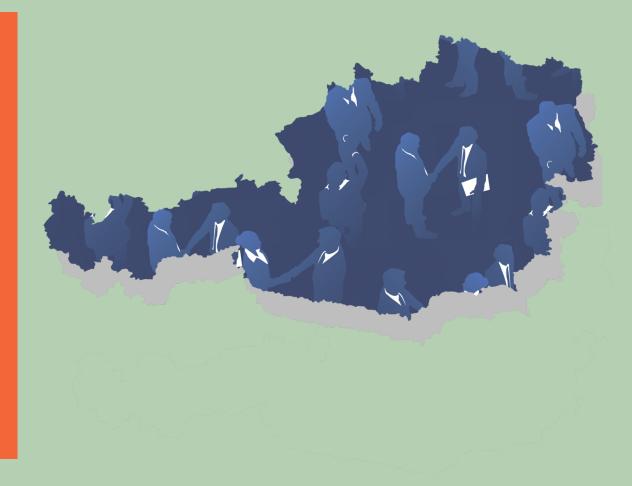


# State of University-Business Cooperation AUSTRIA University Perspective

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























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

#### **Partners**























**Authors**: Balzhan Orazbayeva, Victoria Galán-Muros, Andreas Altmann, Bernd Ebersberger, Todd Davey, Arno Meerman 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 Austria from the perspective of higher education institutions (HEIs). Examining the perceptions of academics, HEI managers and knowledge transfer professionals (KTP) provides positive signs for the future, with 99% of respondents currently cooperating with businesses planning to increase their cooperation in the future. In this sense, Austria proves to be an attractive country for UBC. Currently the Austrian UBC is slightly less developed compared to the European average. Therefore, there still is room for further development and improvement, specifically in supporting academics in their cooperation efforts, including the development of incentive and performance measurement systems in UBC.

#### About the study

The results presented in this report reflect the perceptions of academics, HEI managers and KTP in Austria with respect to cooperation between HEIs and business. Data was collected through an online survey distributed via email to all registered European HEIs in 33 countries during October-November 2016, leading to a total of 531 Austrian HEI responses. The study measured the perceptions of respondents with respect to their cooperation efforts, barriers, drivers, support mechanisms and perceived capabilities.

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

Academics responding to this survey are involved in a variety of different UBC activities, but research

activities such as joint R&D and business consulting emerge as the most prevalent ones. 62,4% and 59,3% of respondents respectively cooperate in these activities. Nearly 50% of academics do not undertake UBC activities in the valorisation or management domains. Particularly low is the activity related to sharing resources, as only 16,9% of respondents are active (on a medium to high level) in this area.

Academic respondents see themselves as the most proactive initiators of UBC as 56,7% of respondents state that they usually or always initiate such cooperation. Austrian academics also assign an important role to the university management and government. In comparison, only 20,2% and 14,4% of respondents perceive that external intermediaries and current students usually or always initiate cooperation.

#### Resourcing is key

Independent of whether Austrian academics are currently cooperating with business or not, limited resources of SMEs are identified by all academic respondents as the primary barrier to UBC. In addition, both academics perceive limited business funding, differing motivations between universities and business and insufficient work time for UBC activities as important barriers. While cooperating academics identify university bureaucracy as another strong barrier, non-cooperating academics are concerned with limited government funding.

Aligned with the academic perception, barriers most strongly perceived by Austrian HEI representatives also relate to monetary resources, such as limited resources of SMEs as well as lack of

NOTE: This report provides a university perspective on university-business cooperation, 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 nonrandom nature of the sample, the results provide positive signs both of the present and for the future. while also providing an indication to areas that require future development.

business funding. KTPs also rate insufficient work time for academics, differing time horizons and motivations between universities and business as crucial barriers.

#### **Relationships matter**

While funding to undertake cooperation emerges as one of the top five facilitators, relationship factors emerge as the most prominent UBC facilitators. Thus, the relationships based on the existence of a shared goal, the mutual commitment and the mutual trust facilitate and drive Austrian UBC, from the perspectives of all HEI respondents. These results confirm that any effort aimed at enabling and increasing cooperation between businesses and universities should focus on relationship development as the main success factor.

#### Different motivations for UBC

While cooperating academics highlight research motivations, such as gaining new insights and using it in practice, academics not cooperating are motivated by the willingness to improve graduate employability as well as to obtain financial resources. Non-cooperating academics rate motivators related to other stakeholders (e. g. employability of graduates, societal needs, mission of the university) more strongly.

HEI representatives are, on the contrary, more driven by the benefits that their HEIs can get from UBC, such as financial resources or an improved reputation, followed by the motivators related to improving research and addressing societal challenges and needs.

#### Strategy first

Austrian HEIs place a strong emphasis on developing supporting mechanisms for UBC. High-level strategic developments such as top-level management commitment for UBC and a documented mission or vision embracing UBC are perceived as well developed. Yet, specific incentive and recognition systems and the reduction of teaching time in exchange for extended cooperation emerge as less developed.

Most highly developed structural mechanisms in the given sample include alumni networks as well as board member or vice-rector positions for UBC. Concerning specific operational mechanisms developed in Austrian HEIs, a strong focus is being put on students, since the highest development is reported in activities facilitating student interaction with business and student entrepreneurship courses. Academic entrepreneurship courses and networks, on the other hand, are considered considerably less developed.

#### Positive attitude towards UBC

Austrian academic respondents who already collaborate with business have a positive view of their abilities and roles in undertaking UBC. They identified their strengths in the ability of exchanging knowledge and technology with business and conducting research with and for business. Besides, they believe it is their and also their universities' role to collaborate with businesses in both education and research. Overall, Austrian academics and HEI managers have a positive attitude towards UBC.

## Introduction

#### About the study

The study focusses 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, threaten 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.



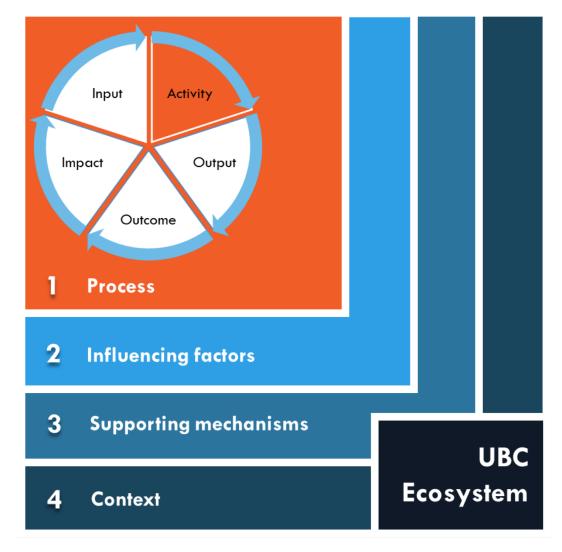
## **UBC** activities

#### **UBC Ecosystem Framework ™**

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.



