



**UNIVERSITY-BUSINESS**  
COOPERATION IN EUROPE

# State of University- Business Cooperation HUNGARY

## University Perspective

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



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

### Partners



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# Executive summary

## Summary

This report provides the findings of a study on university-business cooperation (UBC) in Hungary from the perspective of higher education institutions (HEIs). Examining the perceptions of academics, HEI managers and knowledge transfer professionals (KTP) identifies that currently UBC in Hungary is considerably less developed compared to the European average. There is significant room for improvement, specifically in supporting academics in their UBC efforts, including the development of incentive and performance measurement systems for academics engaging in UBC, as well as the provision of additional financial resources. Nevertheless, there are positive signs for the future, as the majority of respondents currently cooperating with businesses plan to increase their cooperation in the future.

## About the study

The results presented in this report reflect the perceptions of academics, HEI managers and KTPs in Hungary 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 740 Hungarian responses. The study measured the perceptions of respondents with respect to their cooperation efforts, barriers, drivers, supporting mechanisms and perceived capabilities.

## Few academics cooperate with business

Hungarian academics responding to this survey are involved in a variety of different cooperation types, with mobility of students and business consulting emerging as the most developed UBC activities; 32.5% and 30.9% of respondents respectively cooperate in this manner. On the other hand, more than 60% of academics do not undertake any UBC activities at all, which could be a result of as 'cooperation with business' not being part of their assessment and work performance.

Academics see themselves as active initiators of UBC, with 41% of academic respondents stating that they usually or always initiate such cooperation. On the contrary, Hungarian academics perceive external intermediaries and current students as those stakeholders that less often initiate UBC.

## Lack of resources hinders UBC

Hungarian academics already cooperating with business are considerably hindered by limited university funding, whilst HEI Managers also nominated it as one of the major barriers. Furthermore, while cooperating academics generally identify the lack of monetary resources and bureaucracy as a major barrier, non-collaborating academics and HEI Managers perceive cultural barriers as their biggest inhibitor. A further barrier effecting academics, independent of whether they undertake cooperation or not, is the limited time allocated for UBC.

**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 require future development.

### **Relationship is key**

Notwithstanding the lack of funding being one of the biggest barriers, the main four facilitators for both academics and HEI managers focus on the relationship aspect of UBC, highlighting the importance of a prior relationship with the business partner, a shared goal, mutual trust, and mutual commitment towards UBC.

### **Funding motivates cooperation**

Whilst the stakeholder agree on the major facilitators, the motivations of academics, HEI managers and business differ. Thus whilst relationships facilitate UBC, all actors involved need to be aware of and acknowledge the different factors motivating each of the others.

Hungarian academics as well as HEI representatives cooperate primarily for obtaining financial resources. Cooperating academics are also more motivated by the benefits for their own research (e.g. new insights, practical application), as they are willing to advance their scientific outputs.

However, academics not engaged in UBC do not recognise their research as a motivator and identify motivators related to other stakeholders (e.g. employability of graduates, societal needs, mission of the university), and generally recognize less motivators for UBC overall.

Academics perceive that other stakeholders get the benefits from UBC including students, their universities as well as the business, more so than themselves.

### **Paper strategies vs commitment of resources**

Universities in Hungary have a less developed set of supporting mechanisms for UBC compared to the European average. A top-level management commitment for UBC and a documented mission/vision embracing UBC are perceived as the most developed. Yet, a commitment of resources, specific incentive systems, the integration of UBC in academic performance assessment and the reduction in teaching time in exchange for extended cooperation emerge are less developed.

The most highly developed structural mechanisms in the given sample include career offices and agencies related to UBC. When examining the development of specific activities, a strong focus on students emerges, with the highest development reported in relation to student entrepreneurship courses, and UBC activities facilitating student interaction with business and student networks dedicated to UBC (e.g. entrepreneurship networks). The student and academic networks dedicated to UBC as well as entrepreneurship courses offered to academics are the most underdeveloped operational mechanisms.

### **Cooperating with conviction**

Academic respondents already cooperating with business have a positive view of their abilities and roles in undertaking UBC. They believe it is their and universities' role to collaborate with businesses, in both research and education. Overall they have a positive attitude towards UBC. Yet, Hungarian academics perceive a less positive attitude of the business sector and the region towards UBC.

# 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.



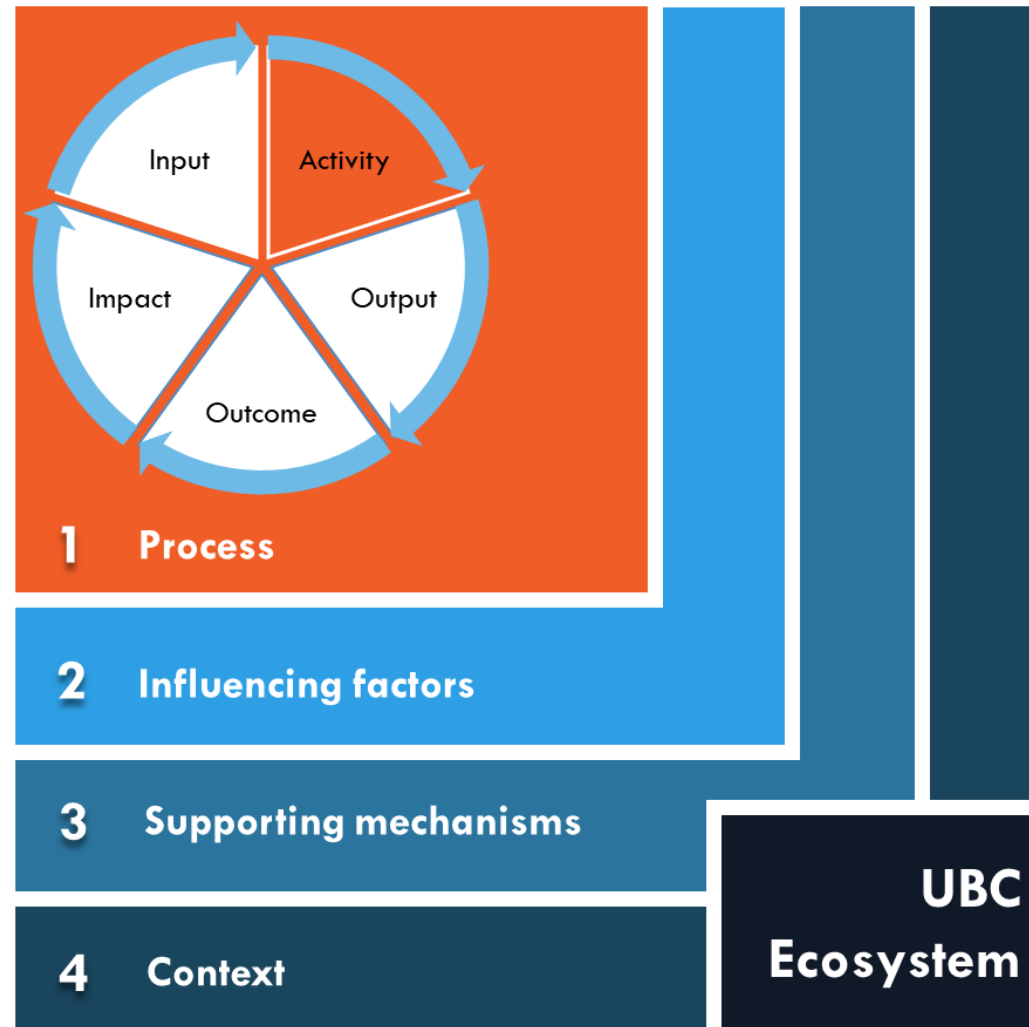
# UBC activities

## 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
<b>Education</b>	<ol style="list-style-type: none"><li>1. curriculum co-<u>design</u></li><li>2. curriculum co-<u>delivery</u> (<i>e.g. guest lectures</i>)</li><li>3. mobility of students (<i>i.e. student internships/placements</i>)</li><li>4. dual education programmes (<i>i.e. part theory, part practical</i>)</li><li>5. lifelong learning for people from business (<i>e.g. executive education, industry training and professional courses</i>)</li></ol>
<b>Research</b>	<ol style="list-style-type: none"><li>6. joint R&amp;D (<i>incl. joint funded research</i>)</li><li>7. consulting to business (<i>incl. contract research</i>)</li><li>8. mobility of professionals (<i>i.e. temporary mobility of academics to business and vice versa</i>)</li></ol>
<b>Valorisation</b>	<ol style="list-style-type: none"><li>9. commercialisation of R&amp;D results (<i>e.g. licencing/patenting</i>)</li><li>10. academic entrepreneurship (<i>e.g. spin offs</i>)</li><li>11. student entrepreneurship (<i>e.g. start-ups</i>)</li></ol>
<b>Management</b>	<ol style="list-style-type: none"><li>12. governance (<i>e.g. participation of academics on business boards and business people participation in university board</i>)</li><li>13. shared resources (<i>e.g. infrastructure, personnel, equipment</i>)</li><li>14. industry support (<i>e.g. endowments, sponsorship and scholarships</i>)</li></ol>

# Development of UBC activities

Overall, UBC is considerably less developed for Hungarian academics than for their European counterparts. It can be explained by the fact that 'cooperation with business' is not a part of the assessment of work performance for academics in Hungary. Therefore, generally UBC doesn't affect the academics' career advancement nor their salaries.

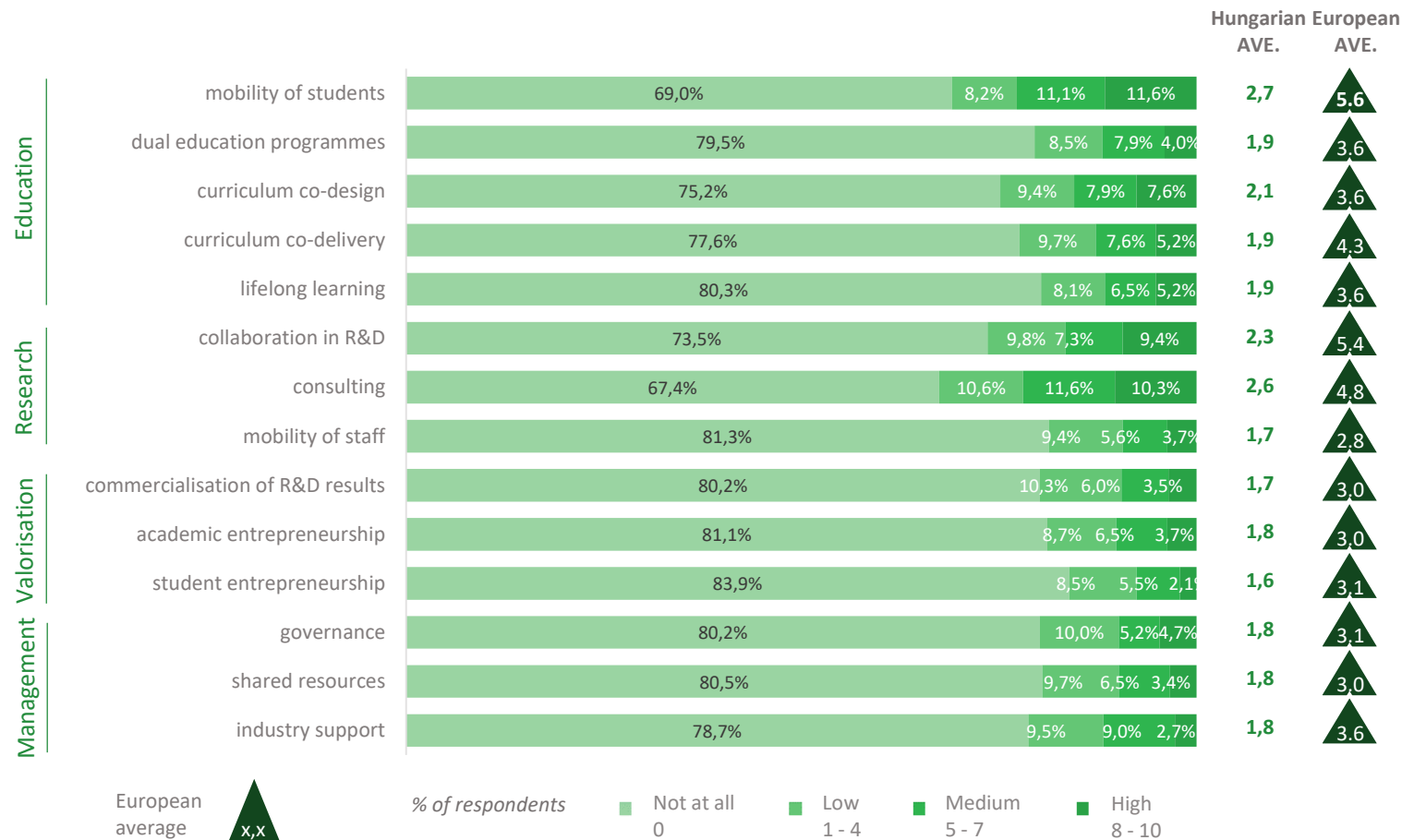
Thus, the most developed UBC activities are mobility of students (2.7) and consulting (2.6). Yet, over 60% of Hungarian academics do not engage in these activities at all.

Collaboration in R&D and curriculum co-design are also well-developed in Hungary. Additionally, with the curriculum co-design becoming a high priority in the Hungarian context and the provision of governmental funds for its development, the further advancement in this specific field is expected in the future (e.g. there are funds available for cooperative HE).

All the UBC management and valorization activities are reported to be undeveloped or not present at all by over 80% of Hungarian academics.

