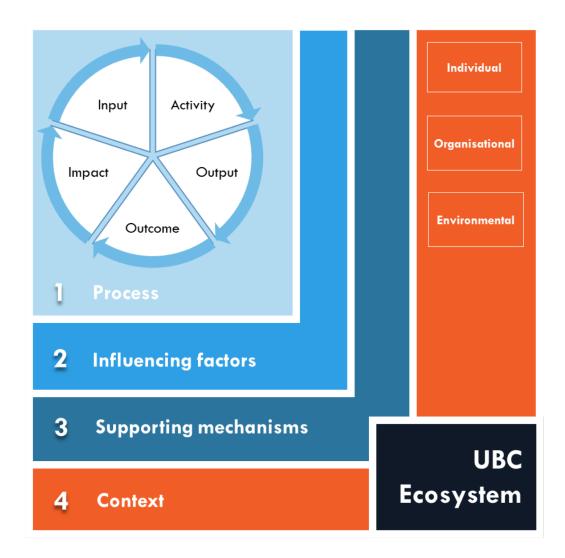
Among the activities focused on networks, both academic and student networks dedicated to UBC are the least developed mechanisms (3.9).

The degree to which UBC takes place is influenced by a set of element present in the context of the organisation that cannot be changed in short term.

These include the characteristics of individual actors involved, the institutional factors relating to the university and business, as well as by a set of broader environmental factors (political, economic, social, technological, etc.).

This section outlines how some contextual factors influence UBC in the country.

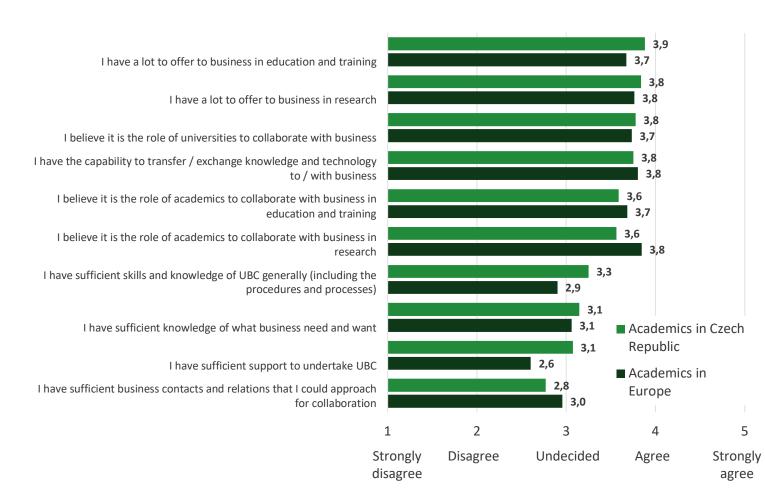
### Context



# **UBC** capabilities

#### **Capabilities for UBC**

'To what extent do you agree or disagree with the following statements?' - as answered by academics



Czech academics identified moderate capabilities for UBC and beliefs about the role of UBC. For most of them they have a more positive attitude than their European counterparts.

Czech academics believe that is the university's role to collaborate with business (3.8). They identified their strengths in doing research (3.8) and training for companies (3.9) and in the ability to exchange knowledge (3.8)

Yet, they perceive they have insufficient business contacts, relations (2.8) and knowledge of companies' needs (3.1) to undertake UBC.

#### Czech and European academics perceive their contextual factors differently. The perception of most contextual factors is slightly more positive in the Czech Republic than in Europe. The only exceptions is that European academics perceive that they have a stronger education and research profiles.

