



UNIVERSITY-BUSINESS
COOPERATION IN EUROPE

State of University- Business Cooperation

UNITED KINGDOM University Perspective

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



Science Marketing
Science-to-Business Marketing Research Centre

technopolis [group]



The State of UK University-Business Cooperation: the university perspective

Partners



Authors: Arno Meerman, Victoria Galán Muros, Rebecca Allinson, Todd Davey, Balzhan Orazbayeva, Alexandra Zinovyeva 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

Examination of the perceptions of academics, HEI managers and knowledge transfer professionals (KTP) provides positive signs for the future, with the majority of respondents (98.7%) currently cooperating with businesses planning to maintain or increase their cooperation in the future. Yet, more can be done, for example in supporting HEIs with the development of initiatives and activities that can support their cooperation efforts, as well as in developing (actual and perceived) capabilities, particularly of those who are not sufficiently engaged in business cooperation.

University-Business Cooperation

Academics responding to this survey are involved in a variety of different cooperation types, with joint activities in the areas of research and education being the most developed. Yet, the development of UBC management and valorisation activities lags behind. More than 75% of academics are not engaged in these activities at all. These results may be explained partly with a lack of funds and support for student entrepreneurship and small start-up businesses stemming from research ideas. It is often university intermediaries and university management, and only to a smaller degree, academics who get involved with organising shared resources with businesses, creating sponsorships and scholarships.

Lack of funding as major barrier

Top barriers inhibiting UBC differ for collaborating and non-collaborating academics in the UK. While collaborating partners are mostly hindered by

resources and funding related barriers, their non-cooperating colleagues report factors related to administrative and cultural issues. The barriers indicated by collaborating academics reflect their understanding of realistic impediments; non-cooperating academics point instead at perceived barriers, such as issues with finding suitable business partners, anticipating a clash of motivations and values.

Perceptions of HEI representatives are similar to cooperating academics. These findings call for better funding schemes which support mobility between academia and business. The results also show both HEI representatives and academics have a strong perception of the barriers related to insufficient work time for UBC. This is because the perception of spending time in industry being damaging to an academic career path persists, and detracts from the attractiveness of such activities for academics.

People factor wins

Relationship and funding factors have appeared to be the two main factors that facilitate UBC for academics and HEI representatives in the UK. Particularly, the relationship based on the existence of mutual trust, shared goal and a prior relation with the business partner are considered as major facilitators for both groups, as it is for European academics. This is evidenced also by research that has indicated 'strong and trusting personal relationships' as the most frequently cited key success factor.

NOTE: This report seeks to contribute to our understanding of the higher education institution's (HEI) perspective of university-business cooperation (UBC) in the UK, drawing on a survey of European HEIs, 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.

Executive summary

Although academics in the UK perceived distance between businesses and the nearest university is the least important factor that facilitates their business collaboration activities, proximity seems to interact with the nature of the collaboration. For example, the higher the concentration of universities in the business locale, the more likely businesses are to cooperate with non-local universities; also, if a business is located close to a research excellent university, cooperation tends to remain local. Proximity matters in different ways according to business size, sales profile, location, absorptive capacity and innovation activity.

Research in practice is what motivates collaborators

What motivates academics in the UK to collaborate? The findings show the answer differs between those who cooperate and those who do not. While the former group highlight gaining new insights for research, academics who do not cooperate are driven by the willingness to improve graduate employability as well as to contribute to the mission of the university.

Education-related UBC less favourable

Similar to the European results, UK academics are less willing to recommend education-related UBC to their colleagues, compared to research, 50% vs. 27% detractors, respectively. One reason for this negative result could be the less apparent, and perhaps longer term gains in education than in R&D. Lack of mechanisms to support the integration of each partners' contribution to training and education could also have contributed to this score.

Implementation strategies need attention

Paper strategies emerge as a more developed form of supporting mechanism compared to implementation strategies in the UK context, a finding that is in line with the European results. The development of most structural mechanisms is slightly higher in the UK HEIs than in European HEIs, as across Europe many HEIs are not yet equipped with the necessary organisational structures to support UBC. Mechanisms related to infrastructure generally require a longer-term commitment and a high level of finance, so it is not surprising that these are less generally developed in the UK context as well. Operational tools that support UBC networks also rank low, mechanisms that otherwise would enable academics and business people to speak the same language, and thus increase the permeability of the interface, and the flow of people, between these two domains.

Moderate beliefs in UBC strengths

Academics in the UK express moderate capabilities and less positive attitude towards their UBC strengths compared to European academics. Besides, although UK and European academics perceive their contextual factors similarly, the perception of most contextual factors is slightly more negative in the UK. This attitude most particularly surfaces in UK academics' perception of their university's education profile, and the attitude of their university management towards UBC. The negativity may reflect an expectation that the government should foster the conditions under which these collaborations can happen at scale and deliver enduring impacts for all parties involved.

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, 51 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.



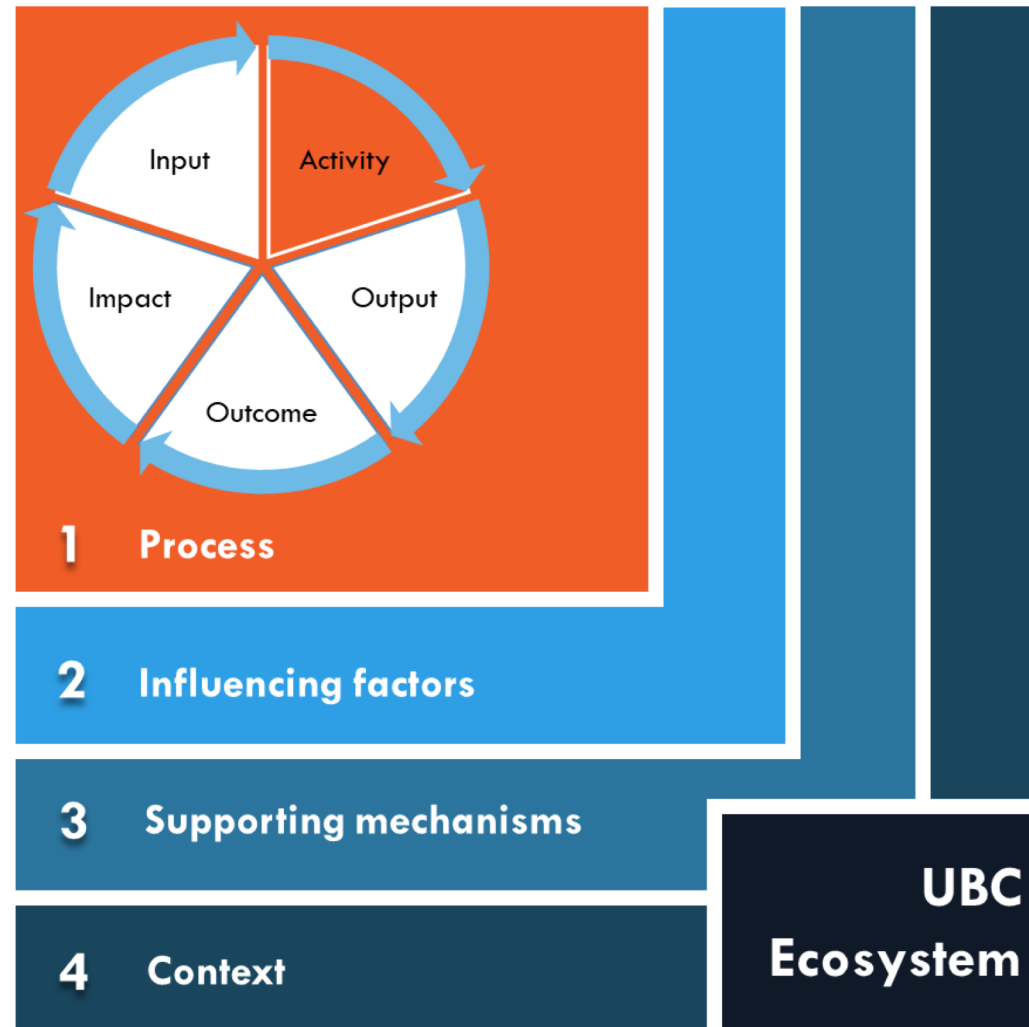
UBC activities

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
Education	<ol style="list-style-type: none">1. curriculum co-design2. curriculum co-delivery (<i>e.g. guest lectures</i>)3. mobility of students (<i>i.e. student internships/placements</i>)4. dual education programmes (<i>i.e. part theory, part practical</i>)5. lifelong learning for people from business (<i>e.g. executive education, industry training and professional courses</i>)
Research	<ol style="list-style-type: none">6. <i>joint R&D (incl. joint funded research)</i>7. <i>consulting to business (incl. contract research)</i>8. <i>mobility of professionals (i.e. temporary mobility of academics to business and vice versa)</i>
Valorisation	<ol style="list-style-type: none">9. <i>commercialisation of R&D results (e.g. licencing/patenting)</i>10. <i>academic entrepreneurship (e.g. spin offs)</i>11. <i>student entrepreneurship (e.g. start-ups)</i>
Management	<ol style="list-style-type: none">12. <i>governance (e.g. participation of academics on business boards and businesspeople participation in university board)</i>13. <i>shared resources (e.g. infrastructure, personnel, equipment)</i>14. <i>industry support (e.g. endowments, sponsorship and scholarships)</i>

Development of UBC activities

Overall, UBC activities seem significantly less developed for the academics in the UK than they are for their European counterparts.