## The extent of development of UBC activities

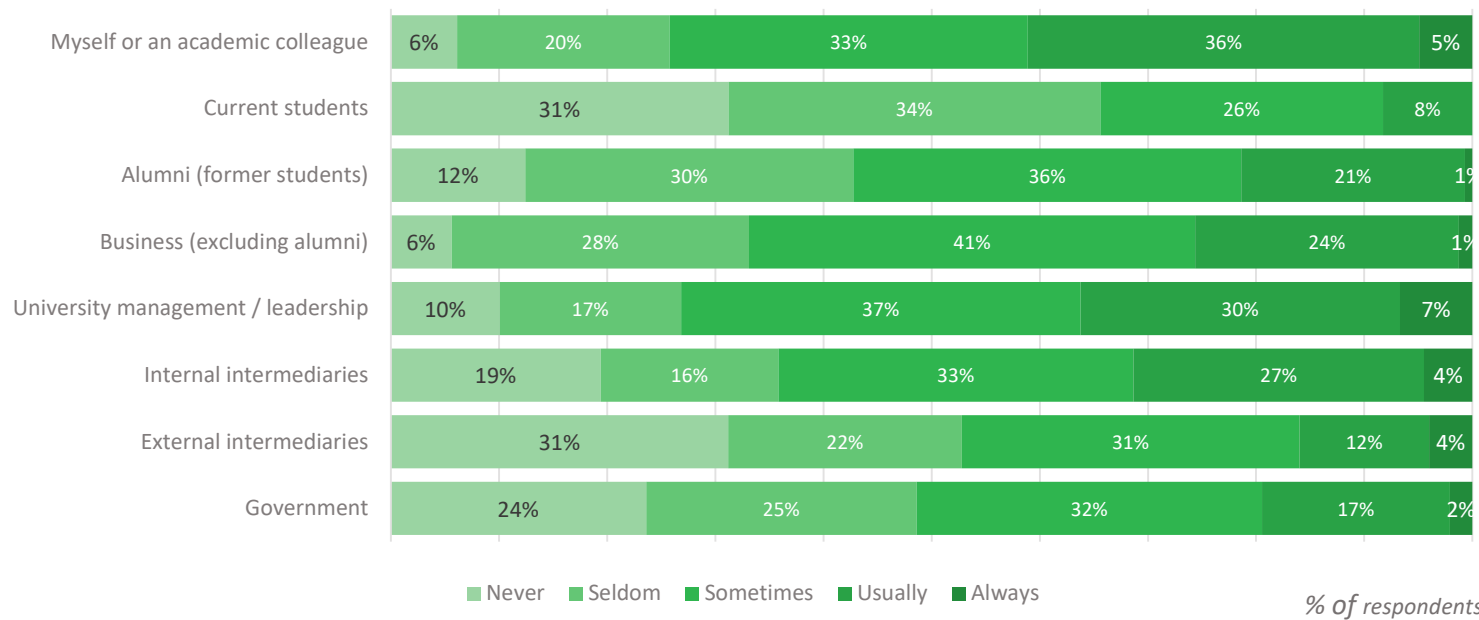
'Which UBC activities do you collaborate with businesses in?' – as answered by academics



# Initiation of UBC

## How UBC is initiated

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



More than 40% of Hungarian academics consider themselves or their academic colleagues as the main initiator of UBC.

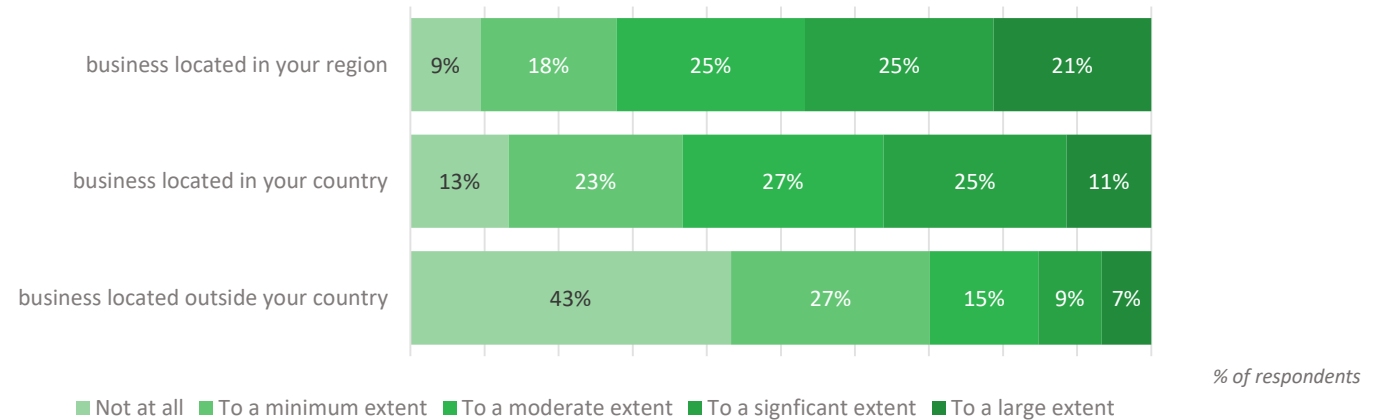
University management are also considered as active actors in initiating collaboration, as indicated by 37% of respondents. Interesting is that only 31% of the respondents grant a similar position to internal intermediaries. Specifically, as it refers to the general job description of Technology Transfer Professionals that are present in almost all Hungarian HEIs<sup>1</sup>.

On the contrary, Hungarian academics perceive external intermediaries and current students as those stakeholders that less often initiate UBC.

<sup>1</sup>Buzás N. (2005). From technology transfer to knowledge transfer: an institutional transition. In: C. G. Alvstam & E. Schamp (Eds.): Linking Industries Across the World (pp. 109-123). Aldershot: Ashgate Publishing.

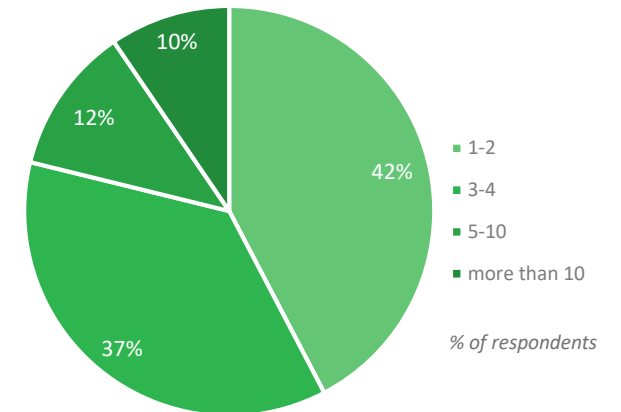
# Location of cooperation partners

## Location of business partners



Academics in Hungary mostly focus on collaboration with regional and national businesses. 46% of respondents indicate the collaboration at national level and 36% at regional as significant or high. However, only 16% of academics indicate significant or high cooperation with international businesses.

## Number of business partners

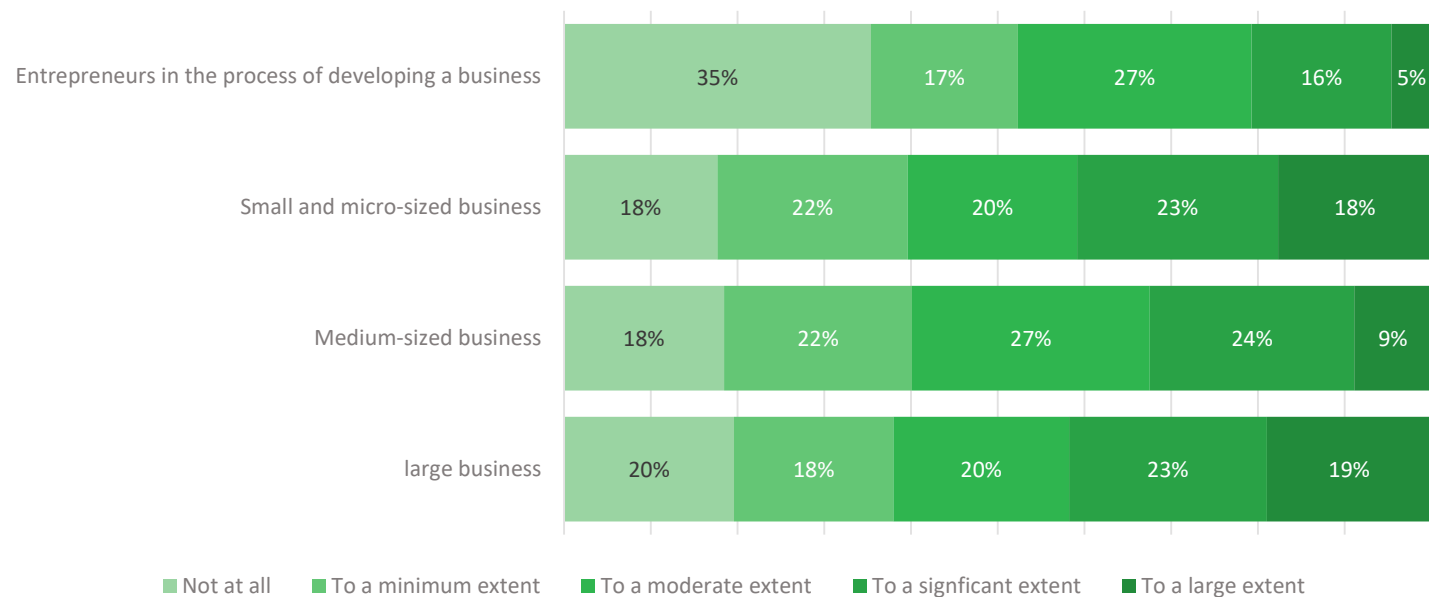


The vast majority of Hungarian academics cooperate only with 1 to 4 businesses (79%). While only 12% have partner relations with 5 or more businesses, and just 10% engage in UBC activities with more than 10 business partners.

# Size of cooperating partners

## Size of cooperating partner

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



Hungarian academics engage to a large extent with large businesses (42%). Traditionally this cooperation dates back to 70's-80's when the large state-owned enterprises that are now private firms undertook research cooperation with public universities<sup>1</sup>.

This cooperation is reduced to 41% of academics cooperating with small/micro-sized companies and 33% with medium-sized businesses.

Hungarian academics are most unlikely to cooperate with entrepreneurs in the process of developing a business. There is lack of social trust towards entrepreneurs in general. After the end of communism in Hungary in 1989 their image has been considerably harmed by the growth of illegal businesses in the early 90's.

<sup>1</sup> Buzás N. (2005). From technology transfer to knowledge transfer: an institutional transition. In: C. G. Alvstam & E. Schamp (Eds.): Linking Industries Across the World (pp. 109-123). Aldershot: Ashgate Publishing.

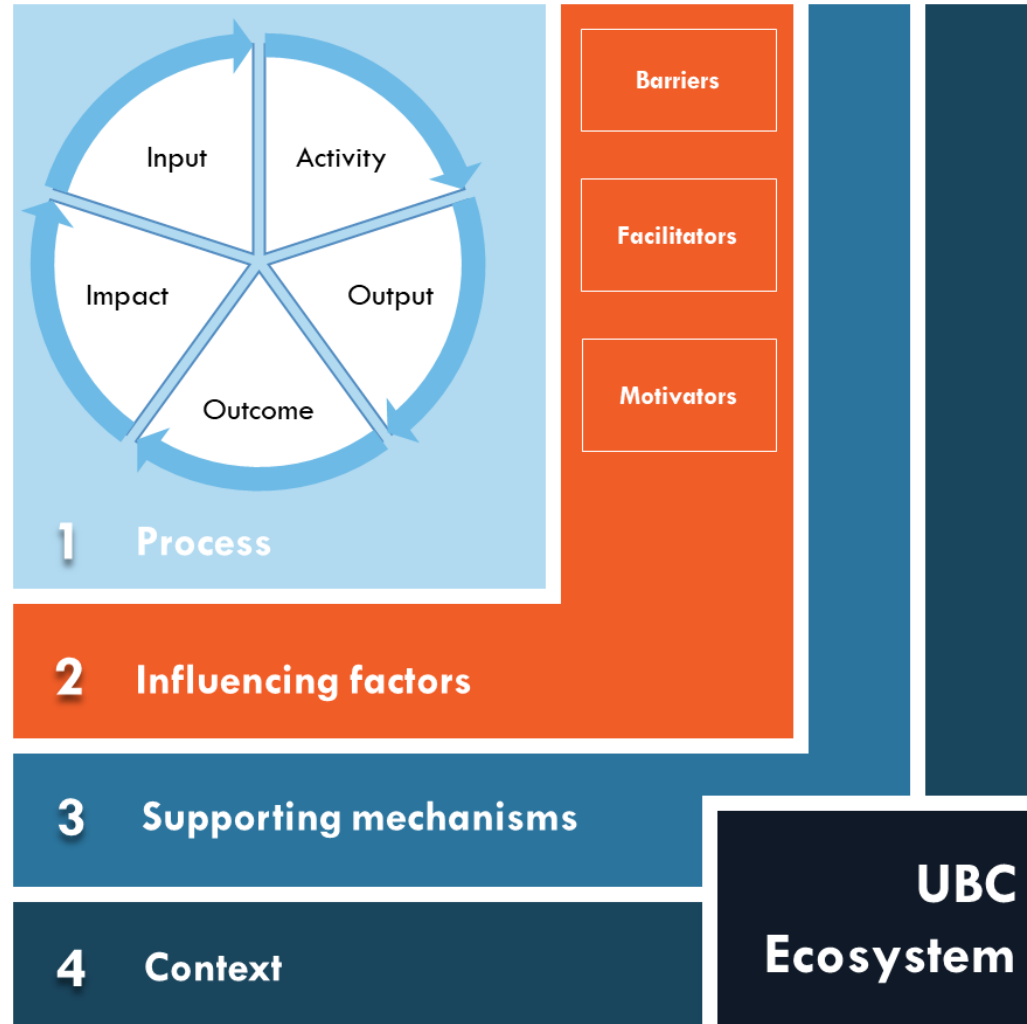
# Factors influencing UBC

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.	Lack of university funding for UBC	Lack of university funding for UBC
2.	Lack of government funding for UBC	Differing motivation / values between university and business
3.	Bureaucracy related to UBC	The focus on producing practical results by business
4.	Limited resources of SMEs	Difficulty in finding the appropriate collaboration partner
5.	Insufficient work time allocated by the university for academics' UBC activities	Insufficient work time allocated by the university for academics' UBC activities
<i>Lowest</i>	Frequent staff turnovers within my university or the business	Frequent staff turnovers within my university or the business

The top five barriers for both collaborating and non-collaborating academics vary, but have some level of similarity and relate to resources, cultural and administrative issues.

Both groups are hindered by the lack of university funding for UBC. As UBC is not part of academics' 'job description' in Hungary, there is no regular budget available at universities for collaborative activities, which is seen as the biggest barrier<sup>1</sup>.

Insufficient work time allocated for academics' UBC activities is another barrier indicated by both cooperating and non-cooperating academics in Hungary. Related to UBC not being perceived part of an academic's job, most Hungarian HEIs do not allocate time for UBC.

As for the differences between groups, cooperating academics are more hindered by the lack of resources, namely limited government funding and resources of SMEs.