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	1. 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)
	<ol> <li>lifelong learning for people from business (e.g. executive education, industry training and professional courses)</li> </ol>
Daggarah	6. joint R&D (incl. joint funded research)
Research	7. consulting to business (incl. contract research)
	8. mobility of professionals (i.e. temporary mobility of academics to business and vice versa)
Mala da attan	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)

## **Development of UBC activities**

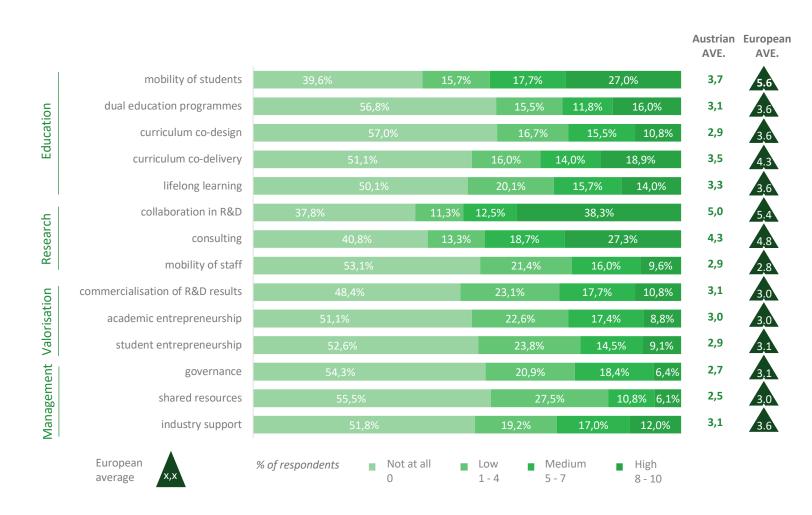
Overall, most UBC activities are less developed for Austrian academics than for their European counterparts.

Austrian academics most commonly engage with business in joint R&D (5.0) and consulting (4.3). However, almost 40% of Austrian academics do not engage in these activities. The latter might be explained by the fact that for professional consulting activities individuals need to have a license, issued by the Chamber of Commerce. This additional step might partly explain some of the findings,.

All the UBC management activities and valorisation activities (except commercialisation of R&D) are not developed at all for over half of the Austrian academics. The incentive structure and the mind-set might be lacking. However, the knowledge transfer centre projects initiated by the Ministry of Research and Economy addresses both these issues <sup>1</sup>. There is most certainly an awareness in the Austrian educational system with regards to these shortcomings; however, things cannot be changed immediately.

#### The extent of development of UBC activities

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

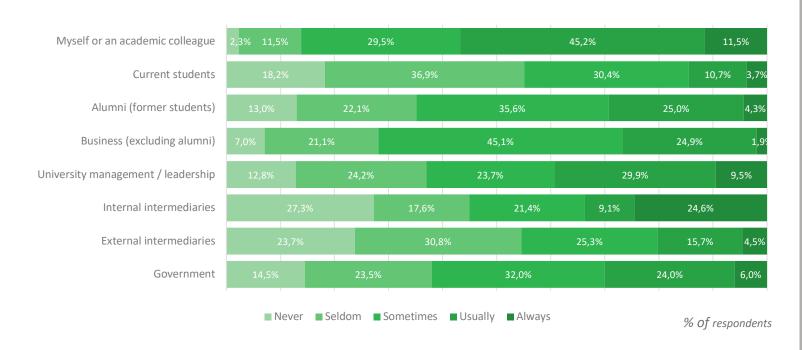


<sup>&</sup>lt;sup>1</sup>BMWFW (2015). Der gesamtösterreichische Universitätsentwicklungsplan 2016-2021. Wien: Bundesministerium für Wissenschaft, Forschung und

## **Initiation of UBC**

#### How UBC is initiated

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



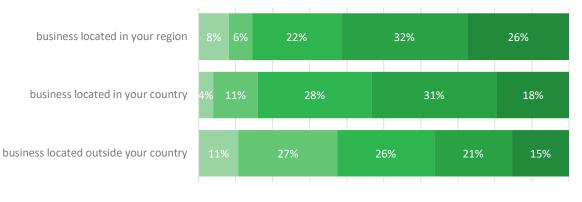
Over half of Austrian academics (56.7%) consider that themselves or their colleagues always or usually initiate UBC.

University management (39.4%) and government (30%) are also considered initiators most times.

Contrary, academic perceive that intermediaries (internal or external) are those stakeholders that less often initiate UBC, followed by current students

## **Location of cooperating partners**

#### **Location of business partners**

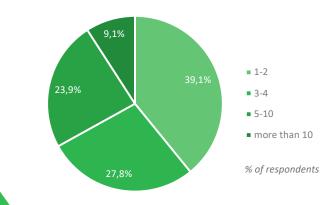


% of respondents

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

Academics in Austria focus on collaboration with regional and national businesses. They undertake a significant or high levels of cooperation with businesses at a regional and national level (57.4% and 49.3% respectively). However, only 36.4% of academics indicate significant or high cooperation with international businesses. This seems to be a function of the two pillars in the Austrian university system: the comprehensive research oriented universities and the universities of applied sciences. The latter have a clear regional focus in their outreach<sup>1</sup>.

#### Number of business partners



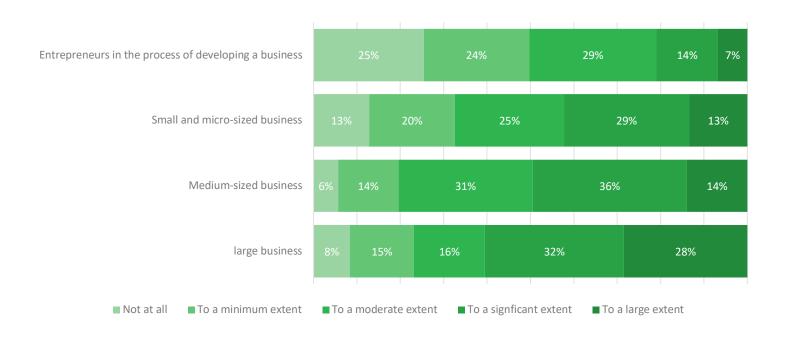
Over a third (67%) of Austrian academics cooperate with four businesses or less while only 9% collaborate with over 10 business partners. A clear focus on the development of relationships with key strategic partners might partly explain this.

<sup>&</sup>lt;sup>1</sup> Kasparovsky, H., & Wadsack-Köchl, I. (2016). Österreichisches Hochschulsystem. 7. Auflage, Stand: 1 März 2016. Wien: Bundesministerium für Wissenschaft Forschung und Wirtschaft.

## Size of cooperating partners

#### Size of cooperating partner

'With what size of organisation do you collaborate?' - as answered by academics



The larger the business the more likely it is to cooperate with an Austriar academic

60.5% of cooperating academics in Austria engage to a significant or large extent with large businesses. This cooperation is reduced to 49.5% for medium businesses, 42.3% for small and micro-sized businesses and 20.9% for entrepreneurs.

Overall, the smaller the businesses the less likely they are to appreciate the collaboration with HEIs for knowledge transfer. This is probably caused by resource constraints.