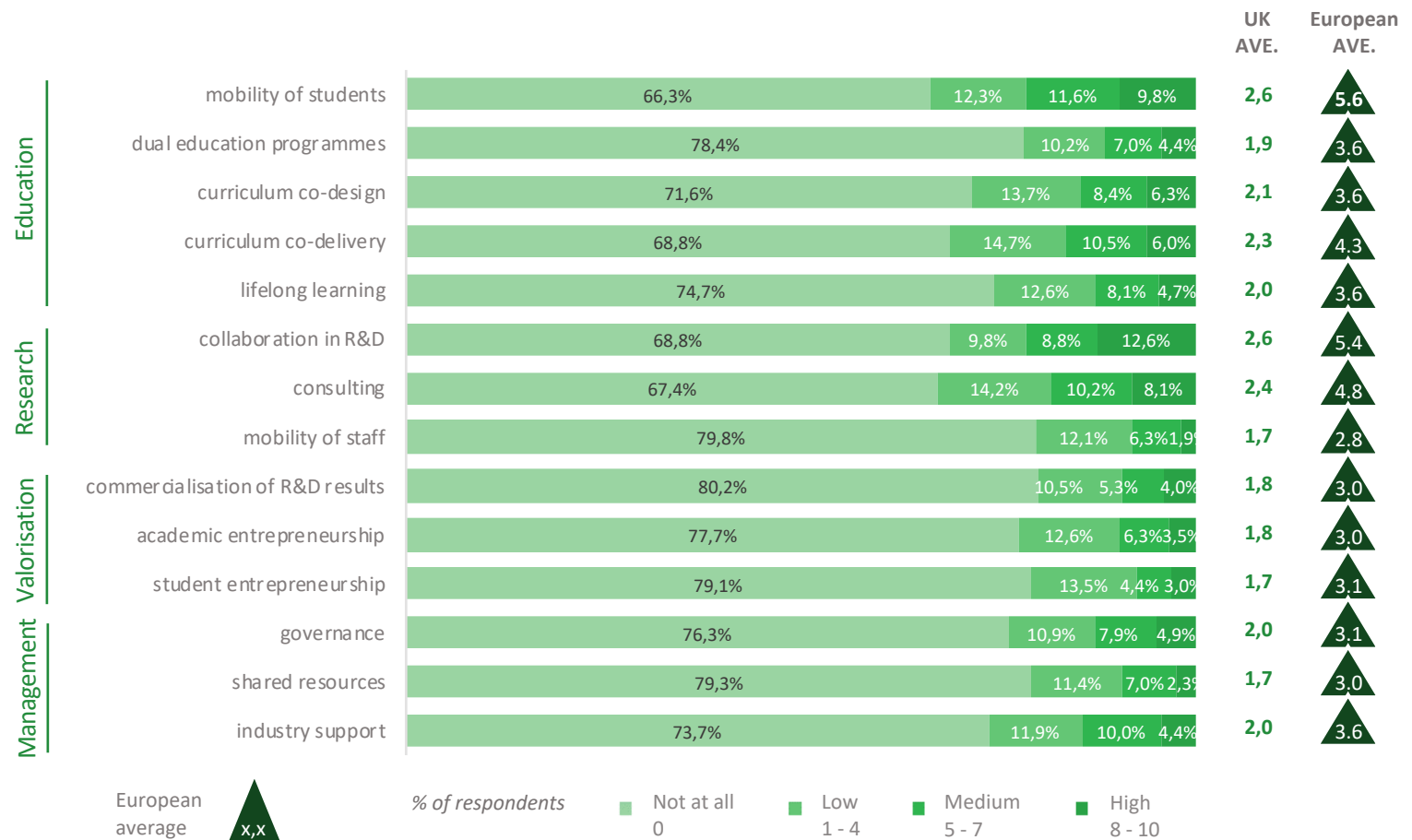
UK academics most commonly engage with business in research and education activities such as mobility of students (2.6), R&D collaboration (2.6), consulting (2.4) and curriculum co-delivery (2.3). The development of UBC management and valorisation activities considerably lags behind. More than 75% of academics are not engaged in these activities at all. These results may be explained partly with a lack of funding and support for student entrepreneurship and small start up businesses stemming from research ideas¹.

The second aspect to be taken into consideration is that it is often university intermediaries and university management, and only to a smaller degree, academics who get involved with organising shared resources with businesses, creating sponsorships and scholarships. Universities are working towards integrating businesses in various valorisation and management activities, but this process of change takes time.

¹ Corbun, Z. (2012 March, 5). Student entrepreneurs frustrated by lack of funding. *The Guardian*. Retrieved from <https://www.theguardian.com/education/2012/mar/05/student-entrepreneurs-uk-lack-business-angels>

The extent of development of UBC activities

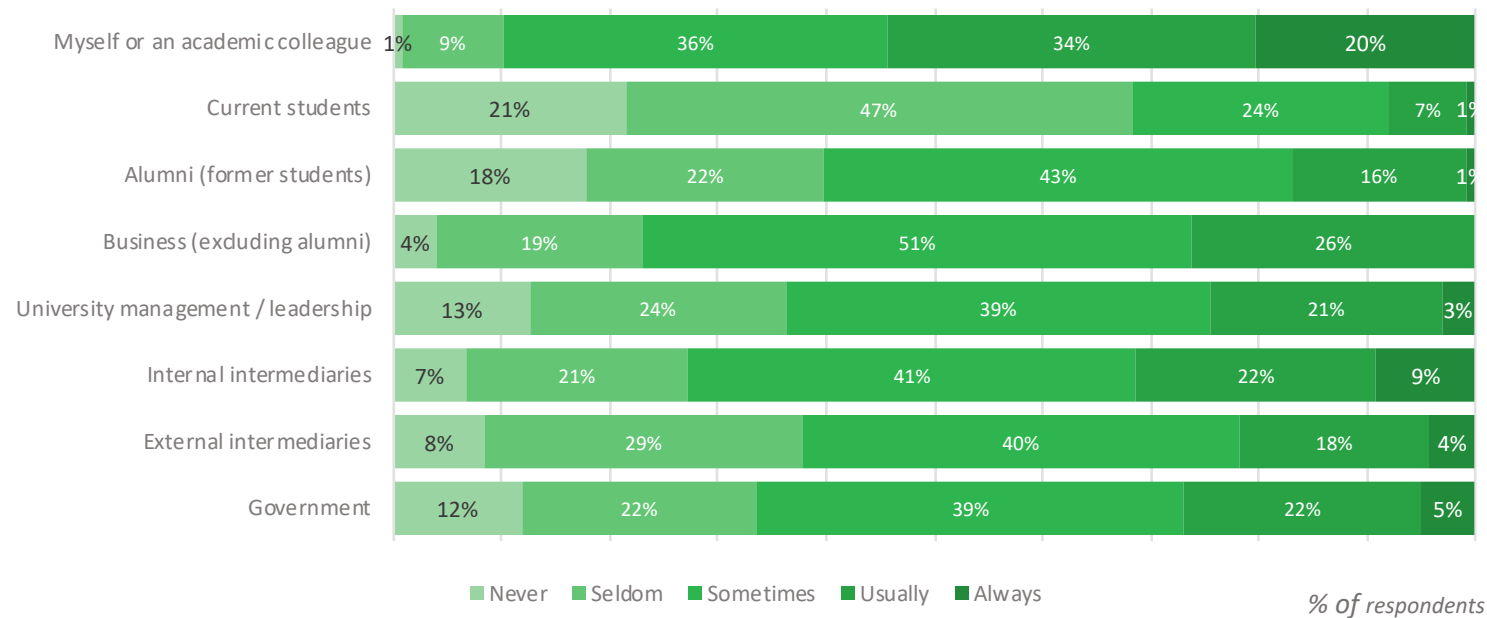
'Which UBC activities do you collaborate with businesses in?' – as answered by academics