Non-collaborating academics perceive cultural barriers, including differing motivations between two organisations and the business focus on practical results, more strongly than the cooperating academics.

<sup>1</sup> Huszár, S., Prónay, Sz., & Buzás, N. (2016). Examining the differences between the motivations of traditional and entrepreneurial scientists. *Journal of Innovation and Entrepreneurship*, 5(1), 1-22.

# Barriers hindering UBC

Hungarian academics perceive most of the barriers to UBC similarly as their European counterparts, though to a slightly higher degree.

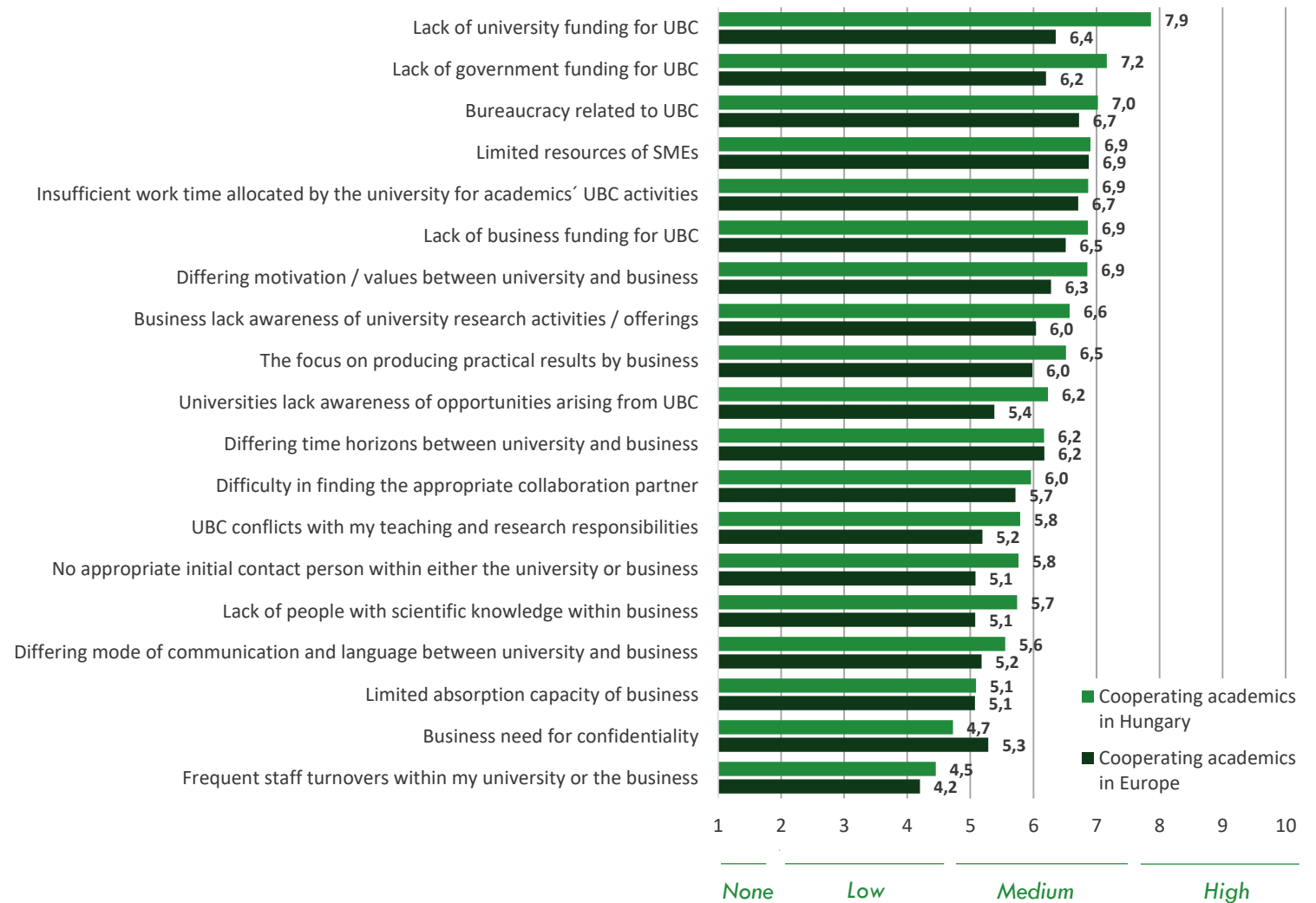
Thus, Hungarian academics are more hindered by funding barriers and bureaucracy related to UBC. Although there is a governmental research funding available for Hungarian universities, the financial resources are supposed to be spent mainly for HEIs' internal R&D activities (e.g. funds for thematic research cooperation).

They also perceive barriers related to differing motivations, business' lack of awareness of university research activities and business' focus on producing practical results more strongly.

The need from business for confidentiality and frequent staff turnovers are the weakest barriers for Hungarian academics.

## Barriers

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

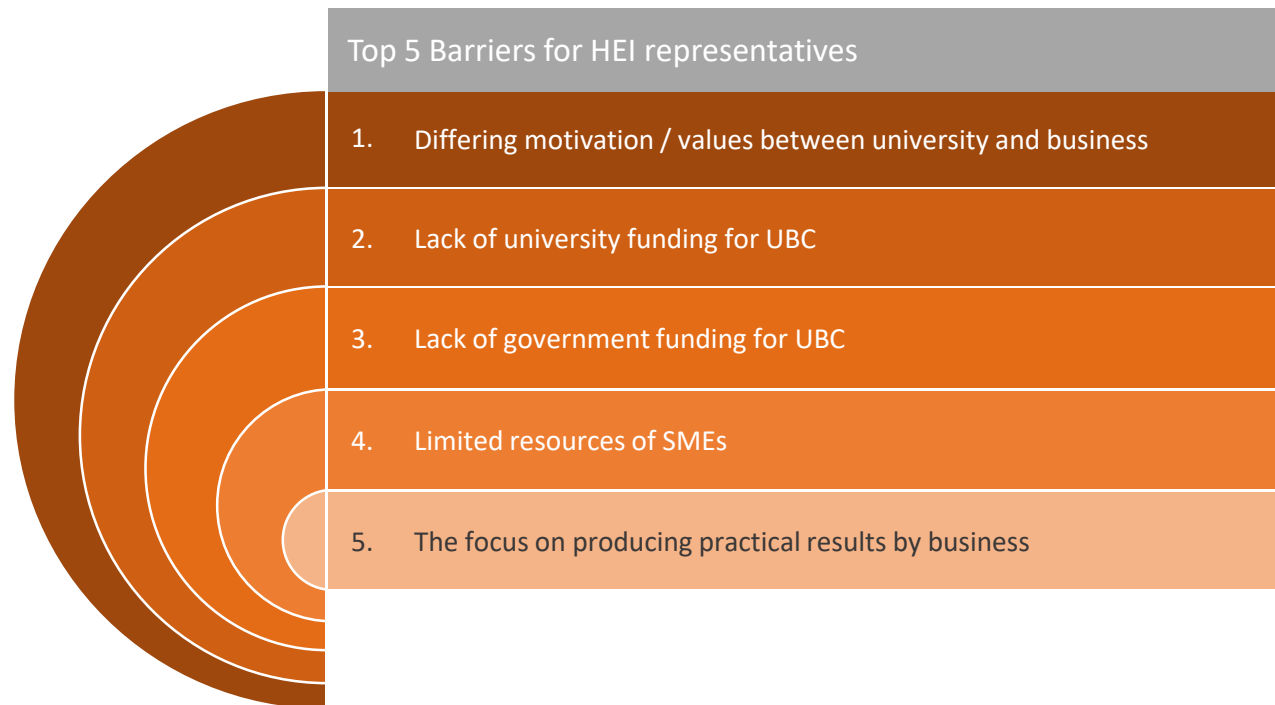




# Barriers hindering UBC

## Barriers

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



Hungarian HEI representatives indicate cultural differences and financial constraints as the strongest barriers hindering UBC.

Differing motivations between two organisations is the strongest barrier. They also recognize that the financial barriers including insufficiency of university and government funding and limited resources of SMEs hinder the UBC to a large extent. In relation to the lack of financial resources, Hungarian HEIs have difficulties in employing and in turn providing sufficient salaries for highly qualified managers or professionals exclusively responsible for UBC.

A less strong but still relevant barrier is the business' focus on producing practical results.

# Barriers hindering UBC

Overall, Hungarian and European HEI representatives perceive barriers to UBC in a different way.

Thus, Hungarian HEI representatives are more hindered by differing motivations, business' practical orientation and bureaucracy related to UBC.

They also perceive stronger funding barriers compared to their European HEI representatives. Although there is funding available for HEIs' R&D, the sources of finance are temporary and usually are not dedicated to external collaborative activities (e.g. funds for thematic research cooperation).

Hungarian HEI representatives have a lower perception of 'limited resources of SMEs', which is however the biggest barrier for their European counterparts.

They also do not perceive limited capacity of businesses to absorb knowledge as inhibiting to UBC as HEI representatives do in Europe.

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

## 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. **Facilitators** – factors that enable or ease cooperation
2. **Motivators** – 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.


The main facilitators for both Hungarian academics and Hungarian HEI representatives are very similar.

The main four facilitators focus on the relationship aspect of UBC, highlighting the importance of prior relationship with the business partner, a shared goal, mutual trust, and mutual commitment UBC. These facilitators play a key role also because of differing motivations identified as barriers. The positive relationship dynamics between two parties can assure a successful UBC.

The difference between two groups lies in academics perceiving funding to undertake UBC as one of the most relevant facilitators, while HEIs representatives recognize the interest of universities in accessing business-sector R&D facilities.

## Facilitators

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



	Academics cooperating	HEI representatives
1.	Prior relation with the business partner	Prior relation with the business partner
2.	Existence of mutual trust	Existence of a shared goal
3.	Existence of a shared goal	Existence of mutual commitment
4.	Existence of mutual commitment	Existence of mutual trust
5.	Existence of funding to undertake the cooperation	Interest of the university in accessing business-sector R&D facilities

# Drivers stimulating UBC

European and Hungarian academics' perceptions of UBC facilitators more or less align. Yet, notably, Hungarian academics perceive the drivers less stronger than their European counterparts.

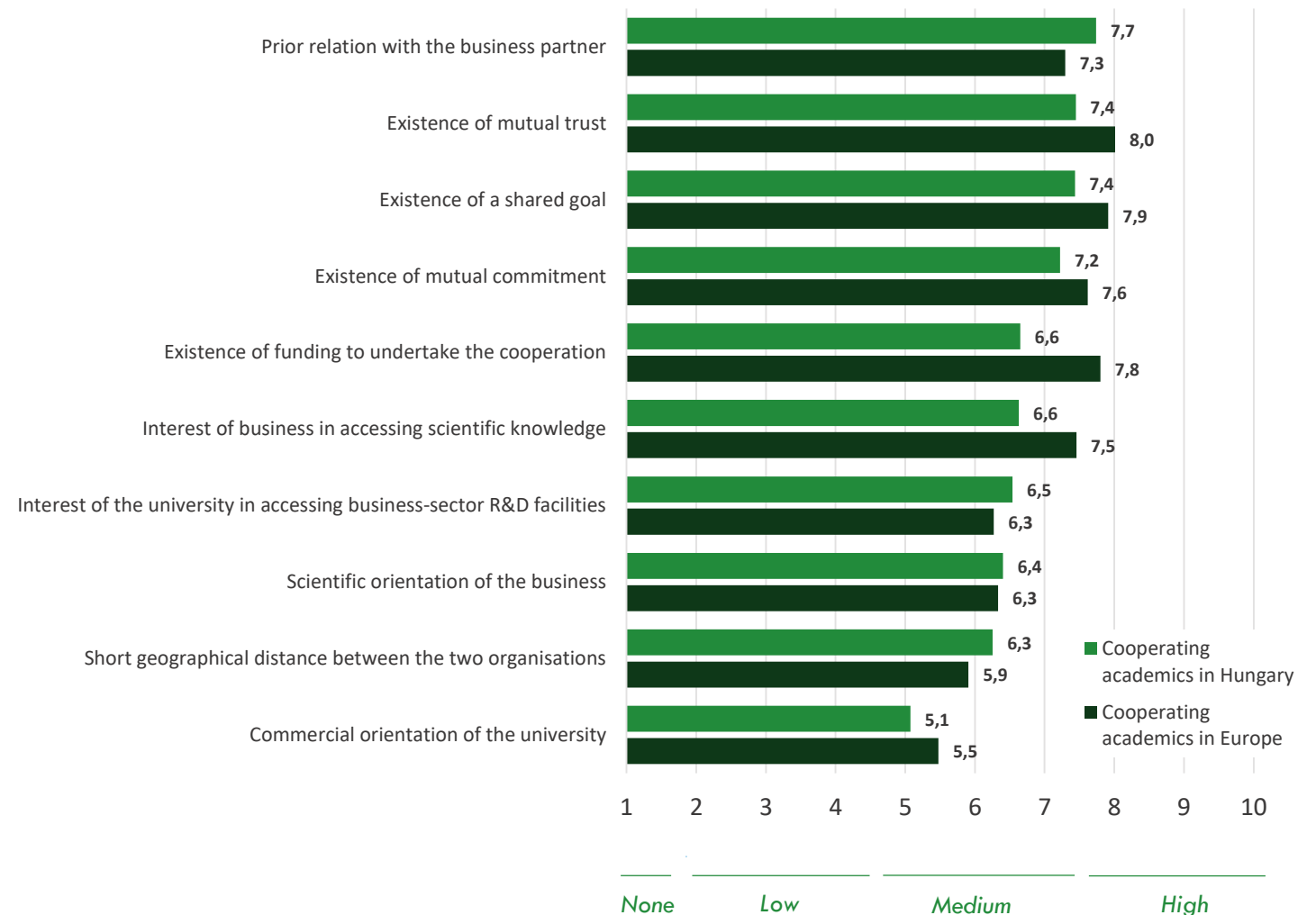
For both groups, the most common drivers are those related to the relationship component. Hungarian academics value prior relationship most, which exceeds European average. For them successful UBC lies in a long-established relationship with business partner that is furthermore much easier to maintain and increase than to establish a new cooperation.

The existence of mutual trust, shared goal and mutual commitment are also important UBC facilitators for Hungarian academics, but they are perceived stronger in Europe.