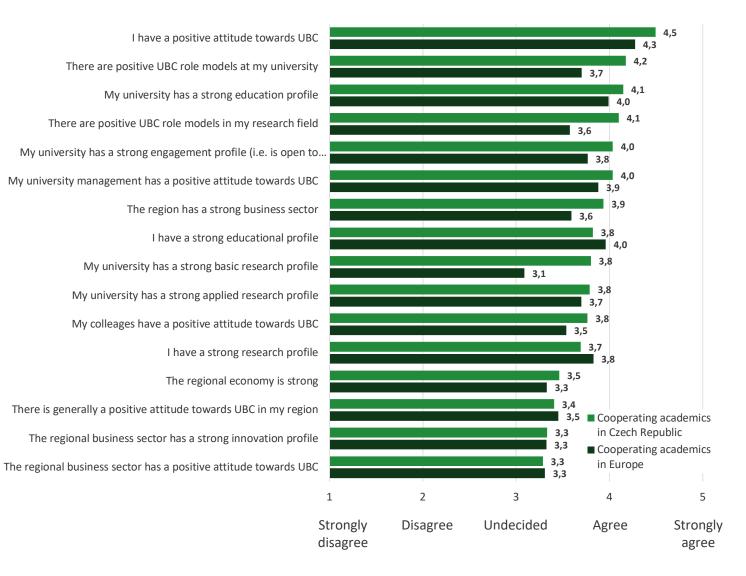
Czech academics also perceive they have more positive UBC role models at their HEIs and their research fields.

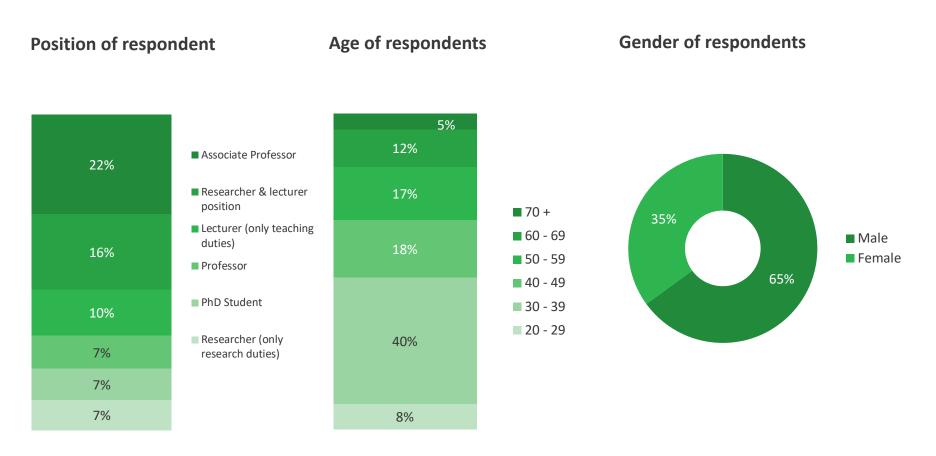
Both Czech and European academics have a positive attitude towards UBC (4.5 and 4.3). Yet, they perceive a less positive attitude of their regions towards UBC.

### Context

#### **Contextual factors affecting UBC**

'To what extent do you agree or disagree with the following statements?' - as answered by academics





# **Respondent profile – academics**

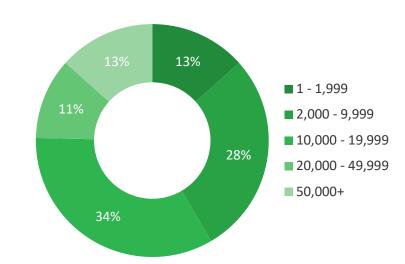
Associate professors comprise the largest group (22%), followed by researchers and lecturers (16%). The remaining academics identified themselves as lecturers (10%), professors (7%), PhD students (7%) and researchers (7%).

Most Czech academics in the sample are aged 30-39 (40%). 18% of the academics in the sample are between 40 and 49. Other groups are those aged 50-59 (17%), followed by those aged 60-69 (12%).

The emerged gender distribution is skewed towards male respondents, with 65% male respondents and 35% female.