Initiation of UBC

How UBC is initiated

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

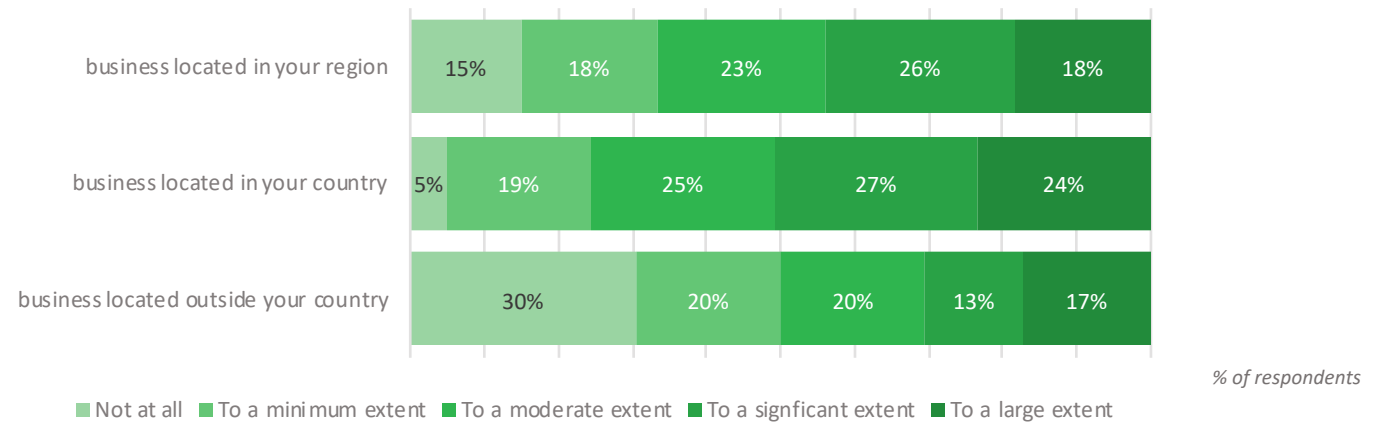


Academics in the UK clearly see themselves as the main UBC initiators. Over half of them (54%) consider that they always or usually initiate UBC. Internal intermediaries (31%) and government (27%) are also considered initiators most times, although to a lesser extent.

Contrary, academics perceive that current students and alumni are the stakeholders that less often initiate UBC in the UK. Students often need the support of an established work experience service or knowledge transfer partnership in order to access opportunities to obtain a work placement.

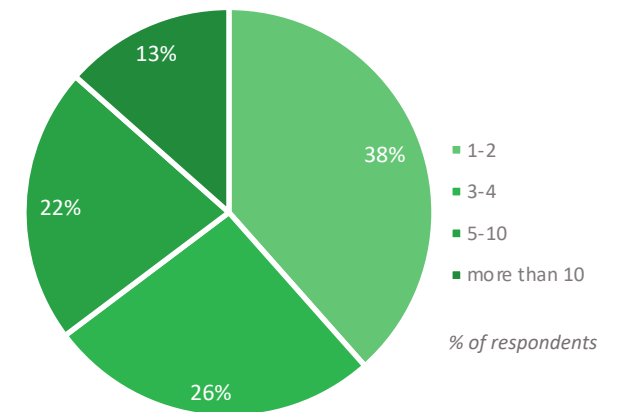
Location of cooperating partners

Location of business partners



Half of academics in the UK undertake cooperation of a significant or high level with national businesses (51%). However, collaboration with regional businesses is not far behind with 44%. Only 17% of academics collaborate to a high extent with international businesses and 30% do not collaborate with international partners at all.

Number of business partners

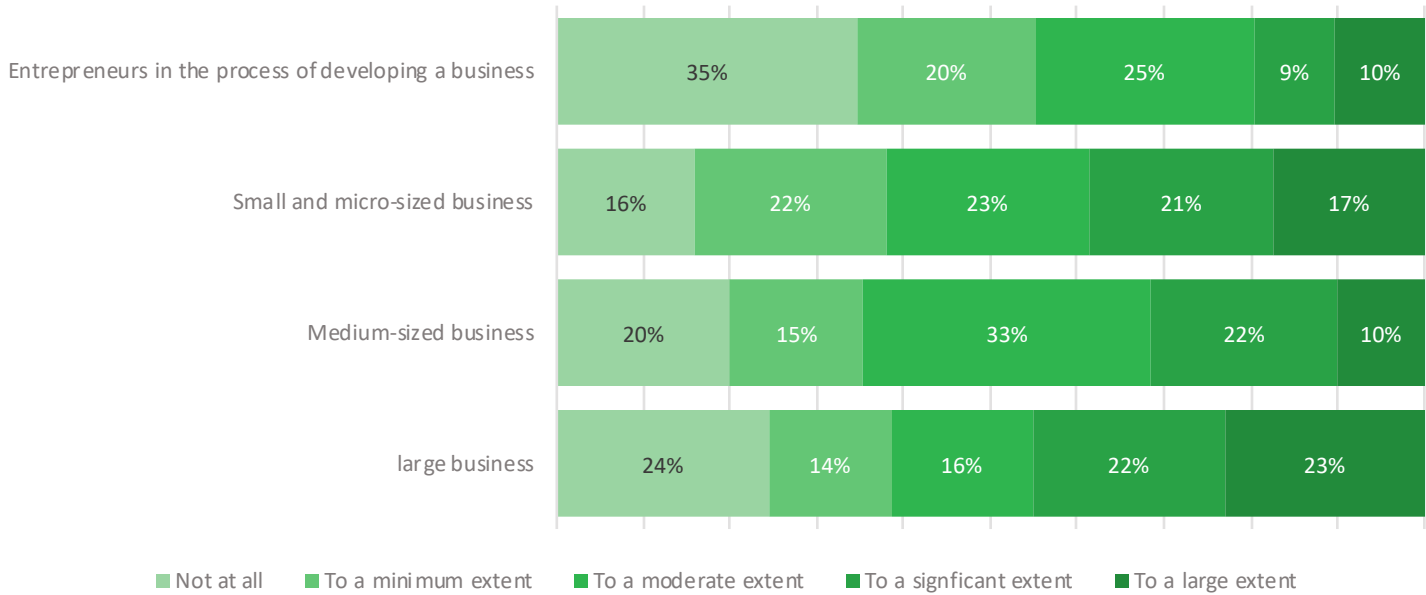


Almost two thirds (64%) of UK academics cooperate with less than 4 businesses. 22% of them collaborate with 5-10 business partners and 13% have partner relations with more than 10 partners.

Size of cooperating partners

Size of cooperating partner

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



Academics in the UK collaborate with businesses of a large size to a greater extent. 45% of academics engage in UBC with them to a significant or large extent.

This cooperation is reduced to 38% with small and micro-sized businesses, 32% with medium-sized businesses. These percentages may reflect the intrinsic difficulties SMEs face: limited knowledge to select and approach universities, lack of in-house resources to allocate to a research co-operation, aiming at different goals and holding different motivations².

Academics undertake much less cooperation with entrepreneurs in the process of developing a business.

² The Government of The United Kingdom (2016, October 6). *University and Business IP cooperation to boost UK innovation*. [Press Release]. Retrieved from <https://www.gov.uk/government/news/university-and-business-ip-cooperation-to-boost-uk-innovation>