Commercial orientation of the university emerges as the least stimulating facilitator for both groups. Generally the commercial orientation is quite low at Hungarian universities.

## Facilitators

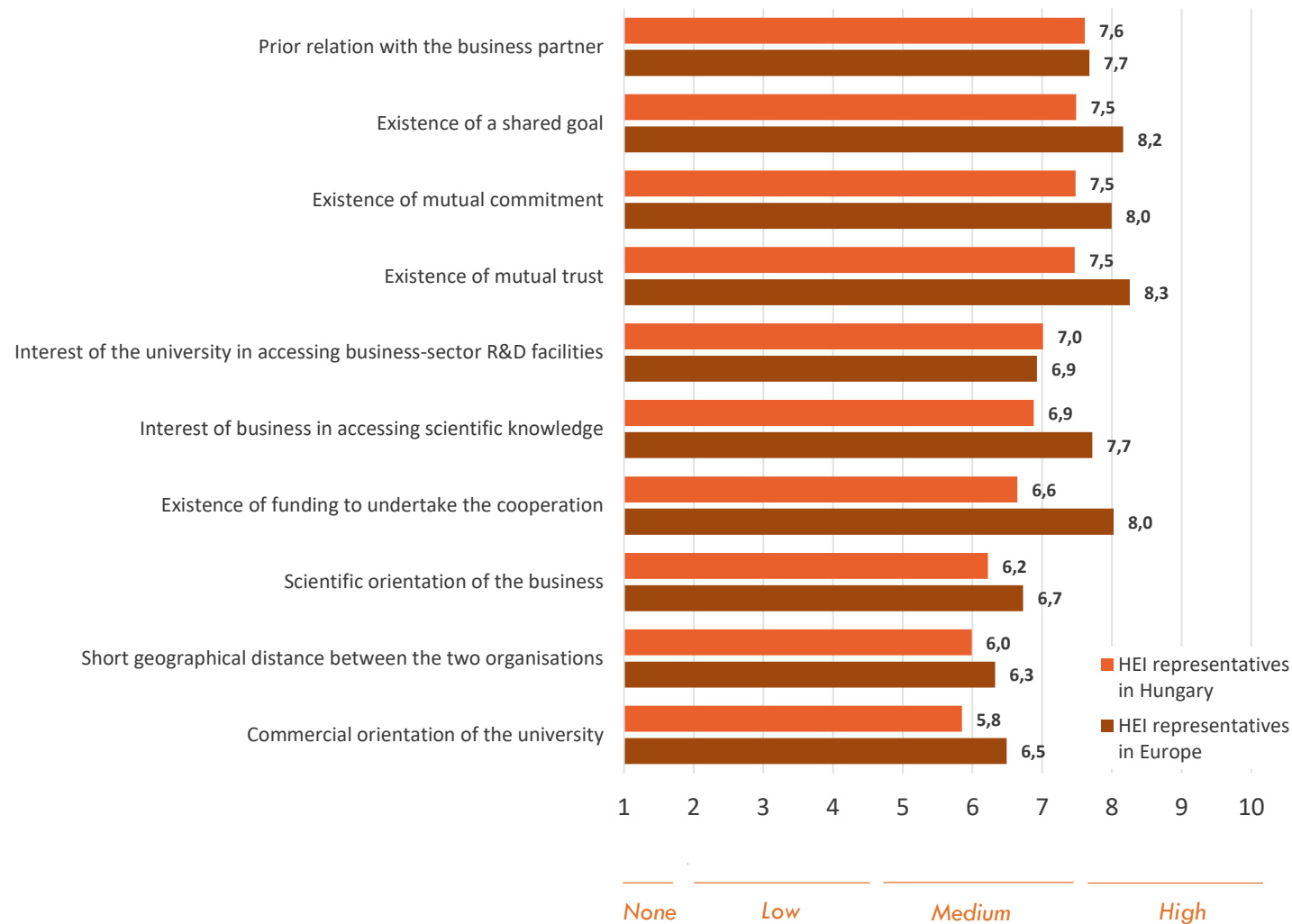
*'What is facilitating your cooperation with business?' – as answered by academics*



# Drivers stimulating UBC

## Facilitators

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



European and Hungarian HEI representatives have slightly different perceptions of UBC facilitators. Notably, Hungarian HEI representatives perceive them less stronger.

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

Compared to European average, Hungarian HEI representatives have a lower perception of the business' interest in accessing scientific knowledge and existence of funding to undertake cooperation. Specifically these results suggest that even though HEI representatives seek for cooperation opportunities, there is still low interest from Hungarian businesses in terms of their financial investment for UBC<sup>1</sup>.


Similarly to academics, short geographical distance between two organisations and commercial orientation of the universities emerge as the weakest facilitators for both groups.

<sup>1</sup> Huszár, S., Prónay, Sz., & Buzás, N. (2016). Examining the differences between the motivations of traditional and entrepreneurial scientists. *Journal of Innovation and Entrepreneurship*, 5(1), 1-22.

# 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.	Obtain funding / financial resources	Improves graduate employability
2.	Gain new insights for research	Obtain funding / financial resources
3.	Uses my research in practice	Contributes to the mission of the university
4.	Improves graduate employability	Addresses societal challenges and issues
5.	Contributes to the mission of the university	Gain new insights for research

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

While cooperating academics highlight the motivation to obtain funding, those not engaged in UBC are more driven by the willingness to improve graduate employability, although funding still plays an important role for them. Generally, Hungarian academics initiate UBC primarily for obtaining financial resources due to the lack of funding for conducting research.

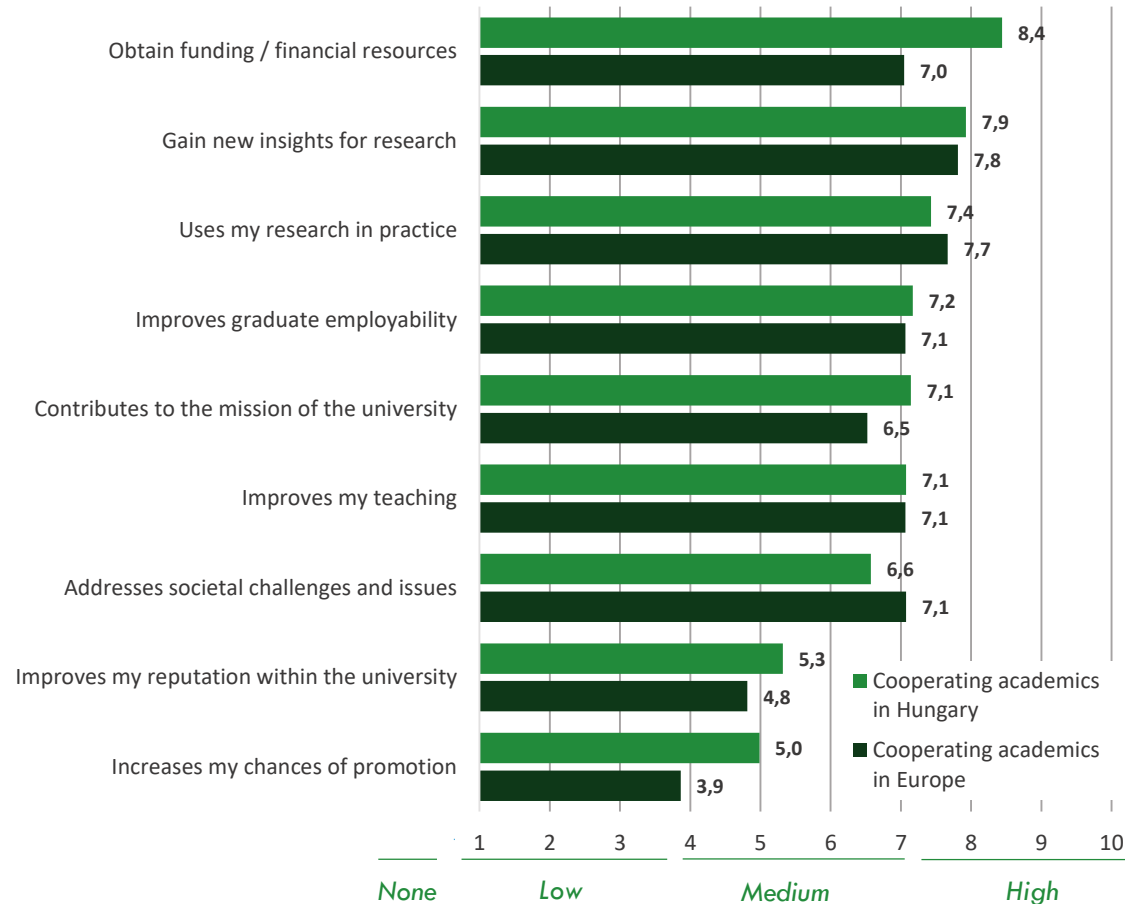
Cooperating academics are also more motivated by the benefits for their own research (e.g. new insights, practical application), as they are willing to advance their scientific outputs.

On contrary, non-cooperating Hungarian academics rate higher the motivators related to other stakeholders (e.g. employability of graduates, societal needs, mission of the university), which suggest that they have more idealistic perceptive.

# Drivers stimulating UBC

## Motivators

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



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

In comparison to the European average, the top two motivators, which are related to financial resources and research, are perceived slightly stronger in Hungary. It highlights the general need for additional financial resources that is hindering research and scientific activities of Hungarian academics.

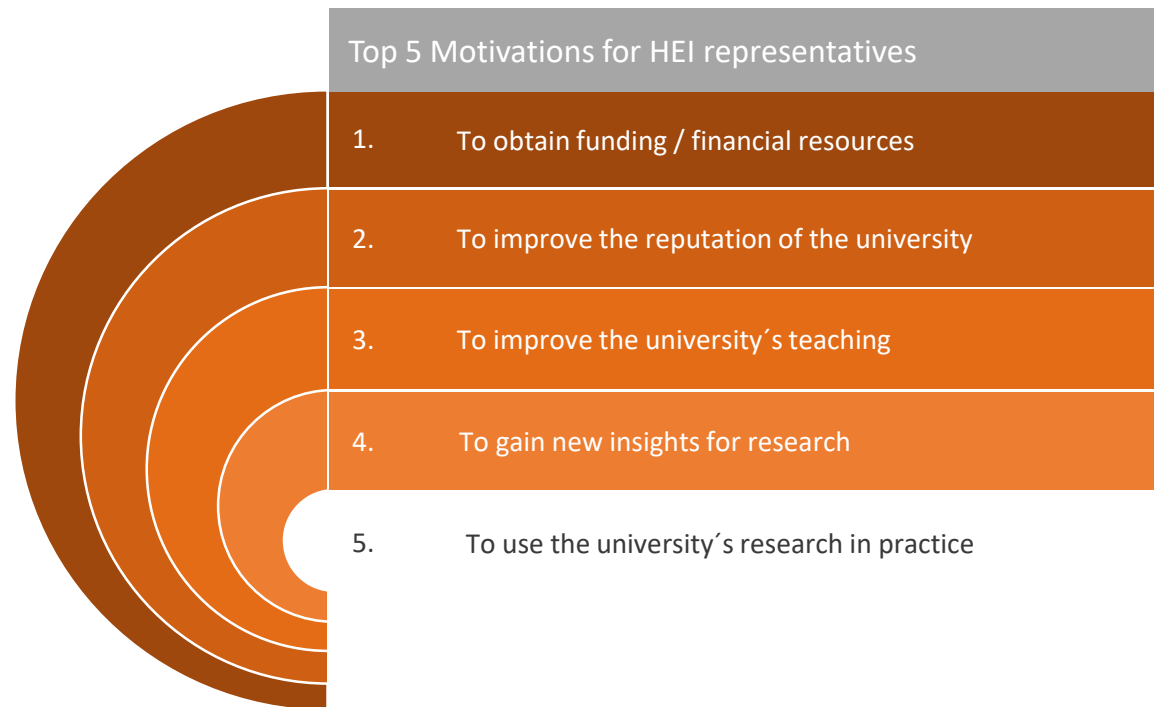
Motivation to address societal challenges drives Hungarian academics less than their European counterparts. Contrary, they are however more motivated than European academics to contribute to the mission of the university. Hungarian academics are more committed towards the goals of their institutions.

Notably 'promotion' and 'reputation' related motivators are the weakest drivers stimulating UBC for both groups, although perceived stronger by Hungarian academics. Generally UBC doesn't contribute to reputation or promotion of academic communities at Hungarian HEIs.

# Drivers stimulating UBC

## Motivators

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



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

This is followed by motivators specifically related to improving university's research and teaching.

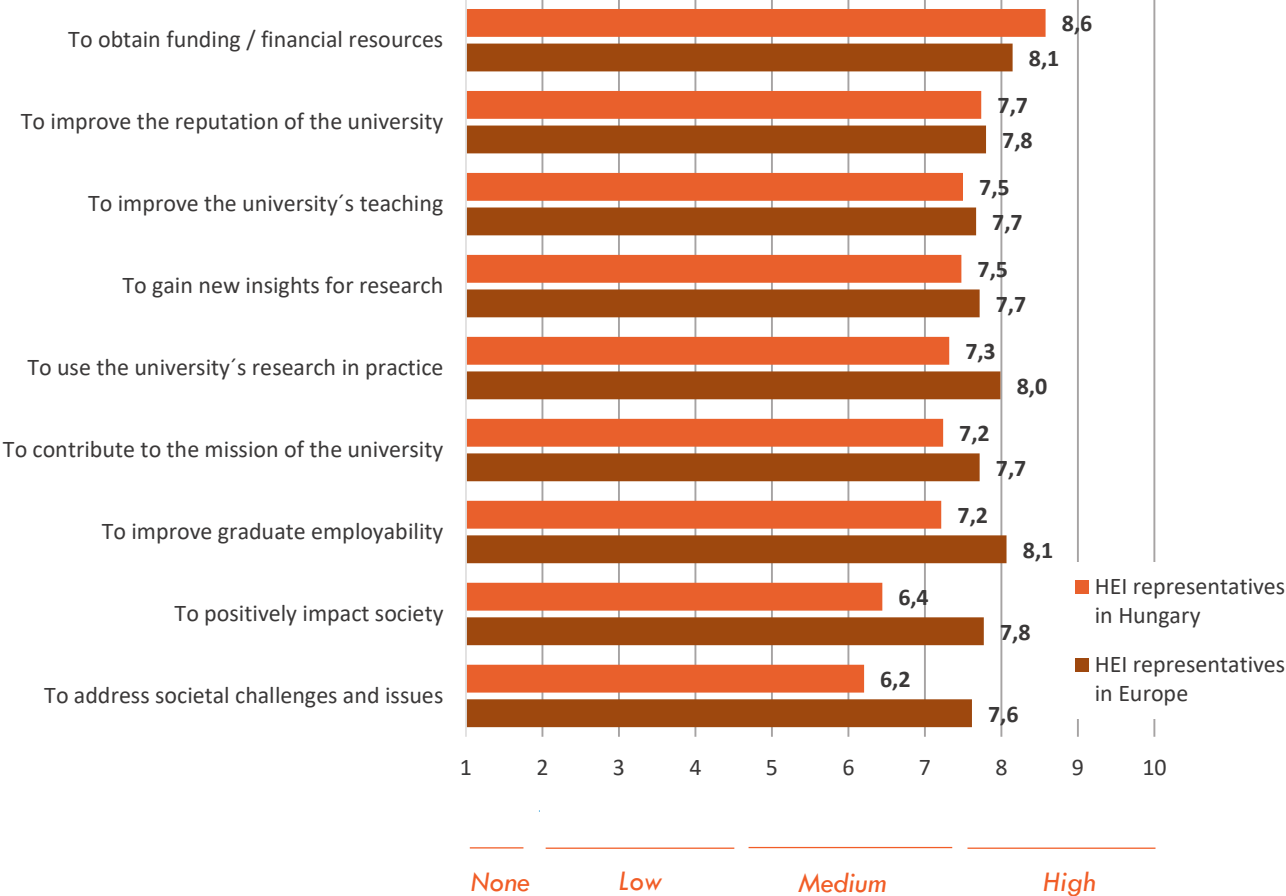
The lack of financial resources has negative impact on other factors (e.g. teaching or research). This is why HEIs are generally more interested in obtaining funding, which is able to contribute to development and improvement of further activities.