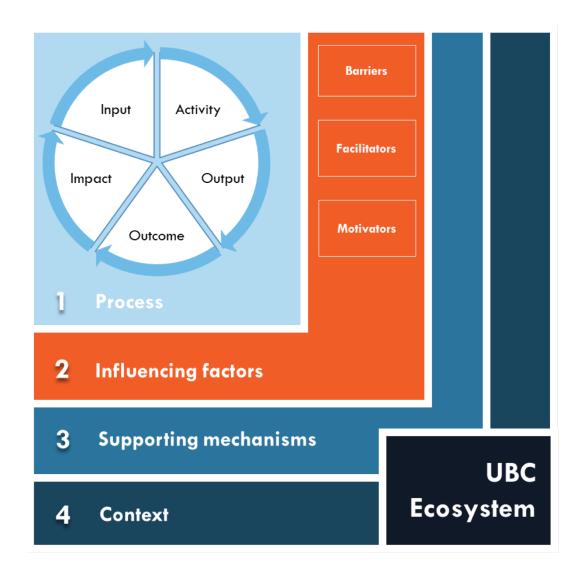
## **Factors influencing UBC**

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 sufficiently present.



## **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.	Limited resources of SMEs	Limited resources of SMEs	
	2.	Bureaucracy related to UBC	Differing motivation / values between university and business	
	3.	Lack of business funding for UBC	Insufficient work time allocated by the university for academics´ UBC activities	
	4.	Insufficient work time allocated by the university for academics' UBC activities	Lack of business funding for UBC	
	5.	Differing motivation / values between university and business	Lack of government funding for UBC	
	Lowest	My lack of knowledge / experience in UBC	Frequent staff turnovers within my university or the business	

The top five barriers to UBC for Austrian academics relate to resources, administrative and cultural issues.

The top five barriers for both collaborating and non-collaborating academics are very similar. The limited resources of SMEs is the most relevant barrier for both groups. The similarity might suggest that the actual barriers are well and correctly anticipated by non-collaborators.

The insufficient work time allocated by university for academics and the lack of business funding for UBC are major barrier for both groups. The latter one can be related to the large percentage of SMEs in Austria<sup>1</sup>.

Yet, collaborating academics see a top barrier in bureaucracy related to UBC, whereas those without cooperation experience are hindered by the lack of government funding for UBC, notwithstanding the fact that the funding landscape in Austria is well developed<sup>2</sup>. This means that the non-collaborators are likely to be simply not aware of the funding possibilities that exist.

<sup>&</sup>lt;sup>1</sup> BMWFW (2016). Mittelstandsbericht 2016. Bericht über die Situation der kleinen und mittleren Unternehmen der österreichischen Wirtschaft. Wien: Bundesministerium fü Wissenschaft, Forschung und Wirtschaft.

Rasparovsky, H., & Wadsack-Köchl, I. (2016). Österreichisches Hochschulsystem. 7. Auflage, Stand: 1. März 2016. Wien: Bundesministerium für Wissenschaft, Forschung und Wirtschaft.

## Austrian academics and their European counterparts perceive most barriers similarly.

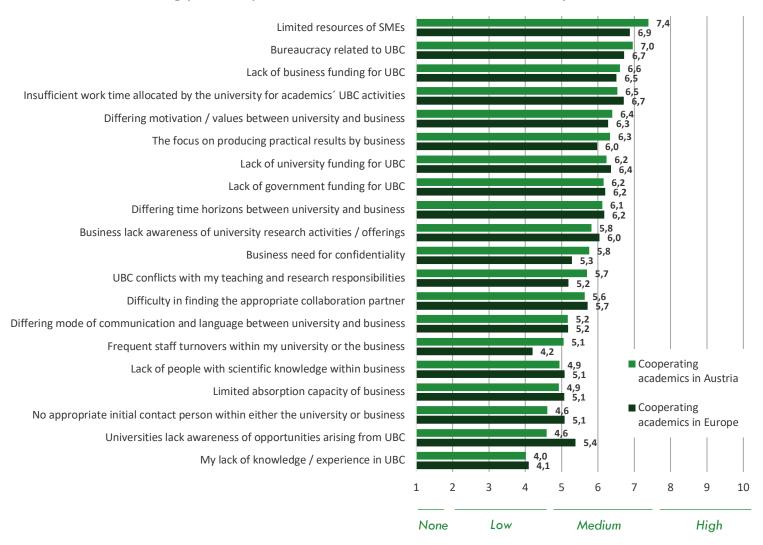
In Austria academics are more hindered than their European counterparts by the limited resources of SMEs, the business needs for confidentiality and the frequent staff turnovers. Generally SMEs are not a homogenous group of companies so national differences in the composition of the SME population might affect this perception <sup>1</sup>.

Austrian academics are however less hindered than their European counterparts by the HEI and business awareness of UBC, and the lack of an appropriate initial contact person.

## **Barriers hindering UBC**

#### **Barriers**

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

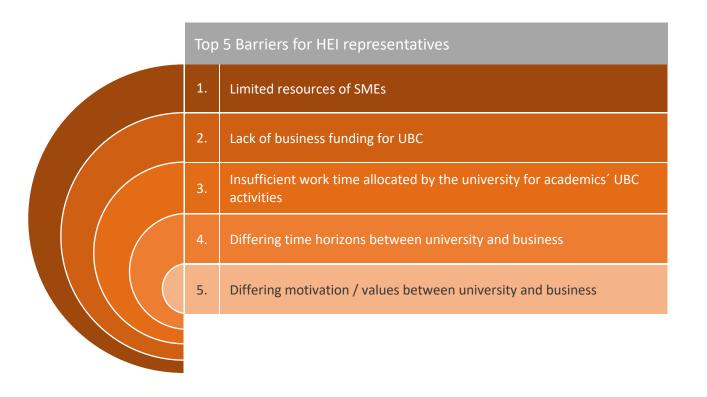


<sup>&</sup>lt;sup>1</sup> BMWFW (2016). Mittelstandsbericht 2016. Bericht über die Situation der kleinen und mittleren Unternehmen der österreichischen Wirtschaft. Wien: Bundesministerium fü Wissenschaft, Forschung und Wirtschaft.

## **Barriers hindering UBC**

#### **Barriers**

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



Austrian HEI representatives are inhibited to engage in UBC by the lack of resources and the cultural differences.

The lack of resources of SMEs and funding of business are the largest barriers. This is consistent with the Austrian academics perceptions.

HEI representatives recognise that the insufficient work time they allocate allocated for academics' UBC activities is also a major barrier. This issue is particularly interesting as it could be seen to reflect a lack of Austrian HEIs' strategies towards outreach or the third mission. The allocation of effort could be seen as a result of this.

At the same time, culture-related barriers such as the different motivations and time horizons between university and business can also significantly inhibit UBC in Austria Overall, Austrian HEI representatives perceive barriers lower than their European counterparts.

While resources and culture related factors are the most inhibiting for Austrian HEI representatives, for European ones are funding and time related factors.

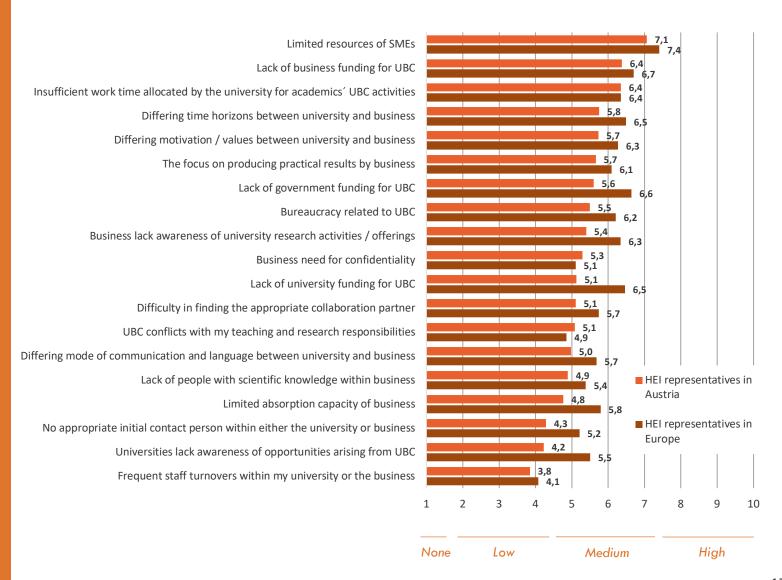
The lack of funding from different sources, the limited absorption capacity of their business, the lack of awareness and the cultural differences are significantly less inhibiting for Austrian HEI representatives.