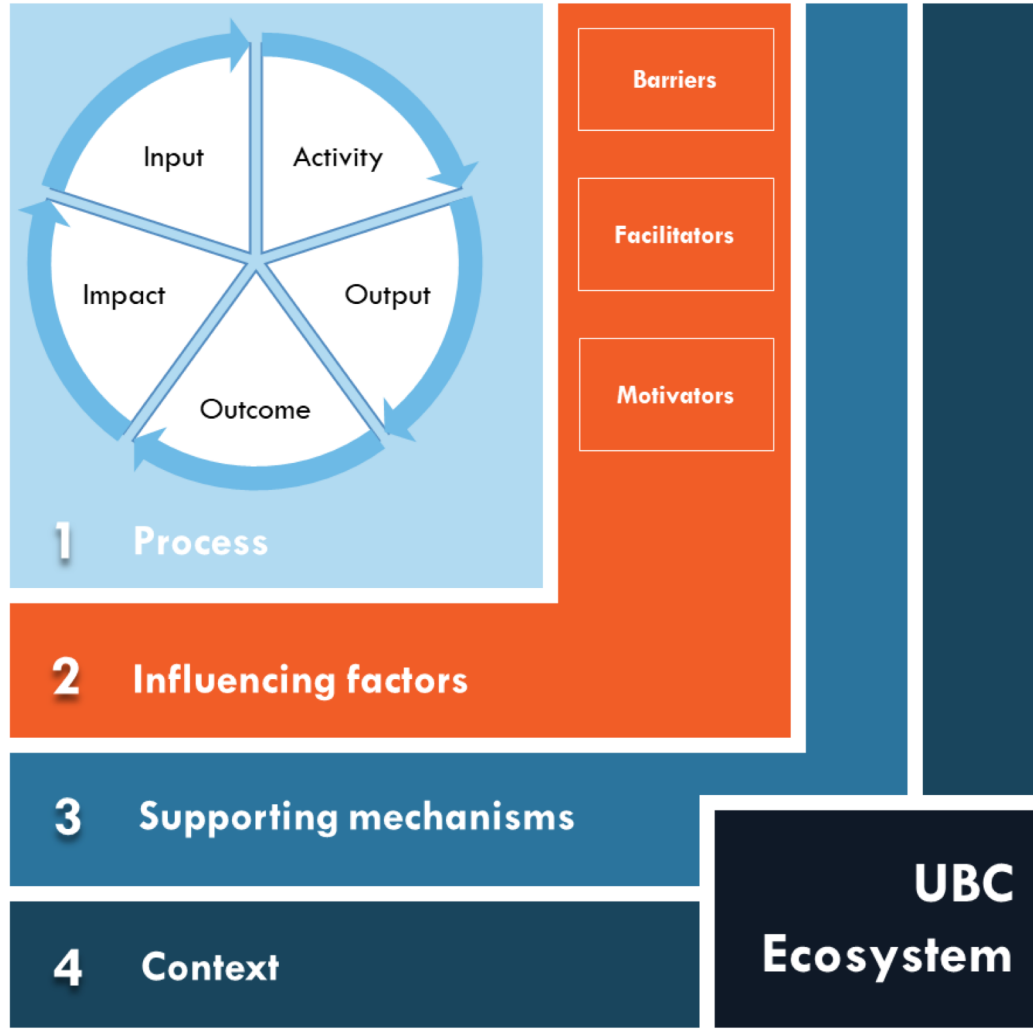
Factors influencing UBC

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.	Insufficient work time allocated by the university for academics' UBC activities	Insufficient work time allocated by the university for academics' UBC activities
2.	Lack of government funding for UBC	Difficulty in finding the appropriate collaboration partner
3.	Limited resources of SMEs	Differing motivation / values between university and business
4.	Lack of business funding for UBC	UBC conflicts with my teaching and research responsibilities
5.	Lack of university funding for UBC	Lack of government funding for UBC
<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 have discrepancies.

Both groups agree that the insufficient work time allocated by the university for academics' UBC activities is the most relevant barrier to cooperation with business.

While collaborating partners are mostly hindered by lack of resources and funding, their non-cooperating colleagues report factors related to administrative and cultural issues. The barriers indicated by collaborating partners (lack of time, money and SMEs limited resources) reflect their understanding of realistic impediments; non-co-operating academics point instead at perceived barriers, such as issues with finding suitable business partners, anticipating a clash of motivations and values. They also perceive UBCs as an additional activities to teaching and research, rather than as activity enhancing teaching and research.

Barriers hindering UBC

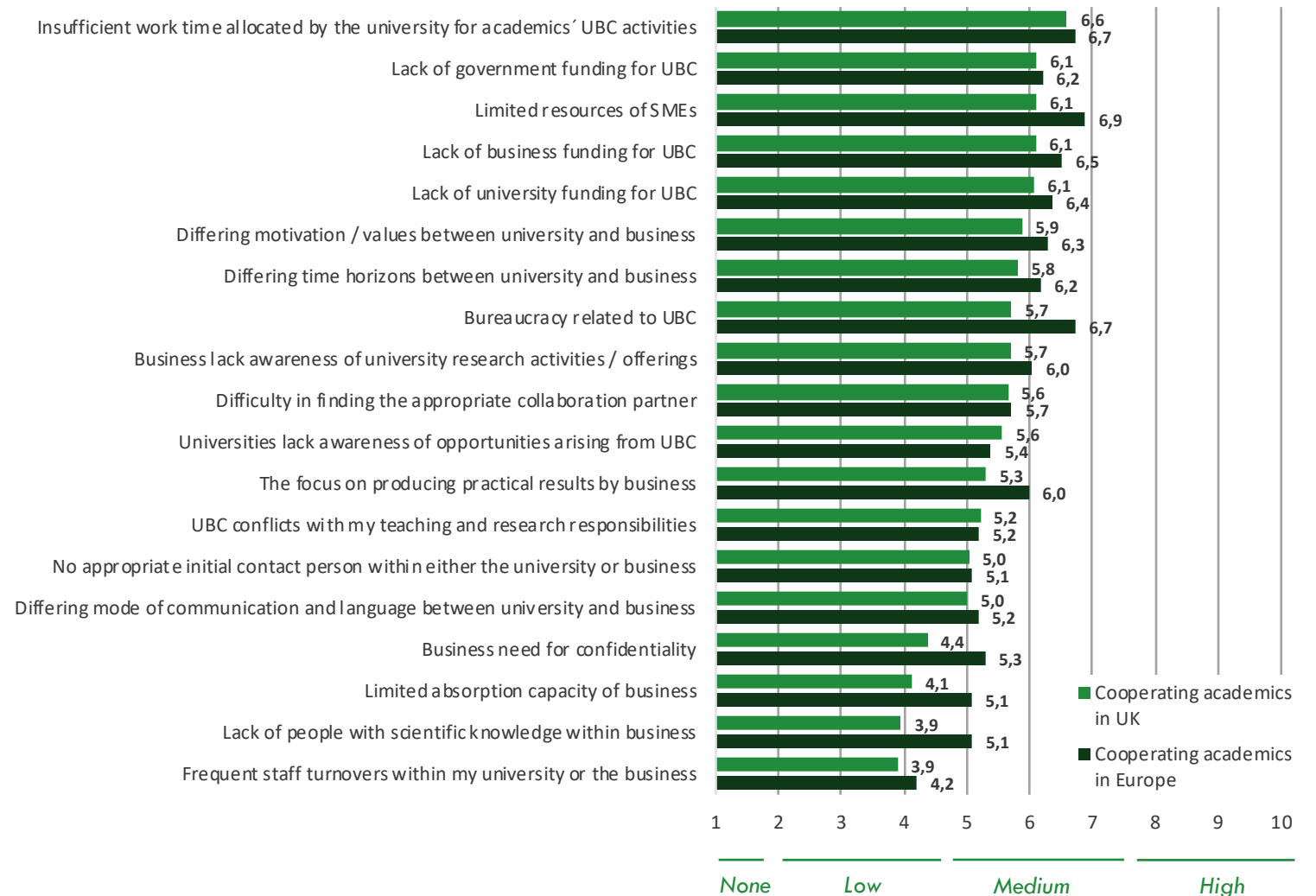
Academics in the UK perceive most barriers lower than their European counterparts.

Compared to Europe, UK academics are notably less hindered by the limited resources of SMEs, bureaucracy related to UBC and the business' focus on producing practical results. Limited business absorption capacity, lack of people with scientific knowledge within the business and frequent staff turnovers are the weakest barriers for both groups. Yet these barriers are also significantly less hindering for UK academics than for their European counterparts.

In Europe the collaboration between universities and businesses is mainly limited to research; universities would like to see more co-operation in developing and refining curricula, in addressing life-long learning needs and up-skilling. Compared to Europe, in the UK these collaborations are more common³.