# Drivers stimulating UBC

## Motivators

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



Hungarian HEI representatives perceive almost all factors that might motivate their engagement in UBC to be lower than the European average.

The only exception, where motivation of Hungarian respondents was higher than the European average relates to the financial resources. This is consistent with the academic perspective.

Thus Hungarian HEI representatives are considerably less motivated by the benefits that other stakeholders can get from UBC (students, university society), as they are more concerned by financial sustainability of their institutions.

# Benefits of UBC

Hungarian academics and HEI managers have relatively 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. This is consistent with the business perspective reporting that Hungarian companies also perceive universities as the main UBC beneficiaries.

The Hungarian government is believed by both groups to gain little benefits from UBC, although it is perceived as one of the main actors specifically in terms of providing policy and funding support for UBC.

Both groups see the benefit for academics lower than the one for students, businesses and universities.

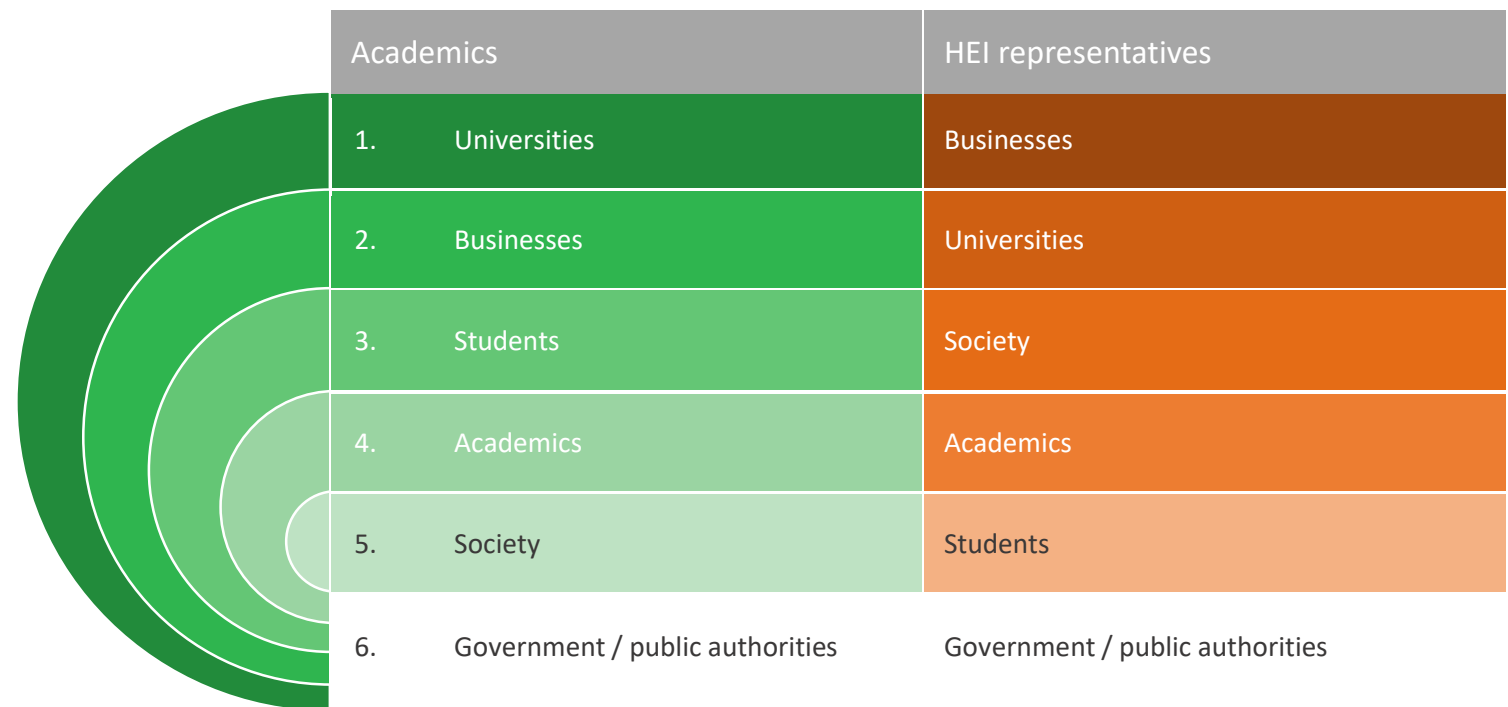
**Benefits** are the perceived positive outcomes (financial and non-financial) from undertaking UBC as relevant for the different stakeholder groups that can potentially participate in UBC.

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

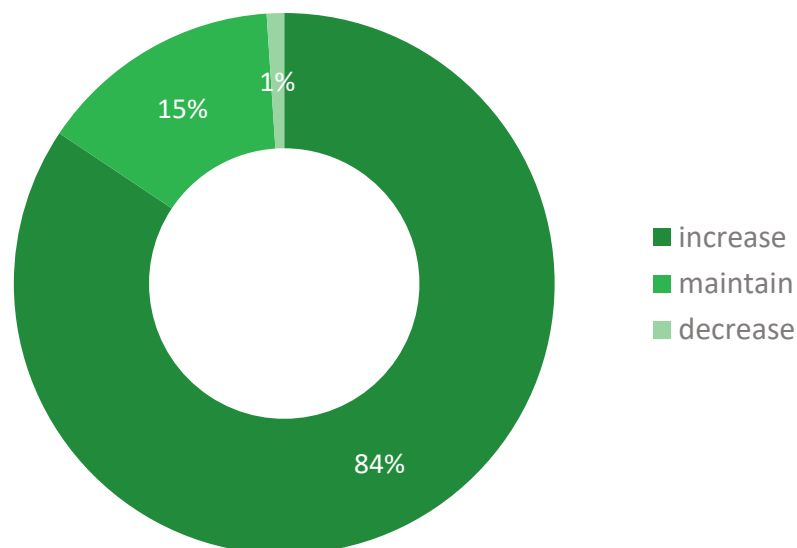
*'Who receives the benefits of UBC?' - as answered by academics and HEI representatives*



# Future intentions

## Future UBC intentions – Hungary

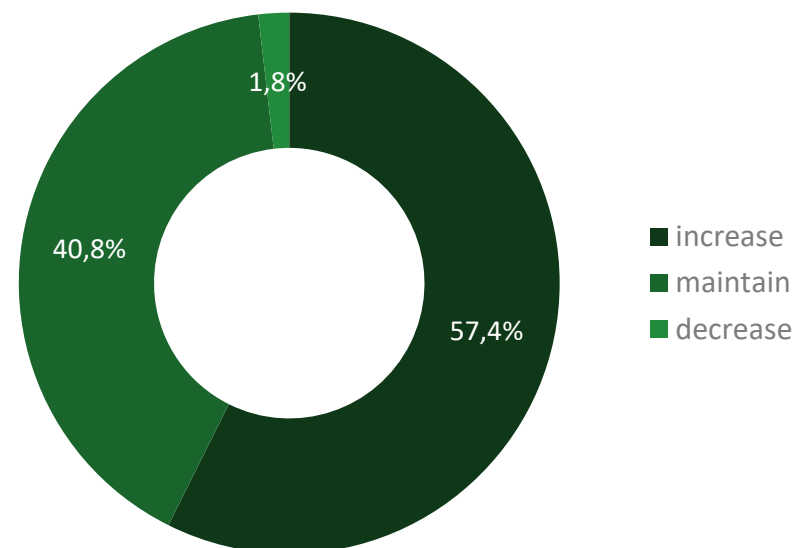
*As answered by Hungarian academics*



Hungarian academics show a very strong commitment to UBC. 99% of academics expect to increase (84.4%) or maintain (14.6%) their UBC activities. In this sense, Hungary proves to be an attractive country for UBC.

## Future UBC intentions – EUROPE

*As answered by European academics*



Academics in Europe show less strong commitment to increasing UBC activities than Hungarian academics. 57.4% of European cooperating academics expect to increase their cooperation and 40.8% plan to maintain their activities with businesses.

# Willingness to recommend UBC

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

Hungarian academics are almost as equally satisfied with their UBC in research as their European counterparts (NPS = 20). With 45% of them speaking positively about it, and 25% being considered as negative influencers.

Compared to research, Hungarian academics are less satisfied with their cooperation in education (NPS=-3), which is however less negative than the satisfaction of their European counterparts (NPS=-14). The recent Hungarian policy devoted to the development of curriculum co-design is however likely to stimulate a change for the better in the near future (e.g. there are funds available for cooperative HE).

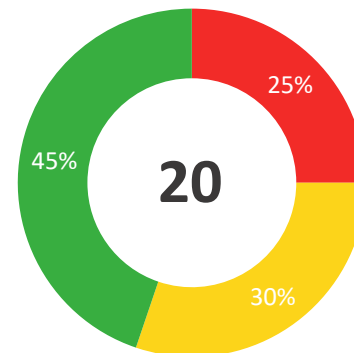
## Willingness to recommend to an academic colleague cooperation with business in R&D and education

As answered by academics

	Detractors	Passives	Promoters
Academics cooperating in E&T	39%	25%	36%
Academics cooperating in R&D	25%	30%	45%

## Satisfaction in cooperation with businesses (Net Promoter Score)

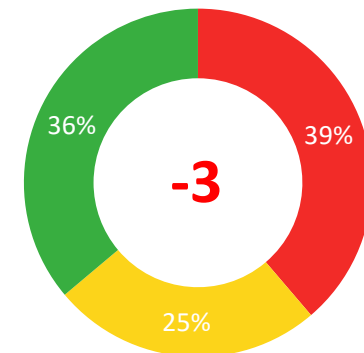
Academics cooperating in research



■ Detractors ■ Passives ■ Promoters

European academics' NPS: 17

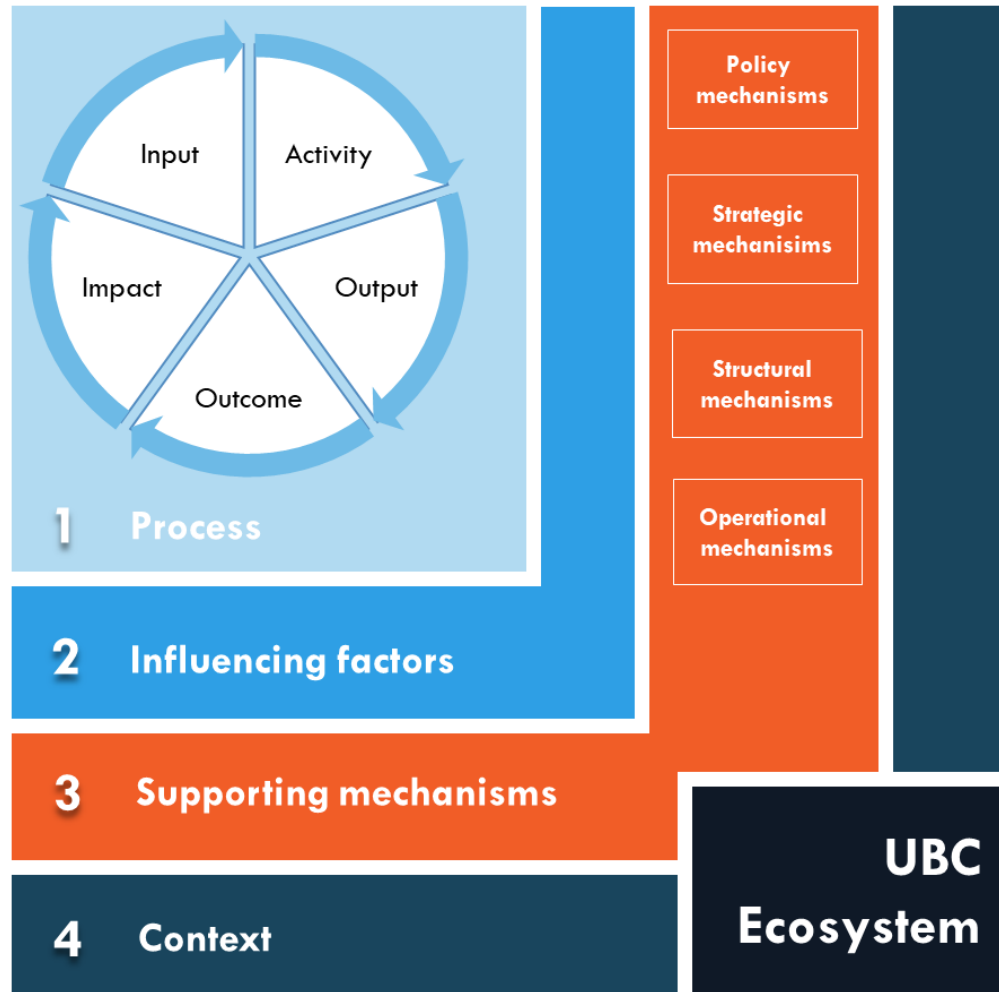
Academics cooperating in education



■ Detractors ■ Passives ■ Promoters

European academics' NPS: -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 supporting mechanisms:

- Policy
- Strategic
- Structural
- Operational

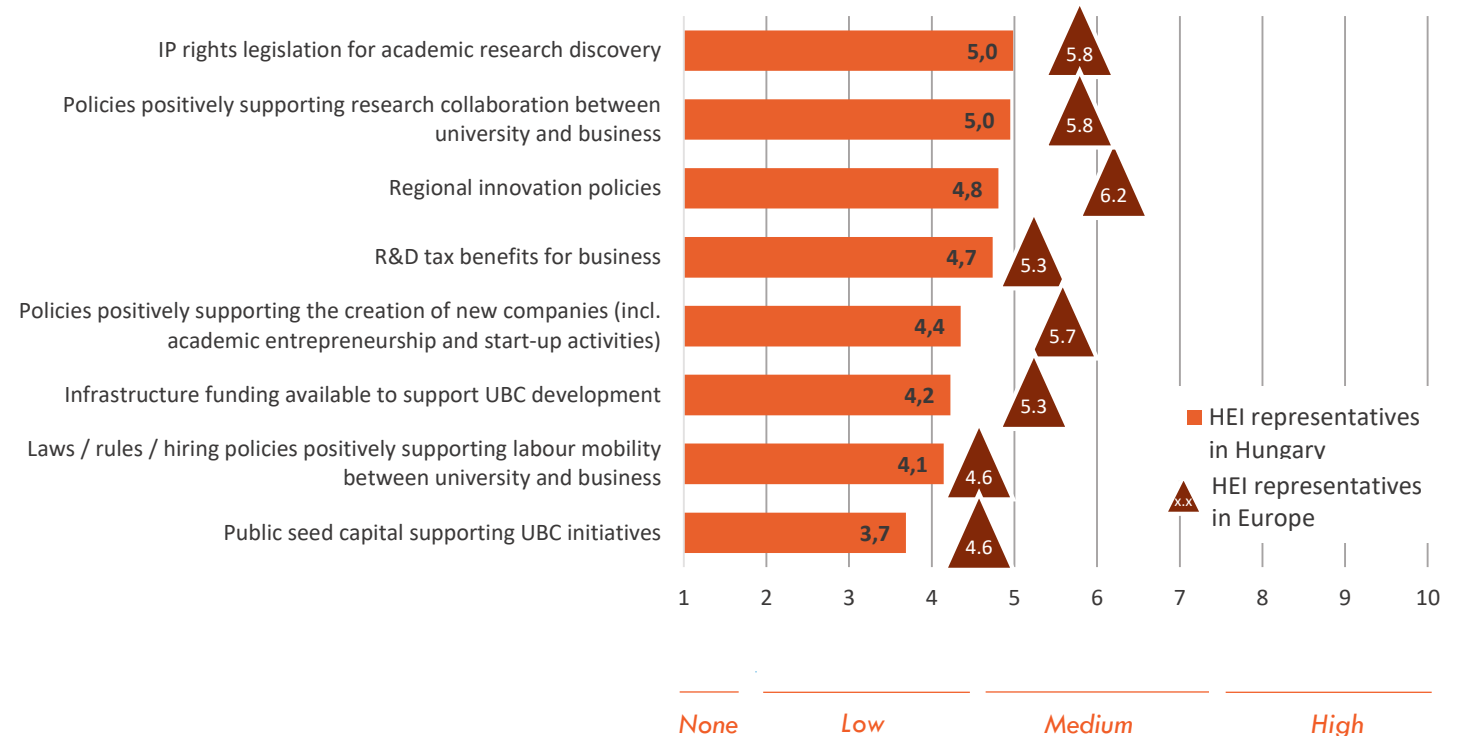
This section outlines the extent to which UBC supporting mechanisms are developed in this sample from the HEI perspective.

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

# Supporting mechanisms for UBC

## Policy mechanisms

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



Hungarian HEI representatives perceive policy mechanisms to be developed to a medium-low level. These are considerably lower than the perceptions of their European counterparts.

IP rights legislation for academic research discovery and policies positively supporting UBC in research are the most developed supporting mechanisms (5.0 each), followed by and regional innovation policies (4.8). The averages for these mechanism however barely reach the mean of 5 points, which indicates a rather low development of the UBC policy environment in Hungary.

The mechanism related to R&D tax benefits for business are also less developed than in other European countries. This can be explained by the recently changed taxing policies which are believed to have a negative impact on Hungarian UBC in general<sup>1</sup>.

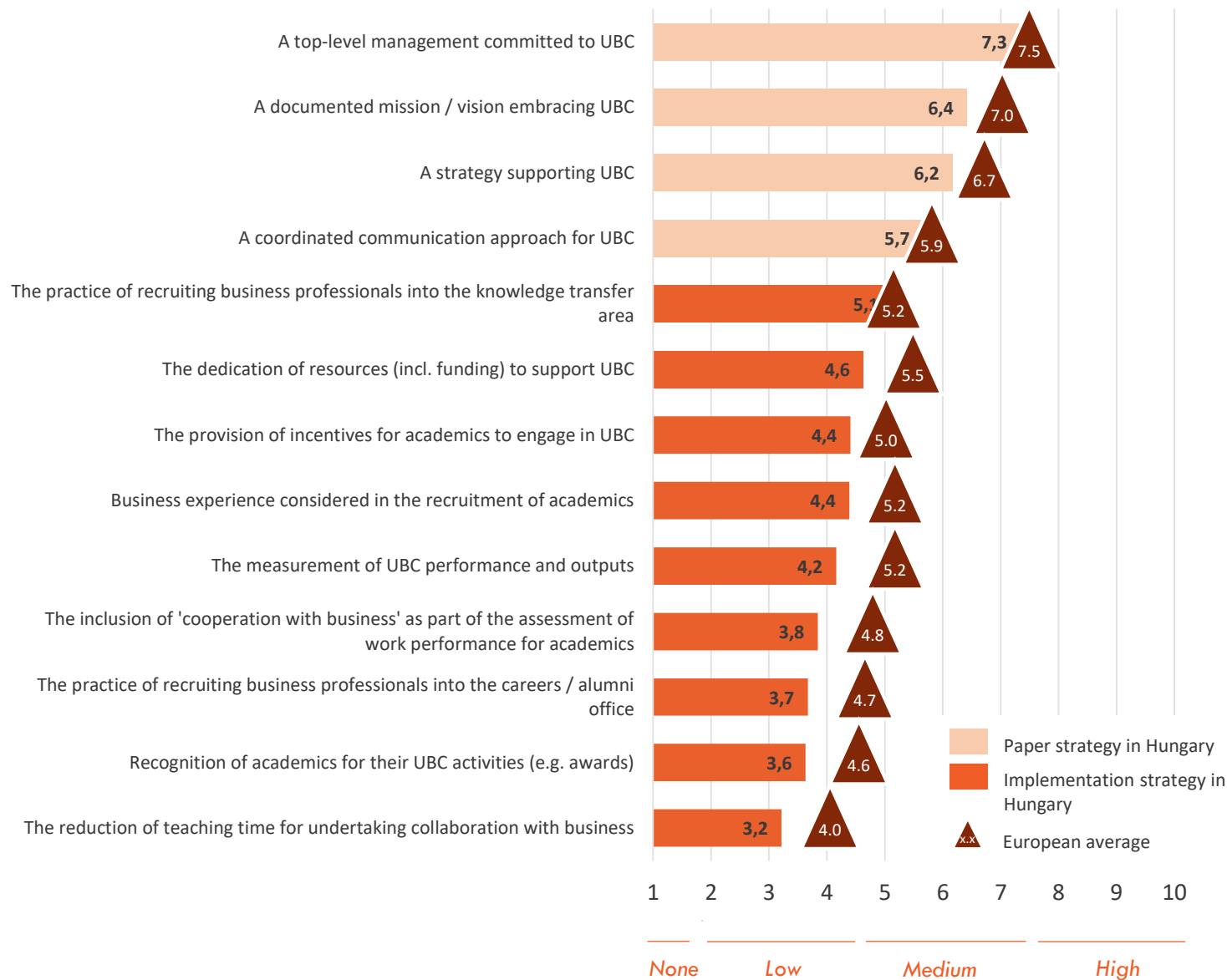
The least developed mechanisms, as indicated by both Hungarian and European HEI managers, are the hiring policy support to labour mobility between universities and business (4.1) and public seed capital for UBC (3.7).

<sup>1</sup>Amendments to the Hungarian Fundamental Law: Act LXXVI of 2014 on Scientific Research, Development and Innovation. Retrieved from URL: [nkfih.gov.hu/the-office/organization/act-lxxvi-of-2014-nrdi-office](http://nkfih.gov.hu/the-office/organization/act-lxxvi-of-2014-nrdi-office)

# Supporting mechanisms for UBC

## Strategic mechanisms

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



The development of the strategic mechanisms in Hungarian and European HEIs is similar, although still lower in Hungary .

There is a high commitment of top-level management of Hungarian HEIs to UBC (7.3). Similar to the European HEIs, the paper strategies are substantially more developed than implementation strategies.

The least developed mechanisms are related to the recognition of academics' UBC activities (3.6) and the reduction of their teaching time (3.2). Similar concerns are raised by the academics. These two factors can be considered as the main obstacles that draw back the UBC development in Hungary.

# Supporting mechanisms for UBC

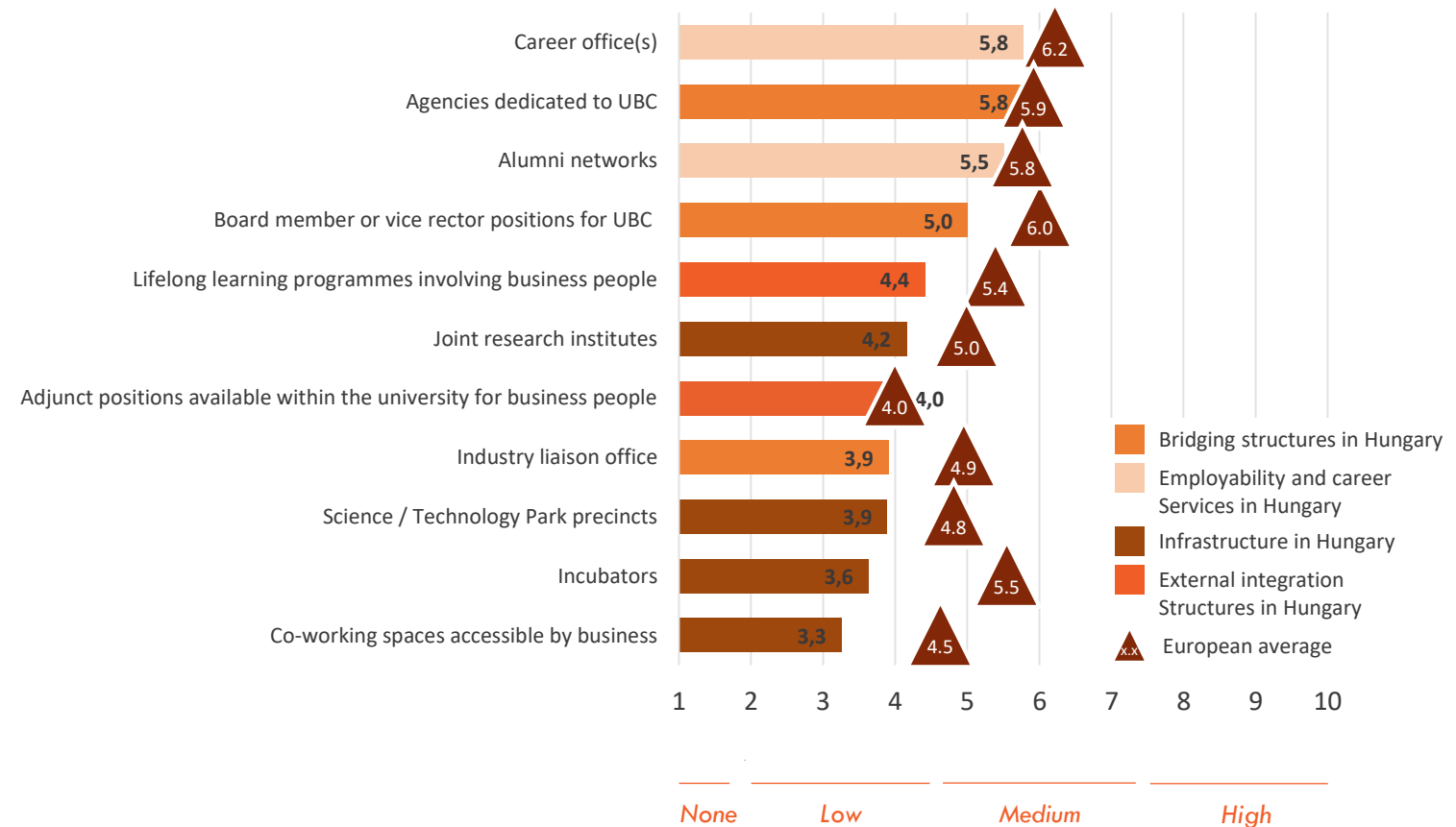
Structural mechanisms are less developed in Hungarian HEIs than in their European counterparts.

Albeit a slight difference in the level of development, the European and Hungarian HEI representatives indicated the same top four structural mechanisms, related to employability services and UBC bridging structures. Of these four mechanisms, the board member or vice rector position for UBC is significantly less developed in Hungary.

Despite significant investments by the European Commission through its European Regional Development Fund program into infrastructure, the least developed UBC supporting structural mechanism are those related to infrastructure, including Science/Technology precincts (3.9), incubators (3.6) and co-working spaces accessible by business (3.3).