The frequent staff turnovers within the university or in businesses is the weakest UBC barrier for both groups.

## **Barriers hindering UBC**

#### **Barriers**

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

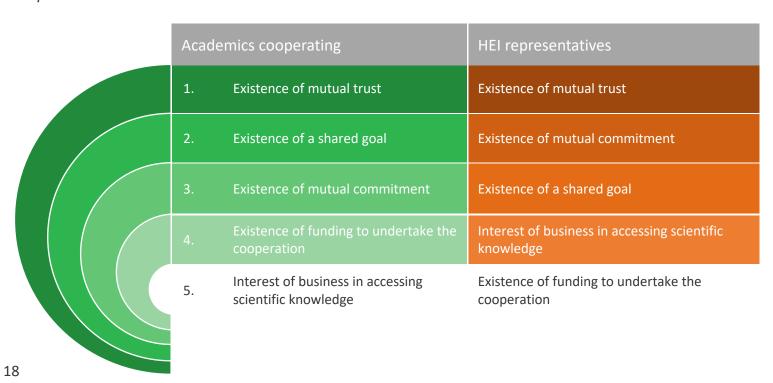
- <u>Facilitators</u> factors that enable or ease cooperation
- **2.** <u>Motivators</u> incentives or benefits that the respective stakeholders would like from the cooperation

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



The main factors that facilitate UBC for both Austrian academics and HEI representatives are identical.

The main three facilitators focus on the relationship aspect of UBC, highlighting the importance of mutual trust, mutual commitment and a shared goal for successful UBC.

The existence of funding to undertake UBC and the interest of business in accessing scientific knowledge are also recognised by both groups.

European and Austrian perceptions of UBC facilitators align. Yet, notably Austrian academics perceive the drivers slightly stronger than European academics.

For both groups, the most important facilitators are those related to the relationship component of UBC. The academics highlighted the existence of mutual trust, a shared goal and mutual commitment among the most important facilitators influencing their cooperation with businesses.

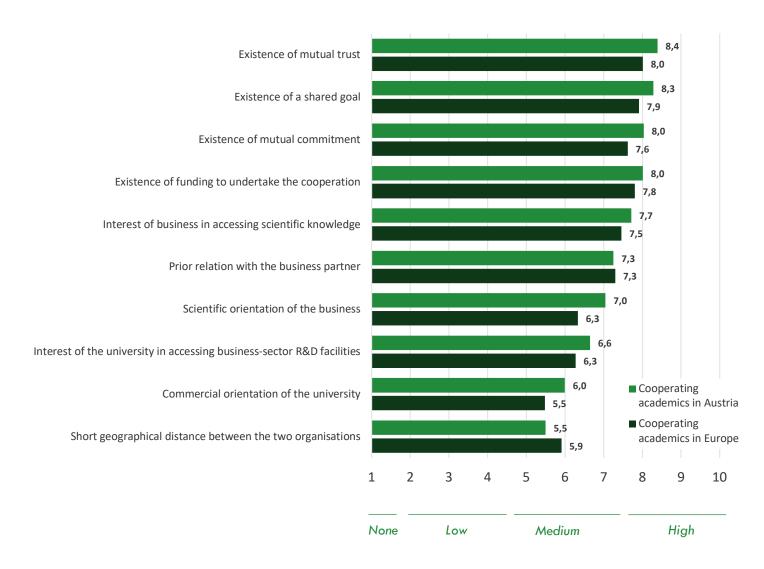
In addition to the relationship facilitators, the existence of funding and the interest of business in accessing scientific knowledge also play important role for both.

The short geographical distance between the two organisations emerges as the least strong facilitator, which is not surprising for a small country.

## **Drivers stimulating UBC**

#### **Facilitators**

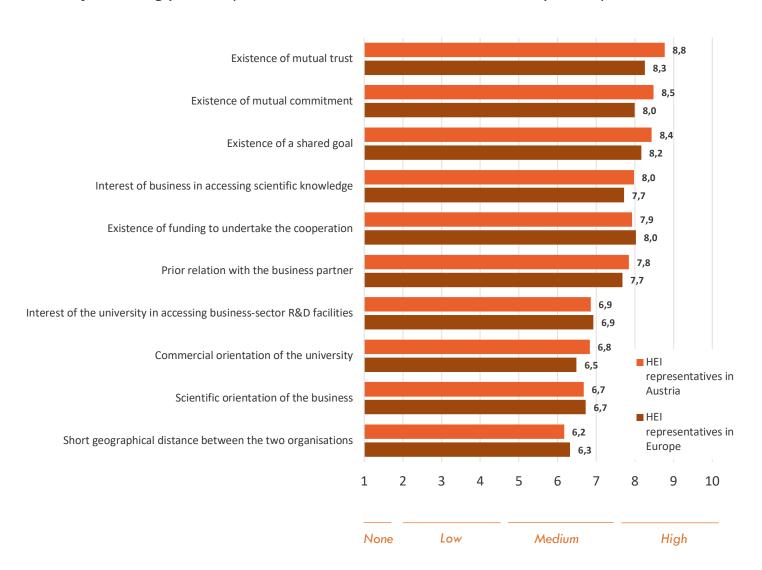
'What is facilitating your cooperation with business?' – as answered by academics



## **Drivers stimulating UBC**

#### **Facilitators**

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



Austrian HEI representatives and their European counterparts perceive the facilitators in a very similar way.

For both groups, the most important facilitators also relate to the relationship aspect of UBC. The existence of mutual trust, a shared goal and mutual commitment are the most important drivers facilitating their cooperation with businesses.

The existence of funding and the interest of business in accessing scientific knowledge also play an important role.

The strong focus on funding in all the findings in this study suggests two issues: Austrian academics believe that UBC can only strive with governmental support because (1) they assume that businesses are not willing or capable to finance these activities and/or (2) they generally hold public responsible for these kinds of activities.

Similarly to academics, the scientific orientation of the business and the short geographical distance between the two organisations are the weakest facilitators.

# Motivators of Austrian academics who already cooperate with businesses and motivators of non-cooperating academics have certain discrepancies.

While cooperating academics highlight research motivations, such as gaining new insights and use it in practice, academics not cooperating are driven by the willingness to improve graduate employability as well as by the motivation of obtaining funding from UBC.

Cooperation with businesses allows academics to change their perception of what can be achieved by UBC.

Interestingly, non-cooperating academics rate motivators related to other stakeholders (e.g. employability of graduates, societal needs, mission of the university) more strongly.