# **Respondent profile - academics**

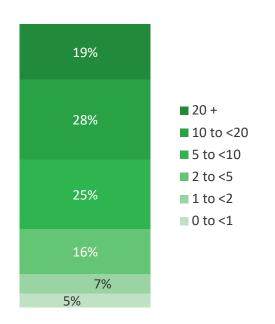
#### Number of students of the HEI



Sample Size	
Czech Academics	n=211
European Academics	n=10.836
Czech HEI representatives	n=118
European HEI representatives	n=3.482

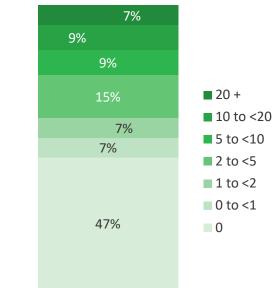
Third of the Czech academics (34%) in the sample work for medium-sized HEIs (10,000 – 19,999 students). 27% of them work for small HEIs (2,000 – 9,999 students). 13% of the academics work at very large HEIs with over 50,000 students. Very small HEIs (under 1,999 students) are represented by 13%. Only 11% of respondents work for medium-large HEIs (20,000 – 49,999 students).

# **Respondent profile - academics**

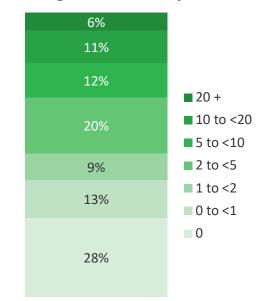


Years working in university

Years working in business



Years involved in UBC whilst working at a university or business

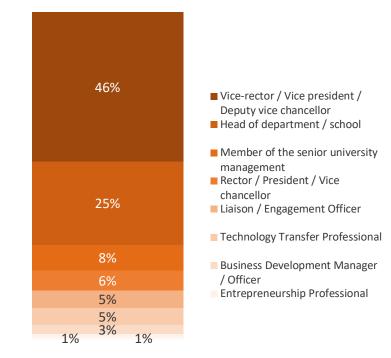


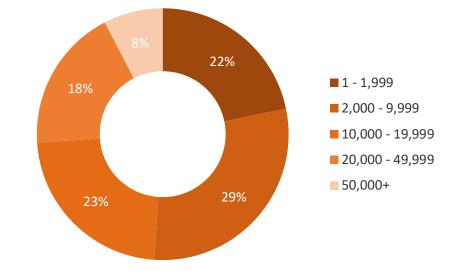
Almost half of academics have worked in academia for over 10 years. 25% have 5-10 years of experience and 16% have worked in academic for 2-5 years. 12% of the academics have less than 2 year of experience. Almost half of academic respondents are not experienced in businesses. 15% of academics worked for businesses for 2 to 5 years. 14% have done so for less than 2 years. An even proportion (9%) have 5 to 10 years and 10 to 20 years industry experience. Only 7% have worked in business for over 20 years. Most academic respondents in the Czech Republic have some industry experience. Although only 6% have been involved in UBC for over 20 years, 23% have between 5 and 20 years of experience and 42% between 0 and 5 years of experience. 28% of academics in the sample have never engaged in UBC.

### **Respondent profile – HEI representatives**

#### **Position of respondent**

Number of students of the HEI





Almost half of Czech HEI representatives (46%) are vicerectors or vice-presidents. 25% are head of department/school. The smallest groups are members of the senior university management (8%), rectors, president or vice chancellors (6%), technology transfer professionals and liaison officers (5% each). Overall, over half of HEI representatives work for small HEIs (under 9,999 students). 23% are based in medium-sized universities (10,000 – 19,000 students) and 18% work for medium-large HEIs (20,000 – 49,000 students). Only 8% work in large HEIs (over 50,000 students).



# Contact us

Todd Davey - davey@uiin.org Arno Meerman - meerman@uiin.org

This report is part of the DG Education and Culture study on the University-Business Cooperation in Europe: drivers, challenges and opportunities in Europe EAC/10/2015. Further information can be found at <u>www.ub-cooperation.eu</u>

This report is also part of the Global University-Business Monitor initiative, a global study into university engagement and cooperation between university and business. Further information can be found at www.uni-engagement.com





**Jniversiteit Leiden** 