## Structural mechanisms

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

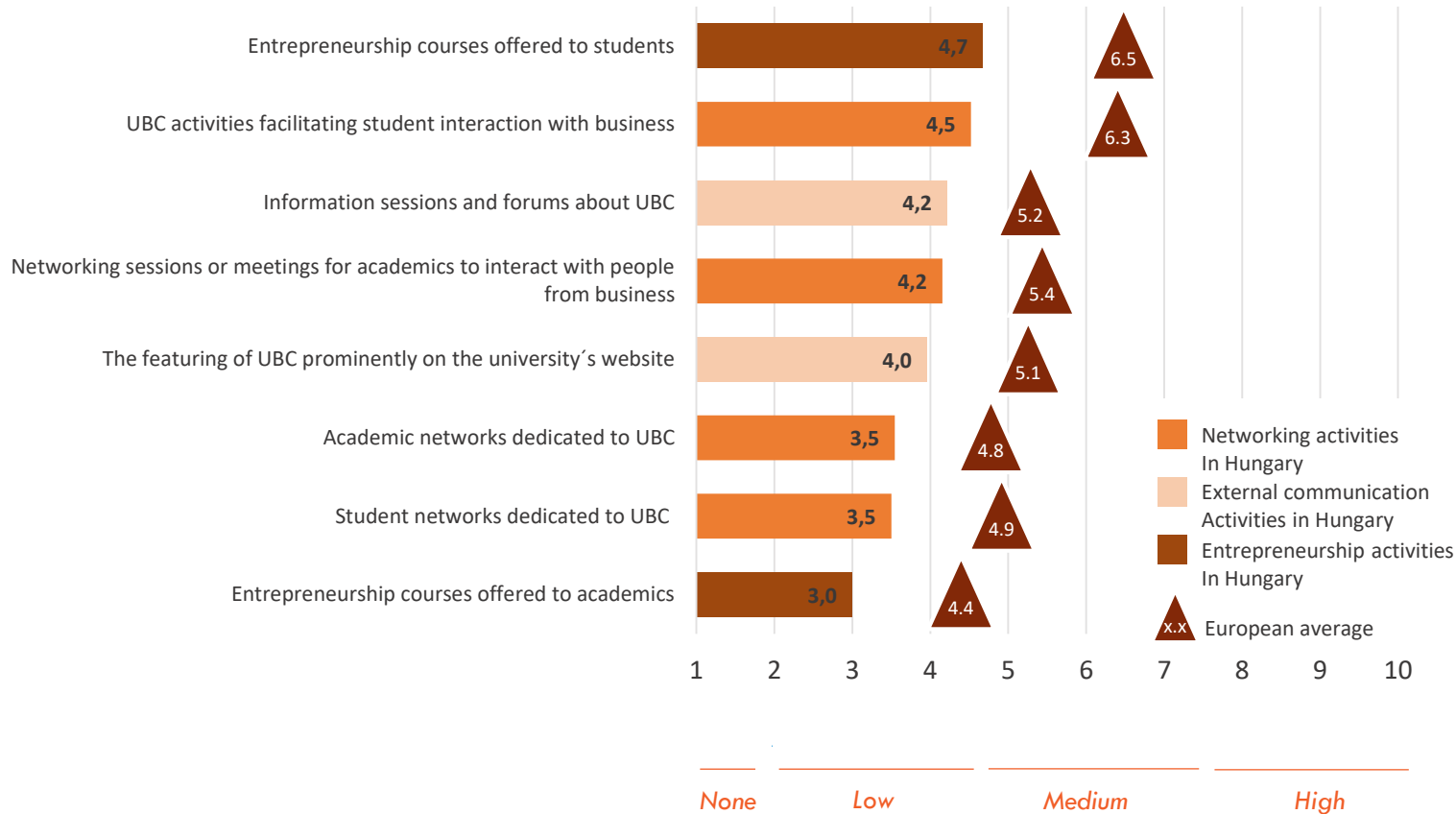




# Supporting mechanisms for UBC

## Operational mechanisms

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



Overall, the development of operational mechanisms in Hungarian HEIs is significantly lagging behind the European average.

Student-oriented mechanisms are the most developed for both European and Hungarian HEI representatives, with entrepreneurship courses offered to students and UBC activities facilitating student interaction with businesses ranked the highest. However, there is a large gap between the European and Hungarian averages.

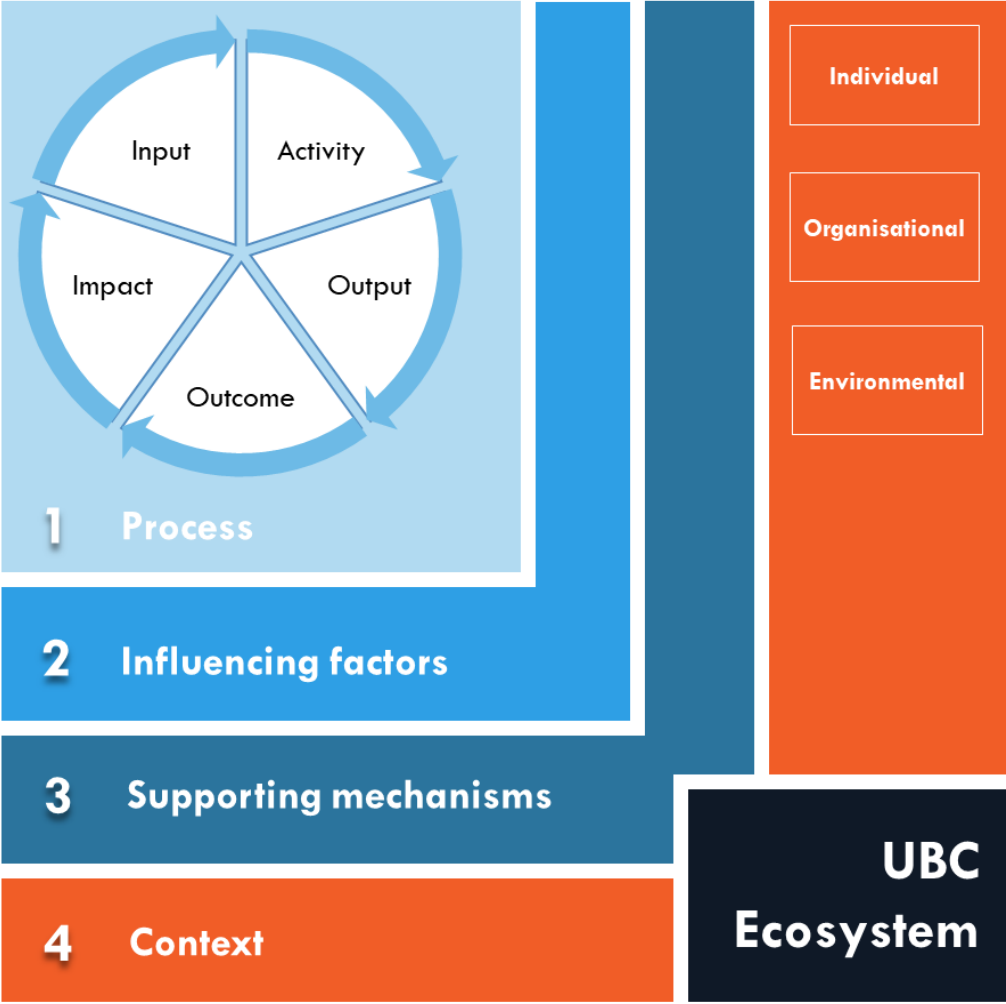
The student and academic networks dedicated to UBC and entrepreneurship courses offered to academics are the most underdeveloped operational mechanisms. Generally, entrepreneurship education in Hungary is a relatively new field, which was non-existent at all before the regime change in 1989.

# Context

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 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.).

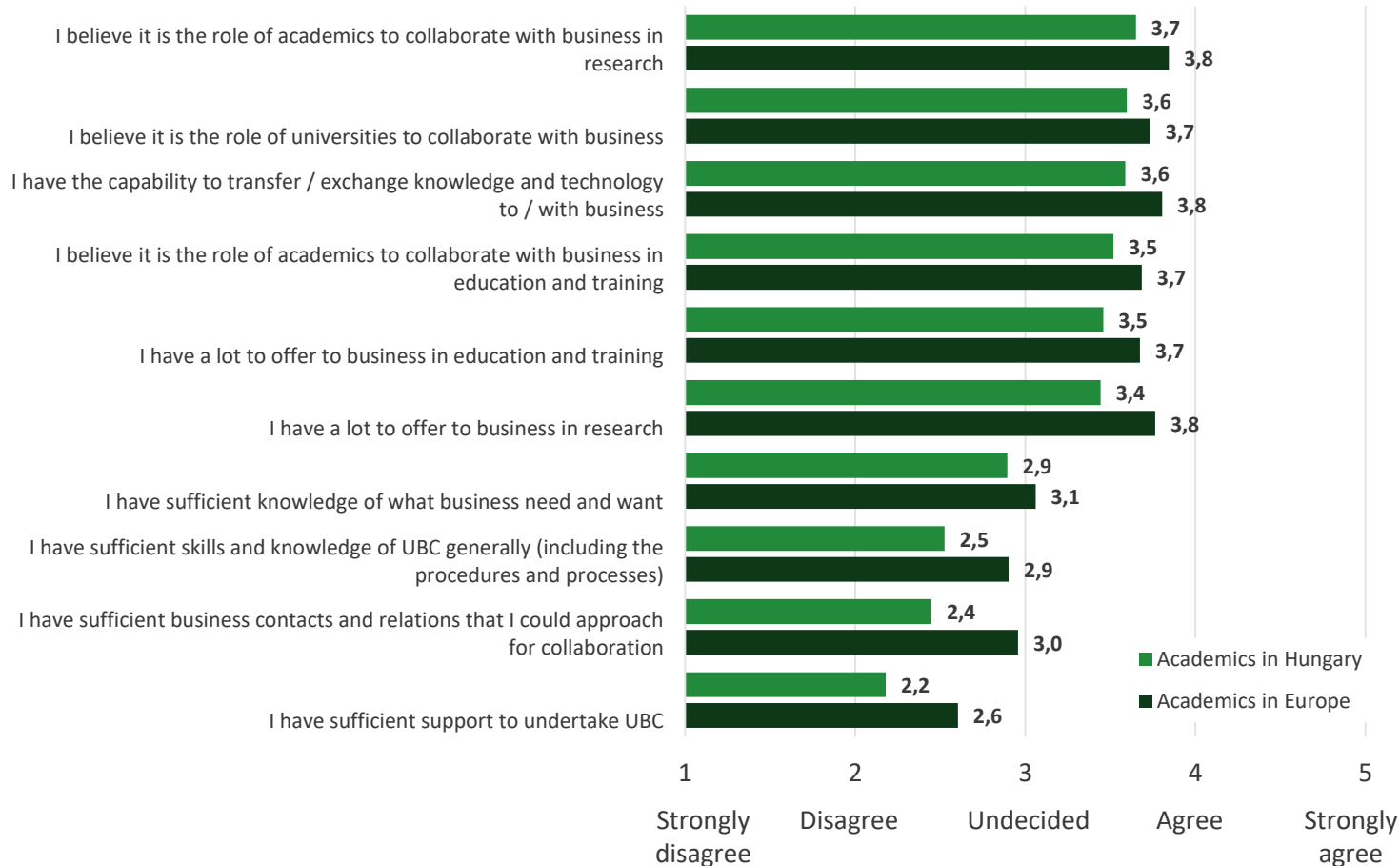
This section outlines how some contextual factors influence UBC in the country.



# UBC capabilities

## Capabilities for UBC

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



Hungarian academics identified moderate capabilities for UBC and beliefs about the role of UBC. For all of them Hungarian academics have a less positive attitude than their European counterparts.

Hungarian academics believe it is their and universities' role (3.5) to collaborate with business, in both research (3.7) and education (3.5). They identified their strengths in the ability to exchange knowledge (3.6), providing education (3.5) and doing research for companies (3.4).

Hungarian academics however consider that their knowledge about UBC and business contact base are insufficient (2.5 and 2.4 respectively). Overall, more than a half of Hungarian academic respondents do not collaborate with businesses and do not have working experience in the private sector.

Generally, they lack support to undertake UBC (2.2). Although Hungarian academics expressed commitment towards fostering UBC, there is still a considerable lack of resources allocated for their cooperative activities including financial incentives and funding as well as HR responsible for UBC.

# Context

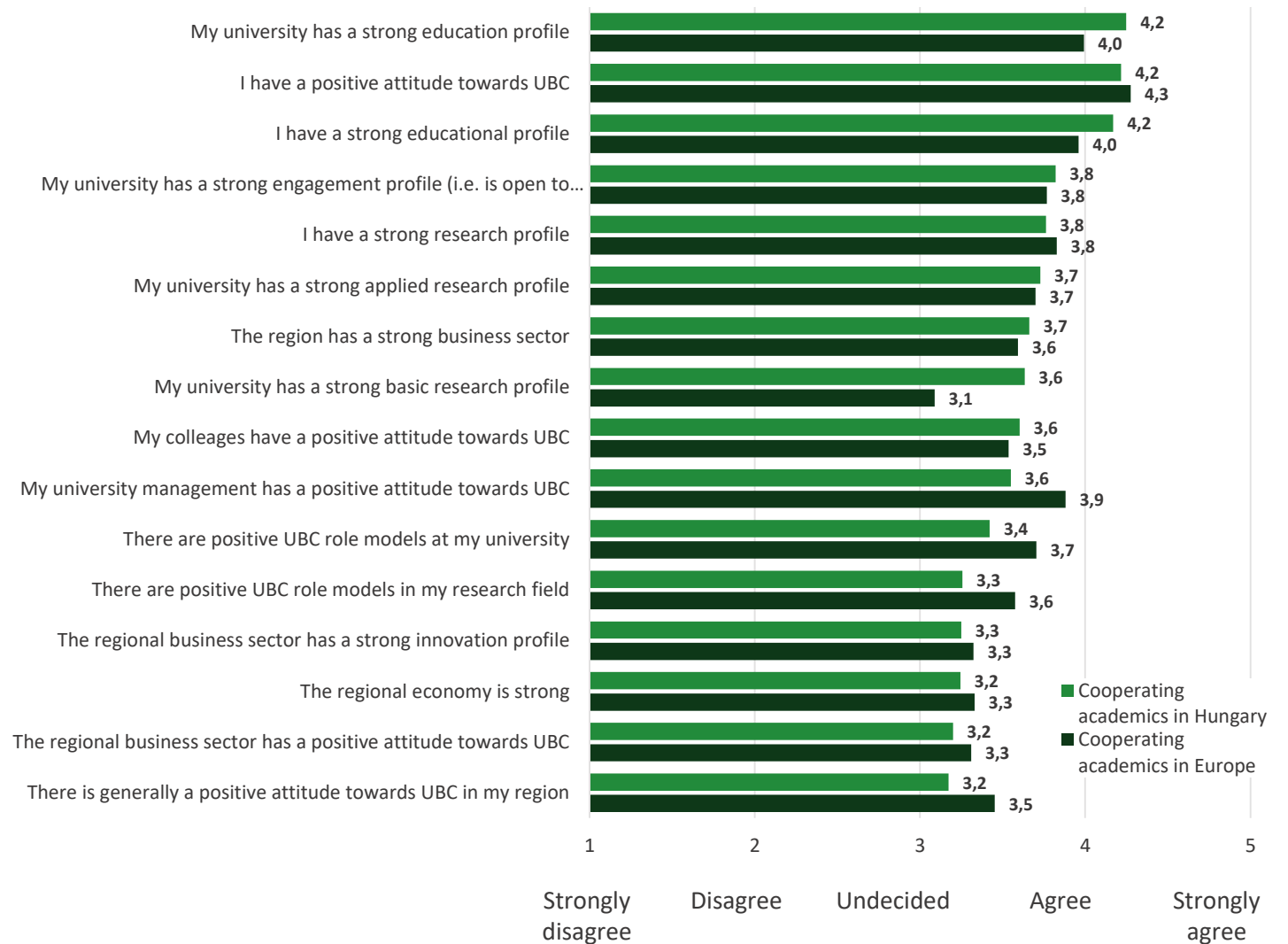
European and Hungarian academics perceive the contextual factors, affecting UBC similarly, with only some exceptions.