## **Drivers stimulating UBC**

#### **Motivators**

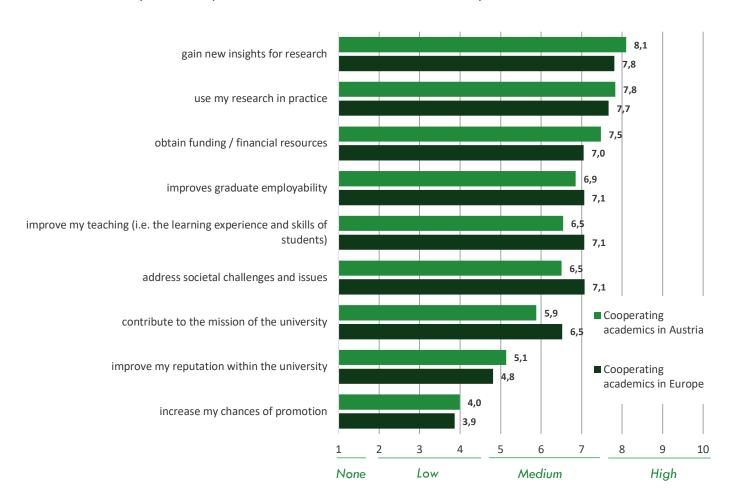
'What motivates you to cooperate with business?'- as answered by academics

	Acade	emics who cooperate	Academics who <u>do not</u> cooperate	
	1.	Gain new insights for research	Improve graduate employability	
	2.	Use my research in practice	Obtain funding / financial resources	
	3.	Obtain funding / financial resources	Contribute to the mission of the university	
	4.	Improve graduate employability	Address societal challenges and issues	
	5.	Improve my teaching	Improve my future research	

## **Drivers stimulating UBC**

#### **Motivators**

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



The perception of UBC motivations of Austrian academics mostly align with the perceptions of their European counterparts.

In comparison to the European average, the top three motivators, which are related to research and financial resources are perceived slightly stronger in Austria.

The motives focused on other stakeholders such as students, society or university have a lower importance for academics in Austria.

Notably promotion and reputation related motivators are the weakest drivers stimulating UBC for both groups.

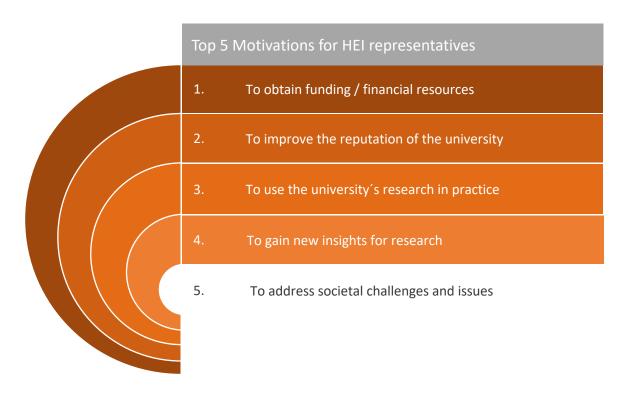
HEI representatives are more motivated by the benefits that their HEIs can get from UBC, such as financial resources of improvement of reputation.

This is followed by motivators specifically related to improving research, including application of research in practice, gaining new insights and addressing societal challenges.

## **Drivers stimulating UBC**

#### **Motivators**

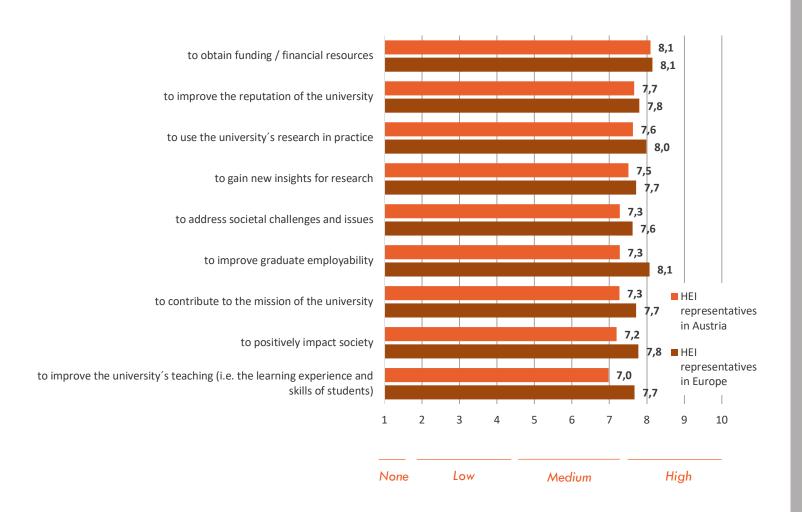
'What motivates your HEI to cooperate with business?' – as answered by HEI representatives



## **Drivers stimulating UBC**

#### **Motivators**

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



Austrian HEI representatives perceive almost all motivators lower than European HEI representatives. However, both groups agree on the importance of the top five motivators.

More crucially, for both European and Austrian HEI representatives all motivators were are ranked of nearly equal importance (from 7.2 to 8.1), which ultimately means that all these motives have a potential of stimulating UBC for universities.

Austrian academics and HEI managers have similar perceptions about the stakeholders that benefit from UBC.

Businesses and universities are perceived by both groups as the stakeholder groups who benefit the most from UBC.

The Austrian government is believed by both groups to gain little benefit from UBC.

Academics see their own benefit higher than the one from students and society, while HEI representatives see than the benefits for academics are lower.

## **Benefits of UBC**

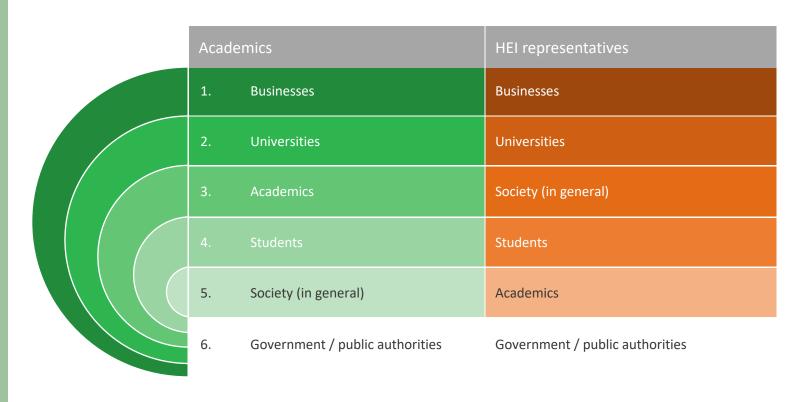
**Benefits** are the perceived positive outcomes (financial and non-financial) from undertaking UBC as relevant for the different stakeholder groups that can potentially participate in UBC.