Barriers

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

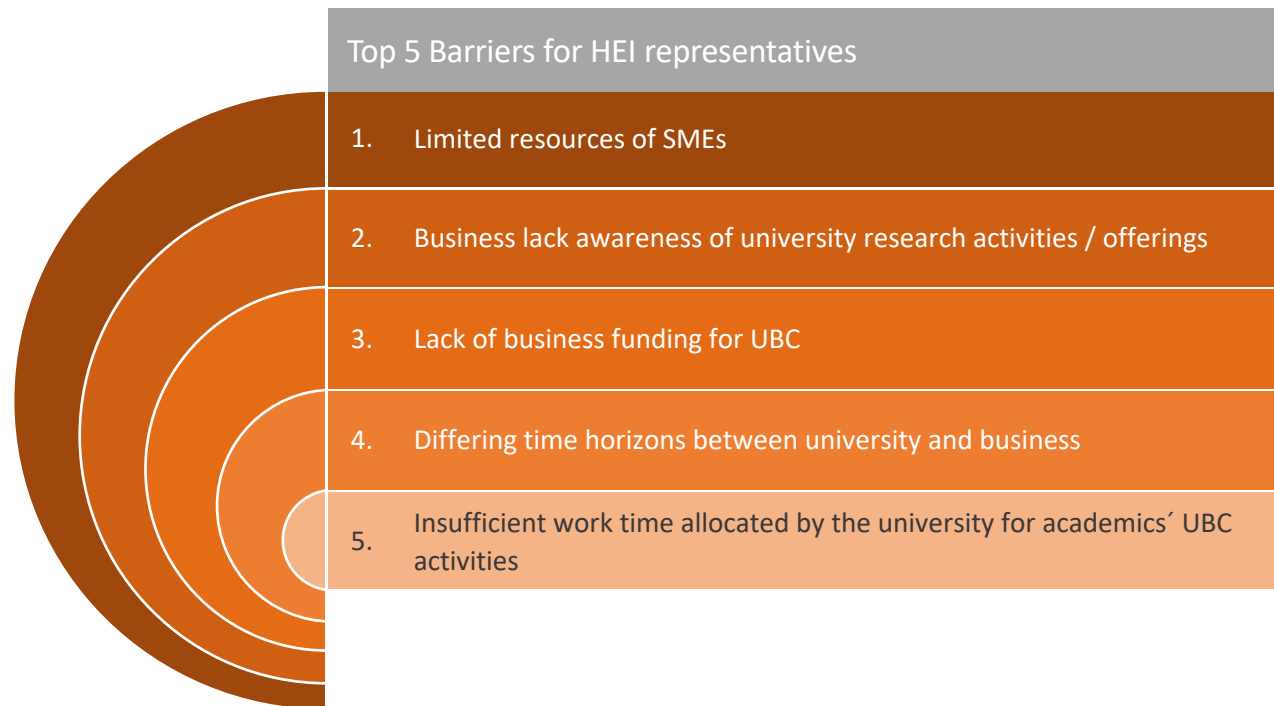


³ European Commission (2016). *Co-operation between academia and business in Europe: time to shift up a gear. 2016.* [Press release]. Retrieved from https://ec.europa.eu/commission/commissioners/2014-2019/navracsics/announcements/cooperation-between-academia-and-business-europe-time-shift-gear_en

Barriers hindering UBC

Barriers

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



HEI representatives in the UK reported a diverse set of barriers inhibiting their collaboration with businesses.

They are significantly hindered by the lack of resources and funding related barriers. More funding schemes which support mobility between academia and business are needed. An incentive framework is also needed to ensure that researchers who are successful in collaborations are valued in terms of career progression and assessment of research output⁴.

They also recognise the business' lack of awareness of university research activities as one of the major factors inhibiting UBC.

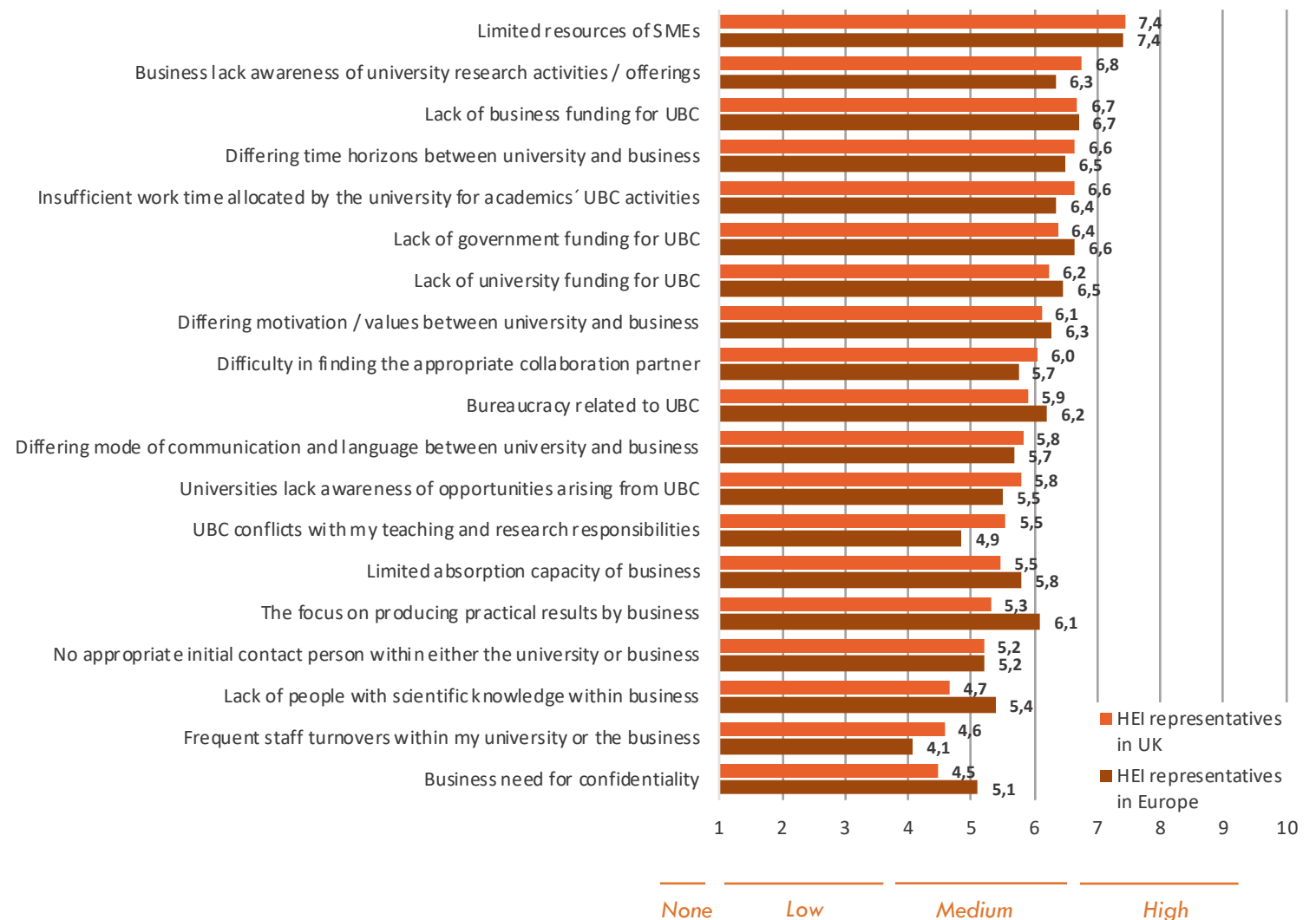
Time related issues such as differing time horizons between two organisations and insufficient work time allocated for academics' UBC activities also considerably hinder cooperative activities for HEI representatives.

⁴ Dowling, A. (2015). The Dowling Review of Business-University Research Collaborations. *Department for Business Innovation and Skills, London, UK.*

Barriers hindering UBC

Barriers

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



Overall, both EU and UK HEI representatives have similar perception of factors hindering their collaboration with businesses.

Yet, HEI representatives in the UK are less constrained than their European counterparts by the business' focus on producing practical results, their lack of scientific expertise and their need for confidentiality.

They, in turn, have a stronger perception of the barriers related to insufficient work time for UBC and difficulty in finding the appropriate partner. This is because the perception that spending time in industry, is damaging to an academic career path persists and detracts from the attractiveness of such activities for academics⁵.

UK HEI representatives found it also inhibiting when UBC conflicts with their teaching and research responsibilities.

⁵ Dowling, A. (2015). The Dowling Review of Business-University Research Collaborations. Department for Business Innovation and Skills, London, UK.

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 factors that facilitate UBC for academics and HEI representatives in the UK are similar, although ranked differently. They are related to relationship and funding factors.

The existence of funding to undertake UBC is the major facilitator for academics, whereas for HEI representatives, the existence of mutual commitment bears greater importance.

The relationship based on the existence of mutual trust, a shared goal and a prior relation with the business partner is also considered as a major facilitator for both groups. This is evidenced by research showing that ‘strong and trusting personal relationships’ was the most frequently cited key success factor⁶.

Facilitators

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



	Academics cooperating	HEI representatives
1.	Existence of funding to undertake the cooperation	Existence of mutual commitment
2.	Existence of a shared goal	Existence of mutual trust
3.	Existence of mutual commitment	Existence of funding to undertake the cooperation
4.	Existence of mutual trust	Existence of a shared goal
5.	Prior relation with the business partner	Prior relation with the business partner

⁶ Dowling, A. (2015). The Dowling Review of Business-University Research Collaborations. Department for Business Innovation and Skills, London, UK.