Hungarian academics perceive that they and their universities have a strong educational profile. However, while they perceive their institutions to have a strong basic research profile (3.6), their European counterparts are less convinced (3.1).

Overall, both groups have a positive attitude towards UBC. Yet, Hungarian academics perceive a less positive attitude of the business sector and the region in general towards UBC.

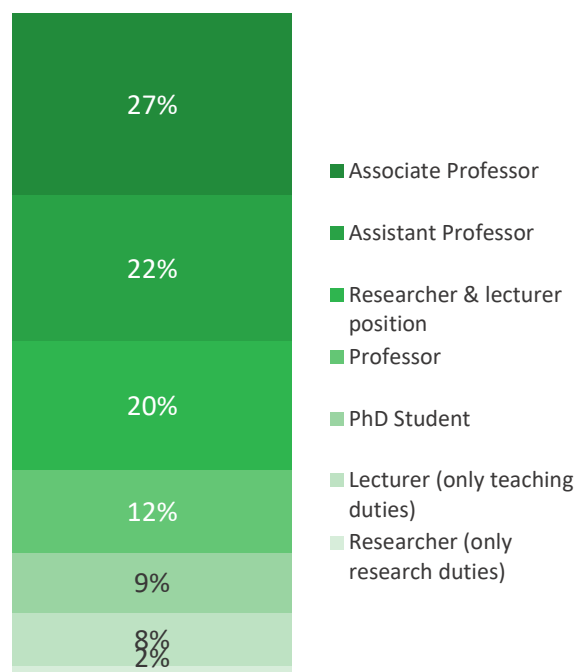
## Contextual factors affecting UBC

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



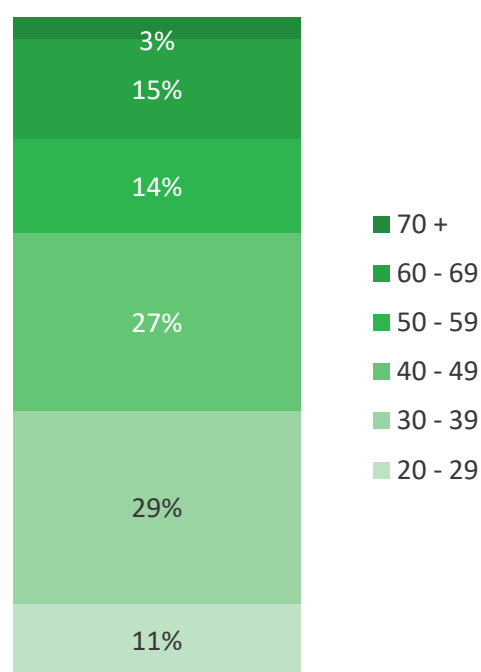
# Respondent profile – academics

Position of respondent



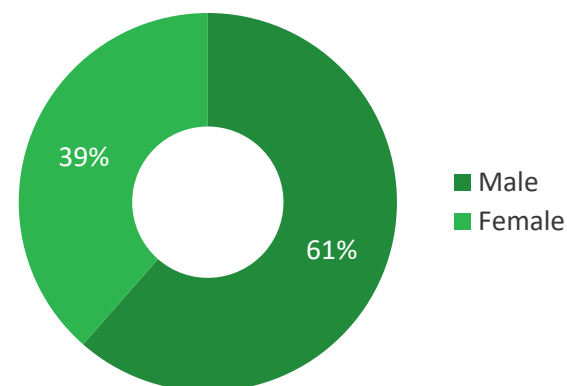
Associate professors represent the largest group of Hungarian respondents (27%), closely followed by assistant professors (22%) and those occupying researcher and lecturer position (20%). The remaining respondents identified themselves as professors (12%), PhD students (9%), lecturers with only teaching duties (8%) and much fewer as researchers without teaching duty (2%).

Age of respondents



The majority of Hungarian academics in the sample are in the middle of their working life. Under a third (29%) in the sample are between 30 and 39 and 27% of academics are aged 40-49. Academics older than 60 are 18%, and younger than 30 are 11%.

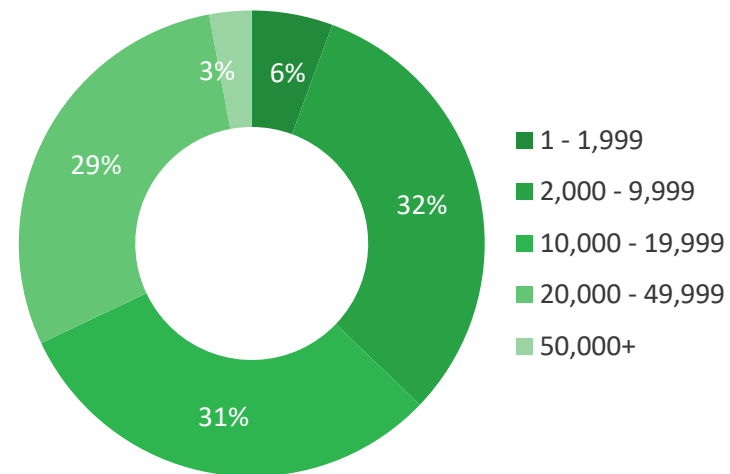
Gender of respondents



The gender distribution in the academic sample in Hungary is skewed towards male respondents, who represent 61% of the total sample.

# Respondent profile – academics

## Number of students of the HEI

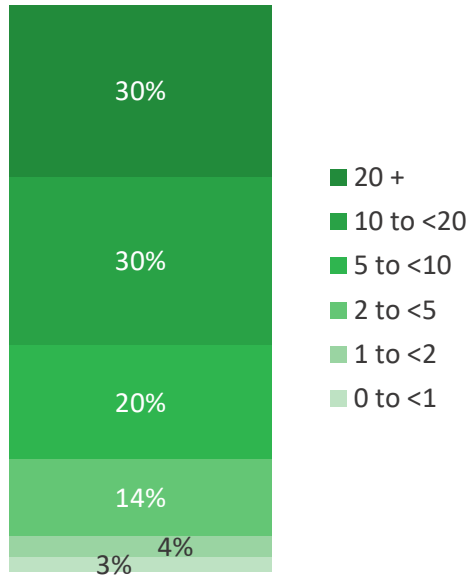


Sample Size	
Hungarian Academics	n=620
European Academics	n=10.836
Hungarian HEI representatives	n=120
European HEI representatives	n=3.482

Over a half of the Hungarian academics (63%) in the sample work for small HEIs (2,000 - 9,999 students) and medium size HEIs (10,000 - 19,000 students). 29% of all respondents work for medium-large HEIs (20,000 - 49,999 students). Very small HEIs (up to 1,999 students) are represented by 6% of respondents. Only 3% of the academics work at very large HEIs with over 50,000 students.

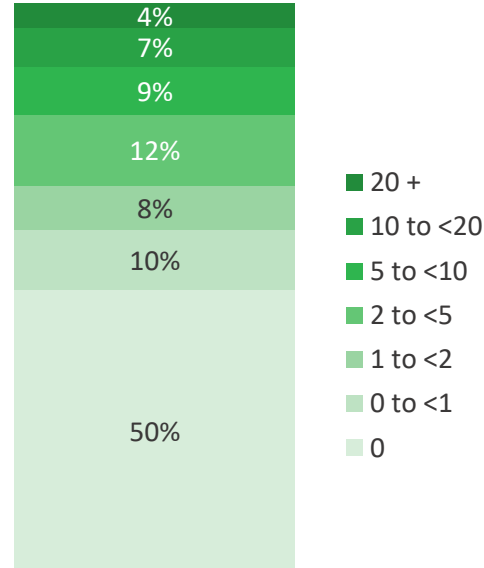
# Respondent profile – academics

## Years working in university



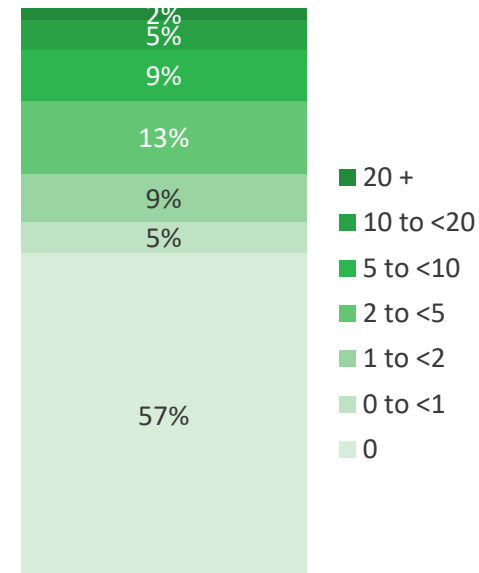
Almost a third of academics have worked in universities for over 20 years, while another third over 10 years. 20% have 5-10 years of experience and 14% have worked in academia for 2-5 years. 7% of the respondents have less than 2 years of experience.

## Years working in business



Close to two-thirds (60%) of all academic respondents have little or no industry experience. Only 40% of respondents worked for more than 1 year in industry before, with 12% worked up to 5 years. Only 4% of academics have worked in business for over 20 years.

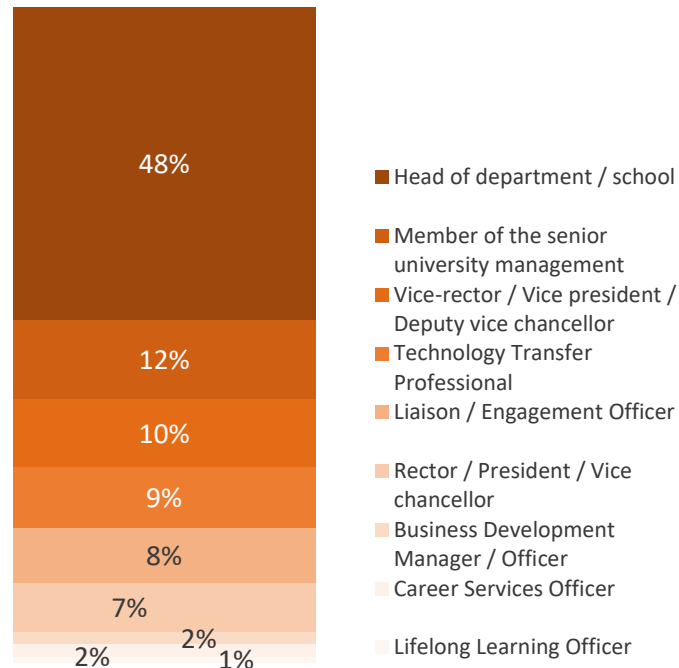
## Years involved in UBC whilst working at a university or business



Over a half (57%) of academic respondents in Hungary have no UBC experience. 14% of respondents have shortly been involved in UBC (0 to 2 years), 13% have 2 to 5 years of experience, while only 12% have been engaged in UBC for more than 5 years. Only 2% of academics in the sample engaged in UBC for more than 20 years.

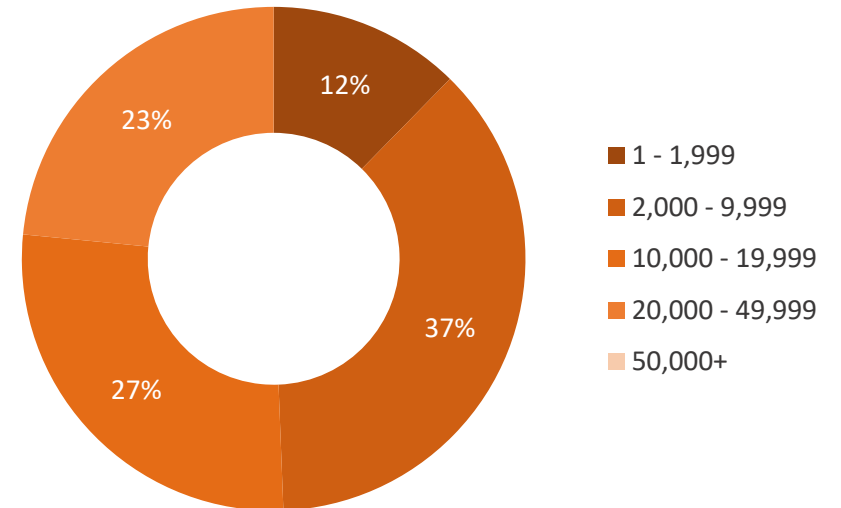
# Respondent profile – HEI representatives

## Position of respondent



Heads of departments/schools represent the largest group of Hungarian HEI representatives (48%). 12% identified as members of the senior university management, 10% as vice-rectors or vice-presidents, and 9% as technology transfer professionals. The remaining respondents reported to be liaison/engagement officers (8%), rectors (7%).

## Number of students of the HEI



Overall, a half of HEI representatives work for medium (10,000 to 19,999 students) or medium-large HEIs (20,000 to 49,999 students). 37% of them work for small HEIs (under 1,999 students). Only 12% work in very small HEIs (under 1,999 students).





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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](http://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](http://www.uni-engagement.com)