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**

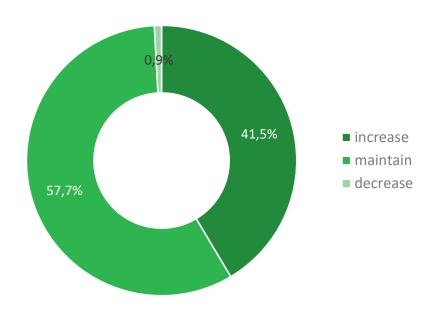
'Who receives the benefits of UBC?'- as answered by academics and HEI representatives



## **Future intentions**

#### **Future UBC intentions – Austria**

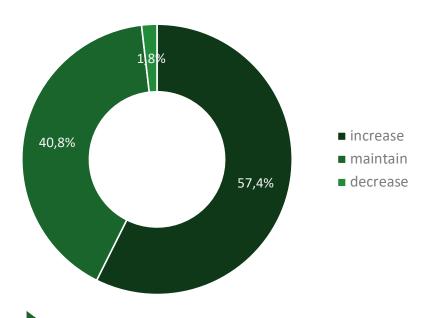
As answered by Austrian academics



Austrian academics show a very strong commitment to UBC. 99.1% of academic expecting to maintain or increase their UBC activities. In this sense, Austria proves to be an attractive country for UBC, with positive momentum for the future.

#### **Future UBC intentions – Europe**

As answered by European academics



Academics in Europe show an even stronger commitment to increasing UBC activities. 57.4% of cooperating academics expect to increase their cooperation and only 1.8% plan to decrease their collaborative activities with businesses. This shows a positive projection for UBC in Europe.

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

Austrian academics are equally satisfied with UBC in research as their European counterparts (NPS=17). While 42% of them will promote it positively, 25% would do it negatively.

Contrary, Austrian academics are less satisfied than their academics counterparts in education-related UBC, even when none of them are very satisfied with their experience (NPS = -29 for Austrian and -14 for European academics).

## Willingness to recommend UBC

#### Willingness to recommend R&D and education and training (cooperation with businesses

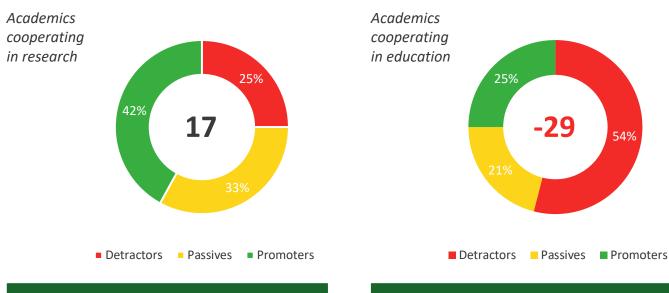
'How likely is it that you would recommend to an academic colleague to engage in UBC? - as answered by academics

	Detractors	Passives	Promoters
Academics cooperating in E&T	54%	21%	25%
Academics cooperating in R&D	25%	33%	42%

Net promoter score	
-29	
17	

The *Net Promoter Score* metric offers a proxy for customer satisfaction, it ranges between -100 and 100 and a score above 0 is considered positive.

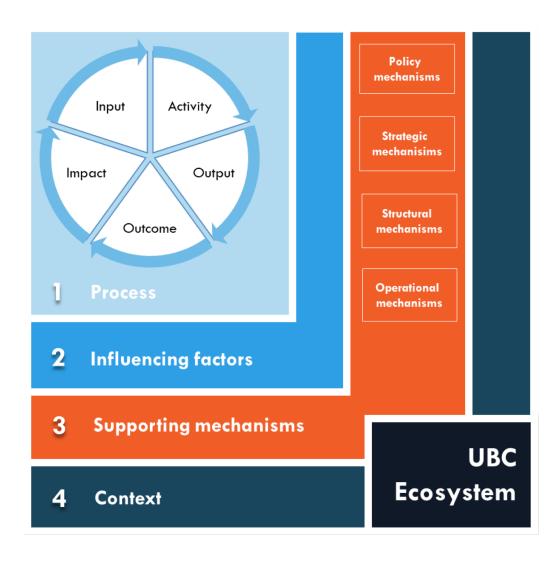
#### Satisfaction in cooperation with businesses (net promoter score)



**European academics' NPS result: 17** 

European academics' NPS result: -14

## **Supporting mechanisms for UBC**



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

There are four types of supportinន្ 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.

Austrian HEI representatives perceive policy mechanisms to be developed to a medium-low level. These perceptions are a similar or lower than their European counterparts.

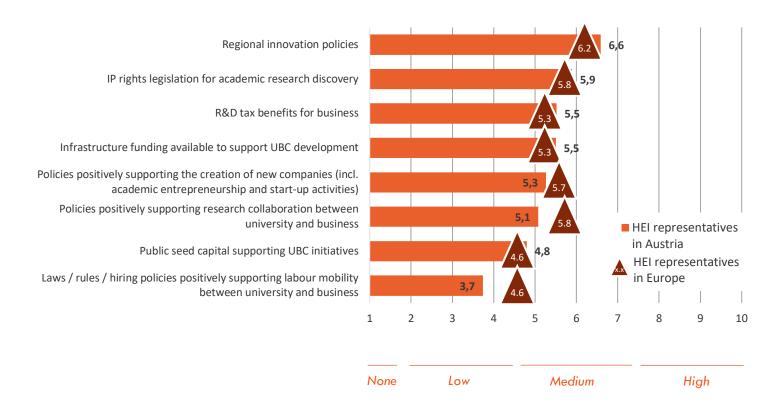
Regional innovation policies are seen as the most developed supporting mechanism (6.6) followed by 'IP rights legislation for academic research discovery'. The regional funding system is indeed rather developed and fits to the needs of the regional actors<sup>1</sup>.

The policies positively supporting the creation of new companies and research collaboration between university and business (5.3 and 5.2 respectively) are lower than in Europe. This is an surprising result as the governmental support for entrepreneurship is very intense at all levels of government, but HEI managers do not perceive it that way.

The least developed mechanism, lower than the EU average, is the policy support to labour mobility between universities and business (3.7), which is not very developed in Austria.

#### **Policy mechanisms**

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



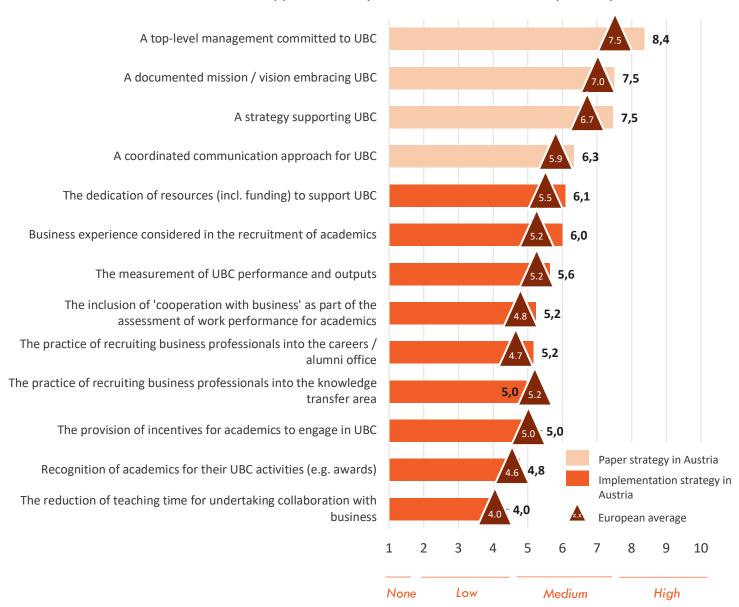
Supporting mechanisms for UBC

<sup>&</sup>lt;sup>1</sup> Kasparovsky, H., & Wadsack-Köchl, I. (2016). Österreichisches Hochschulsystem. 7. Auflage, Stand: 1. März 2016. Wien: Bundesministerium für Wissenschaft, Forschung und Wirtschaft.