Drivers stimulating UBC

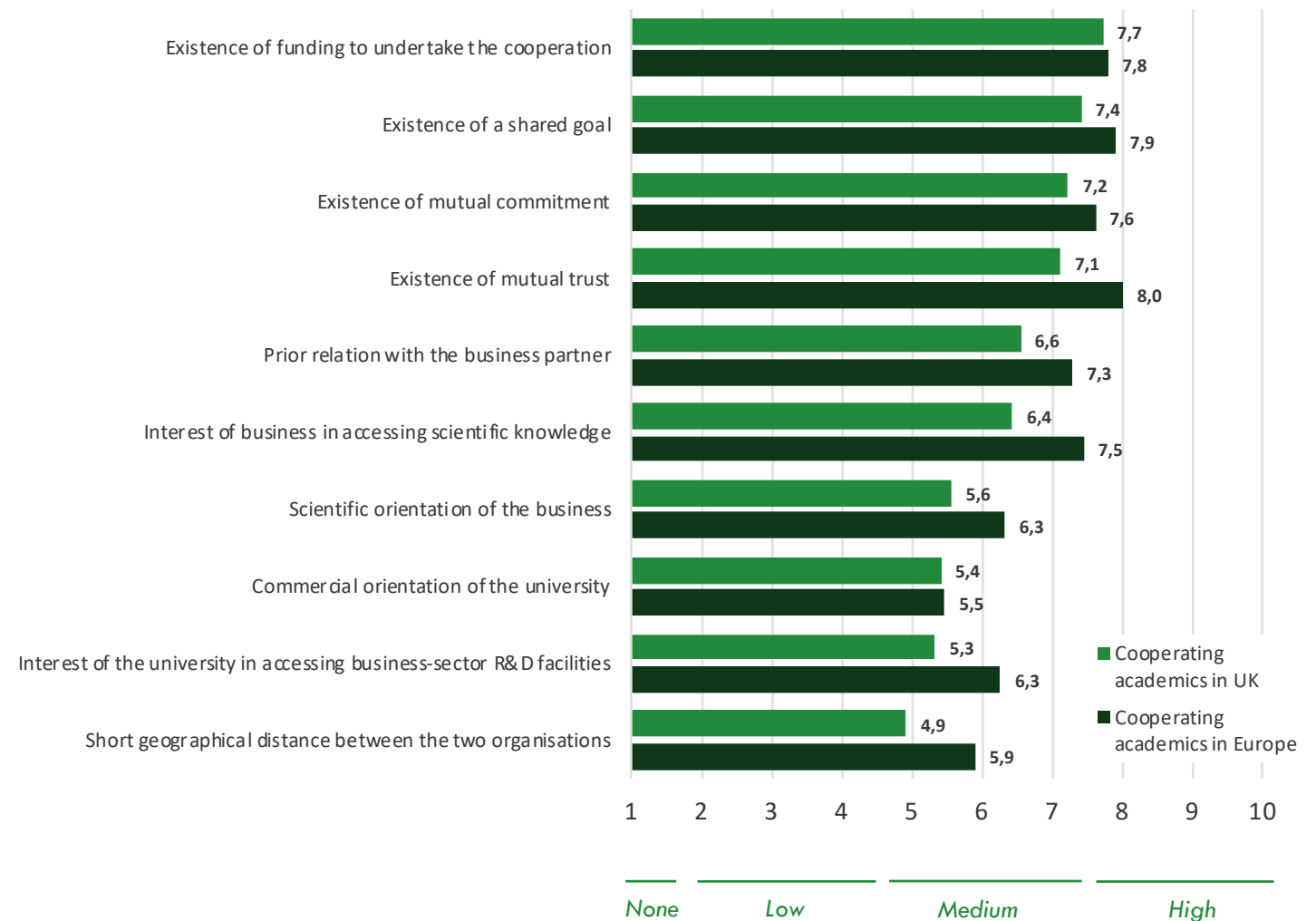
European and UK perceptions of UBC facilitators align. Yet, UK academics perceive most drivers to be lower than their European counterparts.

For both groups, the most important facilitators are those related to funding and the relationship component of UBC. However, European academics consider the existence of mutual trust as a more relevant facilitator than their counterparts in the UK. Similarly, the interest of business in accessing scientific knowledge is ranked higher by European academics.

The short geographical distance between the two organisations emerges as weakest UBC facilitator. Although research confirms that the distance between businesses and the nearest university is not a significant determinant of university-business cooperation, proximity seems to interact with the nature of the collaboration. For example, the higher the concentration of universities in the business locale, the more likely businesses are to cooperate with non-local universities; also, if a business is located close to a research excellent university, cooperation tends to remain local. Proximity matters in different ways according to business size, sales profile, location, absorptive capacity and innovation activity⁷.

Facilitators

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

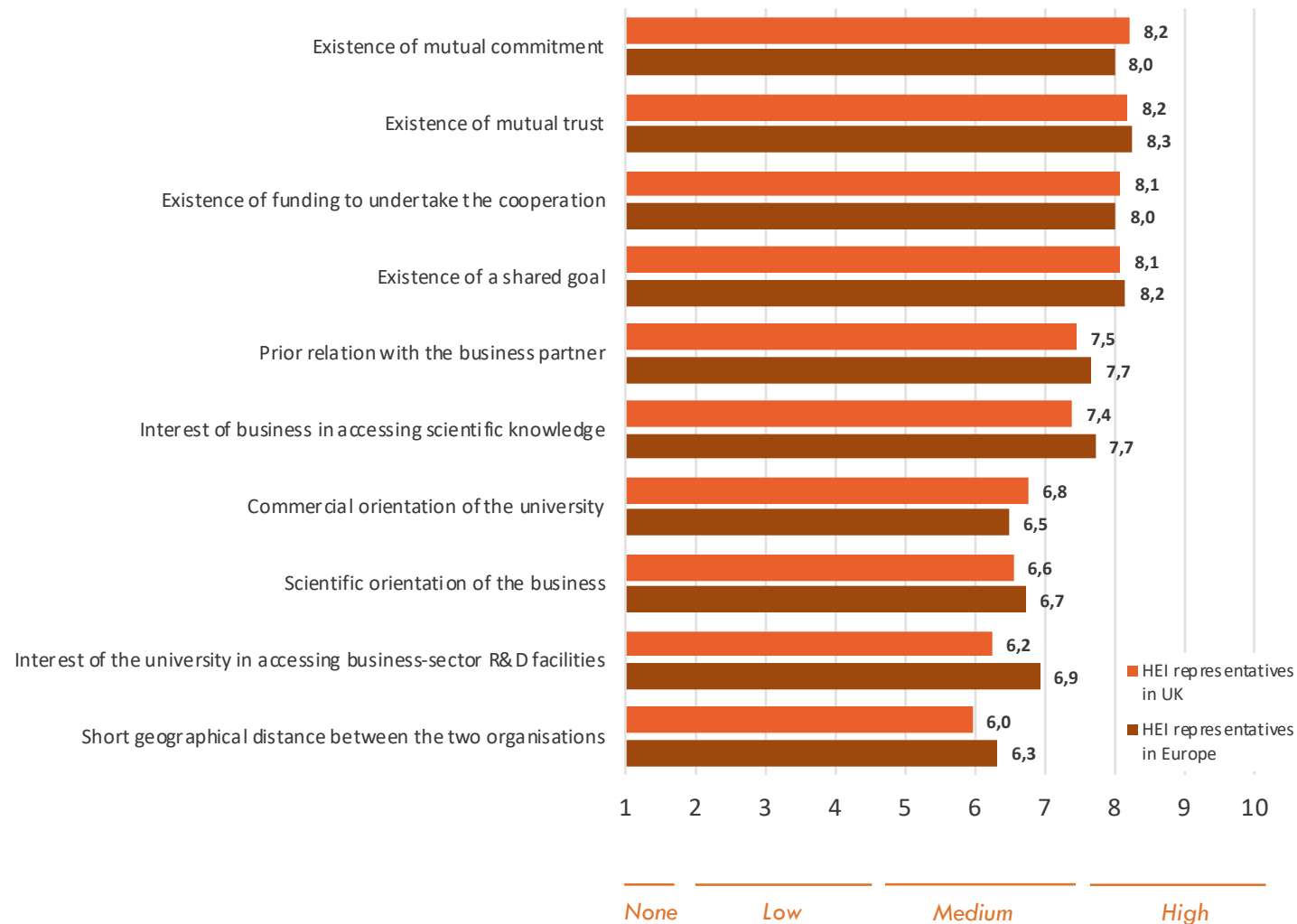


⁷ Hewitt-Dundas, N. (2013). The role of proximity in university-business cooperation for innovation. *The Journal of Technology Transfer*, 38(2), 93-115.

Drivers stimulating UBC

Facilitators

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



HEI representatives in the UK and their European counterparts perceive the UBC facilitators in a similar way.

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

The interest of business in accessing scientific knowledge also plays an important role.

Similarly to academics, the short geographical distance between the two organisations is the weakest facilitator.

Drivers stimulating UBC

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


While cooperating academics highlight research motivations, academics that engage in UBC are driven by the willingness to improve graduate employability as well as to contribute to the mission of the university. From university business co-operations, a high number of academic publications are usually generated. Because the nature of the research is multi-disciplinary, it often has a strong innovative element and therefore is rated as high quality research outputs. How a UBC can enhance academic research often remains unknown to academics who lack this experience and, as a result, they tend to view a UBC, first all, as an activity which is beneficial to graduates⁸.

For the same reason, non-cooperating academics rate motivators related to other stakeholders (e.g. employability of graduates, societal needs, mission of the university) higher.

Improving teaching and obtaining funding are further motivators for both groups.

Motivators

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



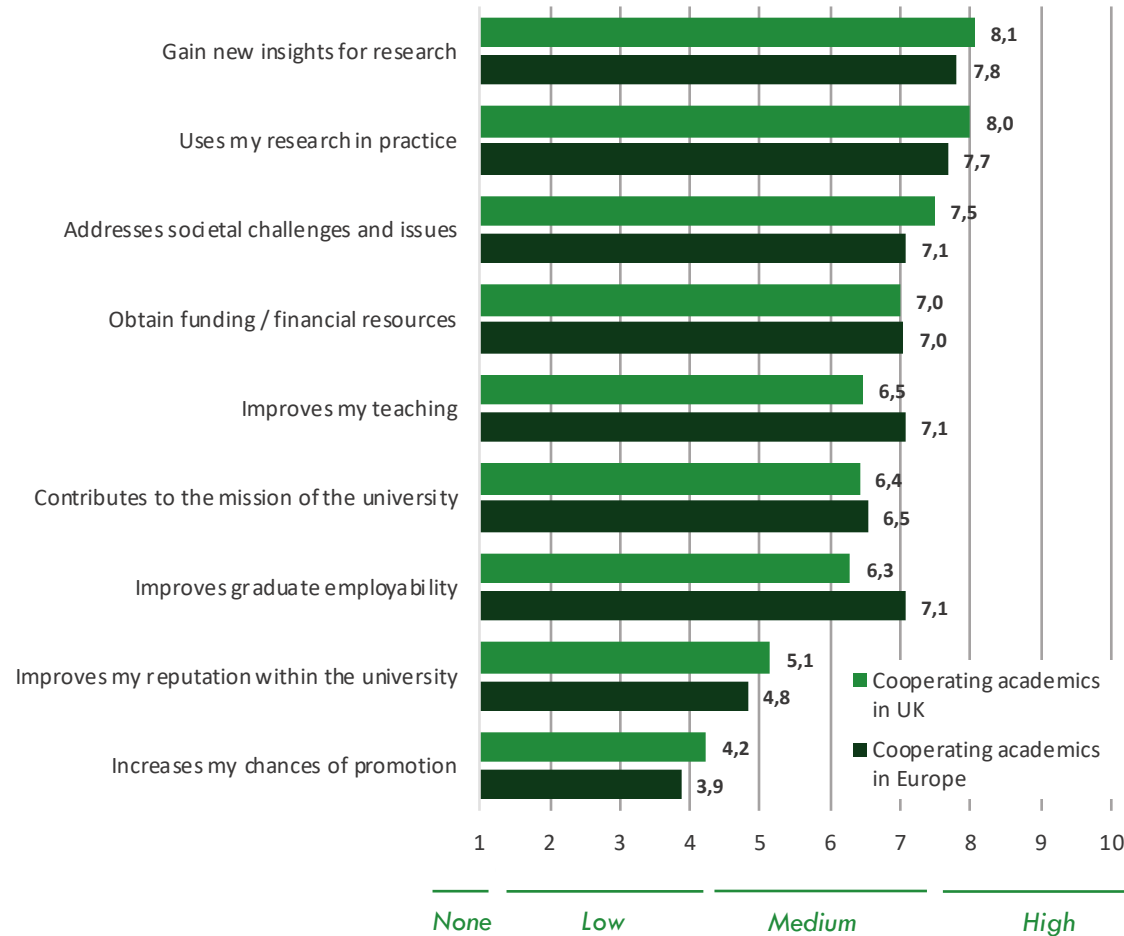
	Academics who cooperate	Academics who <u>do not</u> cooperate
1.	Gain new insights for research	Improves graduate employability
2.	Uses my research in practice	Contributes to the mission of the university
3.	Addresses societal challenges and issues	Addresses societal challenges and issues
4.	Obtain funding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

⁸ Plewa C., & Evans, D. (2017, June 13). Academics Do Want To Engage With Business, But Need More Support [Blog post]. Retrieved from <https://blog.uuinn.org/2017/06/academics-do-want-to-engage-with-business-but-need-more-support/>

Drivers stimulating UBC

Motivators

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



The perception of UBC motivators of UK 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 society are perceived slightly stronger in the UK.

European academics perceive the motivation of improving graduate employability significantly higher than UK academics.

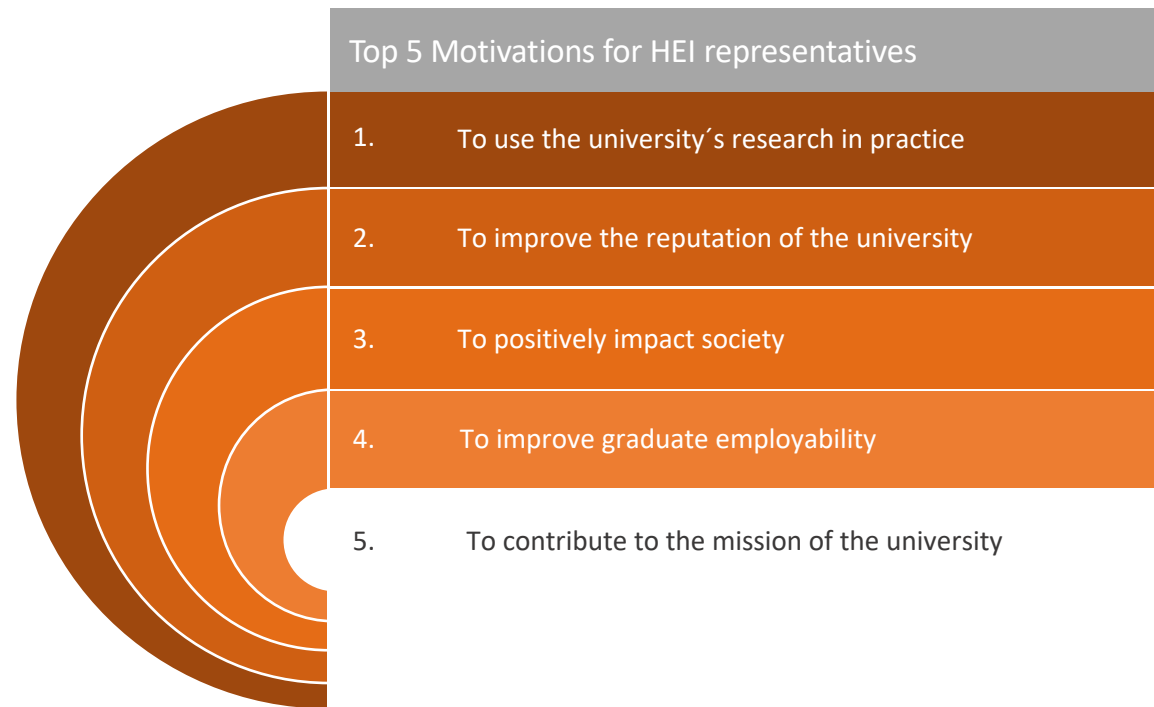
Notably promotion and reputation related motivators emerge as the weakest drivers stimulating UBC for both groups. This reflects the strong sense that, despite progress made, the academic environment does not yet sufficiently support, incentivise or reward collaborative work with businesses⁹.

⁹ Dowling, A. (2015). The Dowling Review of Business-University Research Collaborations. Department for Business Innovation and Skills, London, UK.