## 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 Austrian and European HEIs is similar, even slightly higher in Austrian HEIs.

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

The least developed mechanisms are related to the provision of academic incentives to undertake UBC (5.0), including the recognition of their UBC activities (4.6) or the reduction of teaching time (4.0).

The low level of provision of incentives as reported here might also explain some of the findings in the report above.

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

Both European and Austrian HEI representatives indicated the same top four structural mechanisms. Overall for both groups bridging structures and employability/careers services are the most developed types of structures supporting UBC in universities.

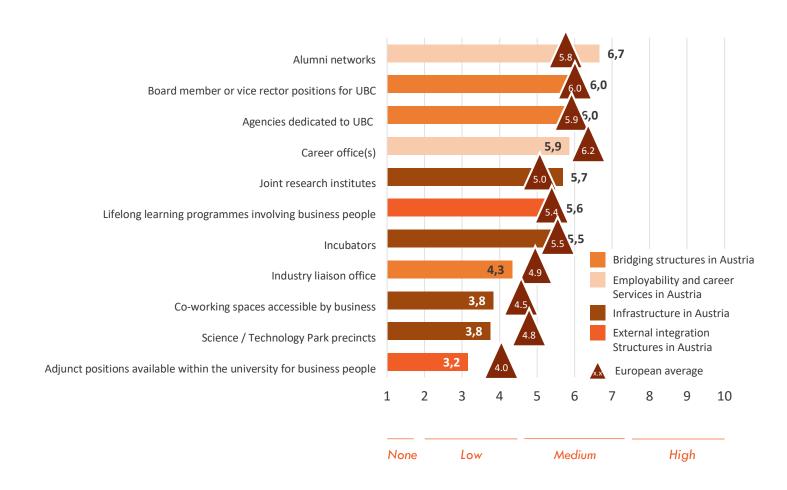
The most developed structural mechanisms are alumni networks (6.7) and a board member or vice rector positions for UBC (6.0).

Contrary, science or technology park precincts and adjunct positions within the HEI for business people are the least developed mechanisms (3.8 and 3.2 respectively).

## Supporting mechanisms for UBC

#### Structural mechanisms

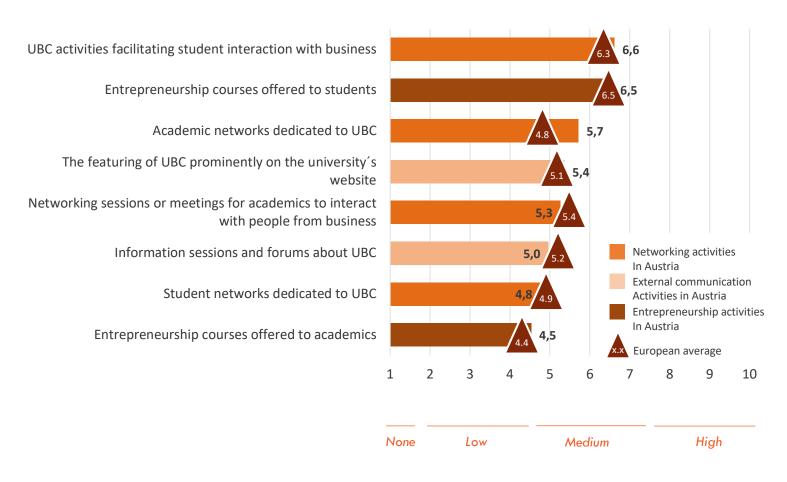
'To what extent do these mechanisms support UBC in your HEI?' – as answered by HEI representatives



## **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 Austrian and European HEI representatives align in respect to the development of operational mechanisms.

Student-centred activities are the most developed operational mechanisms, with UBC activities facilitating student interaction with businesses (6.6) and entrepreneurship courses offered to students (6.5) ranked the highest.

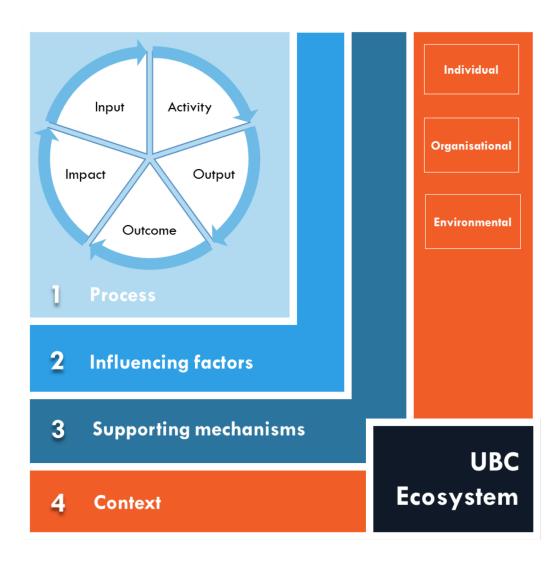
Among the activities focused on academics, the academic networks dedicated to UBC are also well developed (5.7). Other are perceived as less developed, such as entrepreneurship courses offered to academics.

# 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 or medium.

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.

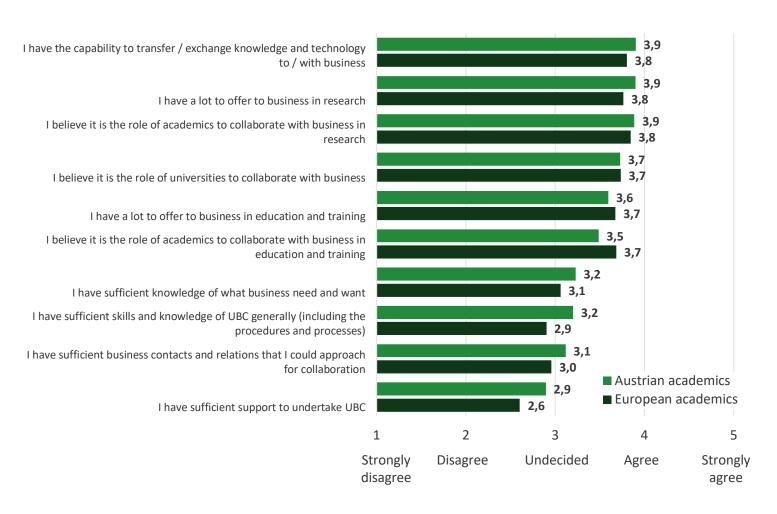
## **Context**



## **UBC** capabilities

#### **Capabilities for UBC**

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



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

Austrian academics identified their strengths in the ability to exchange knowledge (3.9) and doing research for companies (3.9) and believe that is their role to collaborate with business in research (3.9).

Their beliefs and perceived capabilities to cooperate in education are more negative than the research ones.

They perceive they have insufficient contacts, relations (3.1) and support (2.9) to undertake UBC, although still over the European average.

Although Austrian and European academics perceive their contextual factors similarly, the perception of most contextual factors is slightly more positive in Austria than the European one. The only exceptions is that European academics perceive they have a stronger education and basic research profiles.

Contrary, Austrian academics perceive they have more positive UBC role models at their HEIs and their fields.

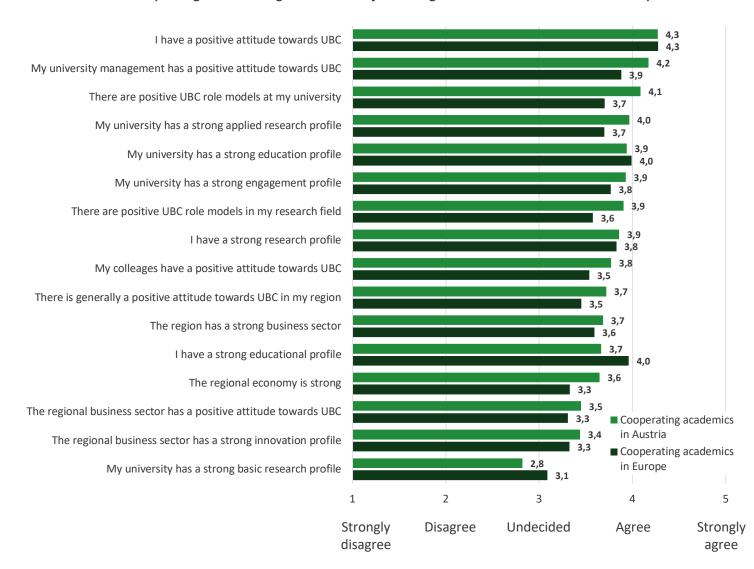
Both Austrian and European academics have a positive attitude towards UBC (4.3 and 4.2).

But Austrian academics perceive a more positive attitude of their colleagues, HEIs and regions towards UBC.

### **Context**

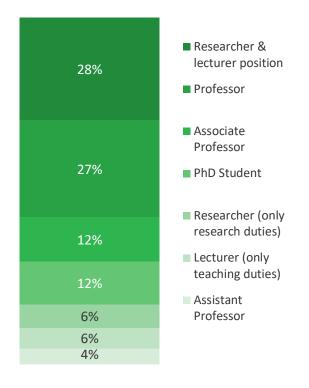
#### **Contextual factors affecting UBC**

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

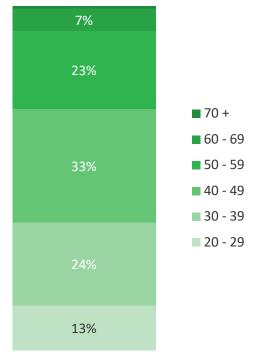


## **Respondent profile – academics**

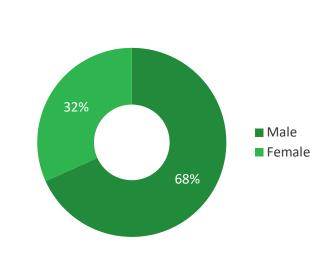
#### **Position of respondents**



#### Age of respondents



#### **Gender of respondents**



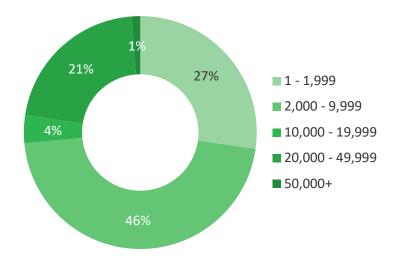
'Researcher and lecturer' comprise the largest group (28%), followed by 'Professor' (27%). The remaining academics identified themselves as 'Associate Professor' (12%), 'PhD student' (12%), 'Researcher' (6%), 'Lecturer' (only teaching duties) (6%) and 'Assistant Professor' (4%).

Most Austrian academics in the sample are in the middle of their working life. A third of the academics (33%) in the sample are between 40 and 49. Other significant groups are those aged 30-39 (24%) and 50-59 (23%), followed by those aged 20-29 (13%). Academics older than 60 are 7%.

The gender distribution in the academic sample in Austria is skewed towards male respondents, with represent 68% of the total sample.

## Respondent profile – academics

#### Number of students of their HEI

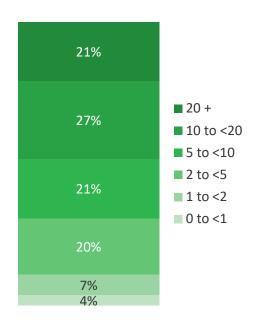


Sample Size				
Austrian Academics	n=407			
European Academics	n=10.836			
Austrian HEI representatives	n=124			
European HEI representatives	n=3.482			

Almost half of the Austrian academics (46%) in the sample work for small HEIs (between 2,000 and 9,999 students) and 27% of them work for very small HEIs (under 1,999 students). Medium-large HEIs (between 20,000 and 49,999 students) are represented by 21% of respondents. Only 1% of the academics work at very large HEIs with over 50,000 students.

## Respondent profile – academics

#### Years working in HEI



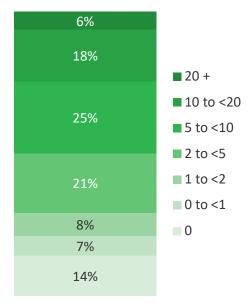
Most academic respondents have worked in academia for several years. Almost half of them (48%) have worked in academia for over 10 years. 21% have 5-10 years of experience and 20% have worked in academic for 2-5 years. 11% of the academics have less than 2 year of experience.

#### Years working in business



Academic respondents are experienced in businesses. Over two thirds (69%) of the Austrian academic respondents have worked in industry before. 16% of them have done so for 2 to 5 years. An even proportion (11%) have 5 to 10 years and 10 to 20 years industry experience. Only 4% have worked in business for over 20 years.

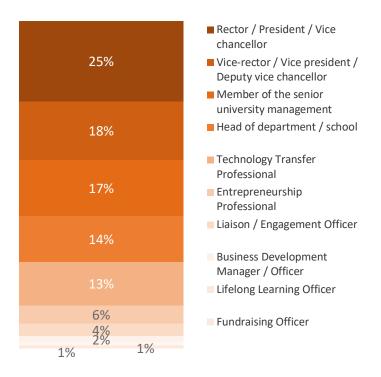
## Years involved in UBC whilst working at an HEI or business



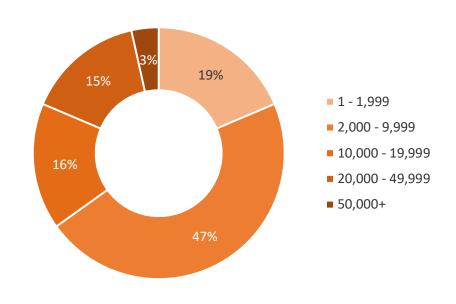
Most academic respondents in Austria have some industry experience. Although only 6% have been involved in UBC for over 20 years, 43% have between 5 and 20 years of experience and 36% between 1 and 5 years of experience. 14% of academics in the sample have never engaged in UBC.

## Respondent profile – HEI representatives

#### **Position of respondents**



#### Number of students of their HEI



Austrian HEI representatives hold a variety of roles. A quarter of them are rectors, president or vice Chancellors. Vice-rectors or vice-presidents are the second largest group (18%), along with members of the senior university management (17%), The smallest groups are head of department/school (14%) and technology transfer professionals (13%).

Overall, over two third of HEI representatives work for small HEIs (under 9,999 students), from whom almost 20% of HEI of them work for very small HEIs (under 1,999 students).

Only 3% 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 www.ub-cooperation.eu

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

