Drivers stimulating UBC

Motivators

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



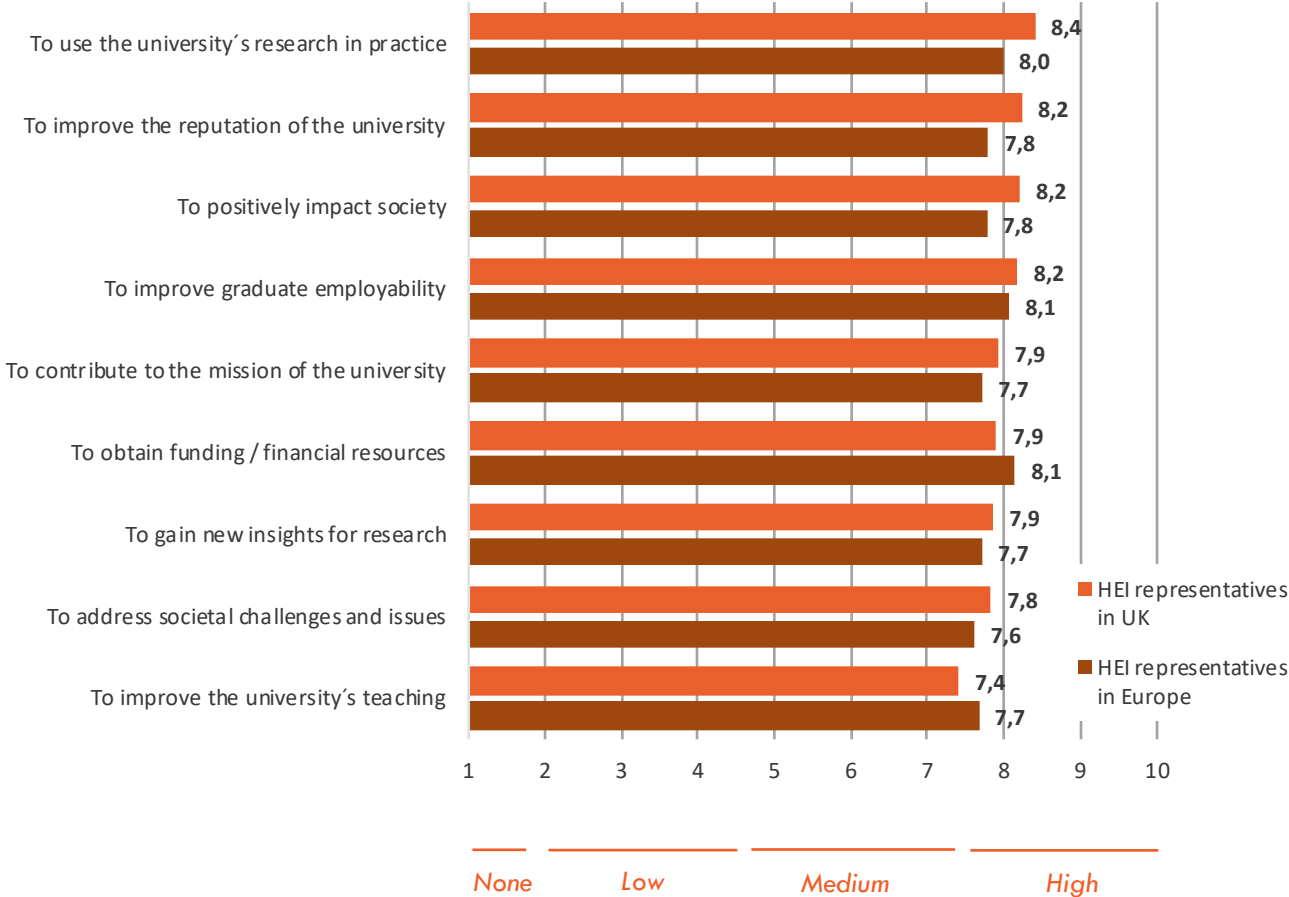
HEI representatives in the UK are motivated to cooperate with businesses mostly to apply the university's research in practice and improve its reputation.

This is followed by the motivators related to the benefits for other stakeholders, including society, graduates and university itself.

Drivers stimulating UBC

Motivators

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



UK HEI representatives perceive most motivators slightly stronger than their European counterparts.

The only exception relates to the motivations to obtain funding and to improve university's teaching, which rate higher in Europe.

More crucially, for both European and UK HEI representatives all motivators present nearly equal importance (from 7.4 to 8.4). Listed UBC motivators can provide a myriad of benefits to the participants. Moreover, these motives generally reflect the shared view that strategic research collaborations are perceived as rewarding activities to participate in, both personally and professionally¹⁰.

¹⁰ Dowling, A. (2015). The Dowling Review of Business-University Research Collaborations. Department for Business Innovation and Skills, London, UK.

Benefits of UBC

UK academics and HEI managers have different perceptions about the stakeholders that benefit most from UBC.

Businesses and universities are perceived as the main beneficiaries by both groups as both parties gain from co-operating, although in different ways. Businesses can generate income from innovative technologies accessed through the university; universities generate innovative research with real-world applications thanks the input provided by business, and also generate income from contract research, consultancy and spin-out companies¹¹.

Yet, academics recognise themselves also as UBC beneficiaries, while HEI representatives see more benefits for students and society than for academics.

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


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

The perception regarding who benefits from such cooperation can influence the decision to increase or decrease their participation or the involvement

of other groups. For example, if academics perceive their own *benefits* to be low, they may refrain from engaging in UBC. Yet, if they perceive *benefits* for students to be high, they might undertake actions that contribute to students' involvement in UBC.

Benefits

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



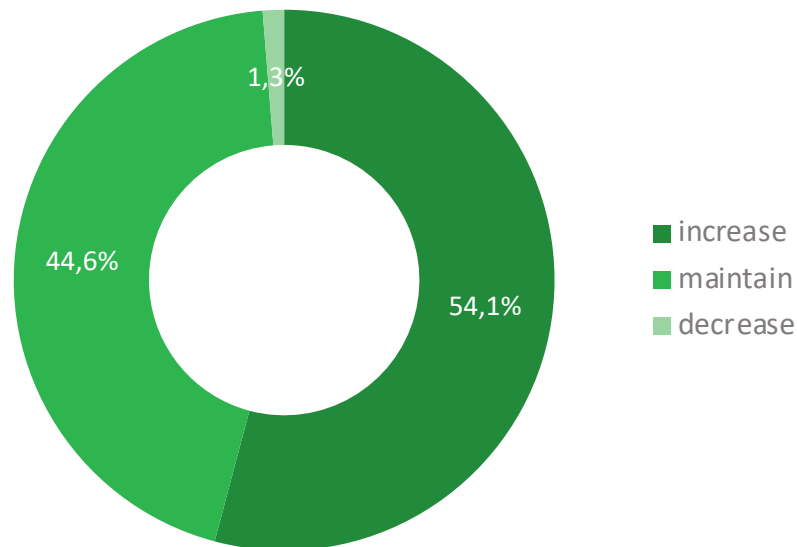
	Academics	HEI representatives
1.	Businesses	Universities
2.	Universities	Businesses
3.	Academics	Students
4.	Society	Society
5.	Students	Academics
6.	Government / public authorities	Government / public authorities

¹¹ HEFCE, (2017). University grow knowledge exchange activity for the benefits of business and communities. Retrieved from <http://www.hefce.ac.uk/news/newsarchive/2017/Name,115846,en.html>

Future intentions

Future UBC intentions – UK

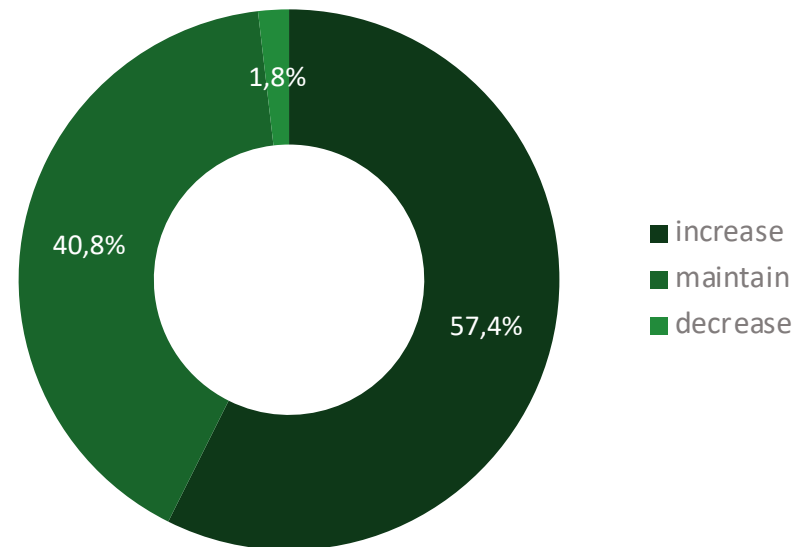
As answered by UK academics



Academics in the UK show a very strong commitment to UBC. 98.7% of them expect to maintain or increase their UBC activities. In this sense, UK 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 also show a strong 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.

Willingness to recommend UBC

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

UK academics are similarly satisfied with UBC in research as their European counterparts. While 45% of them will promote it positively, 27% would do so negatively.

Contrary, UK academics are less satisfied than their European counterparts in education-related UBC. However, university business cooperation in education is an area of dissatisfaction for both European and UK academics. One reason for this negative result could be the less apparent, and perhaps longer terms gains in education than in R & D. Lack of mechanisms to support the integration of each partners' contribution to training and education could also have contributed to this score.

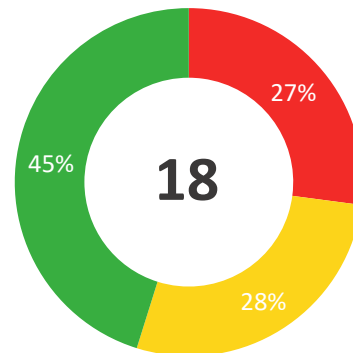
Willingness to recommend to an academic colleague cooperation with business in R&D and education

As answered by academics

	Detractors	Passives	Promoters	Net promotor score
Academics cooperating in E&T	50%	28%	22%	-28
Academics cooperating in R&D	27%	28%	45%	18

Satisfaction in cooperation with businesses (net promotor score)

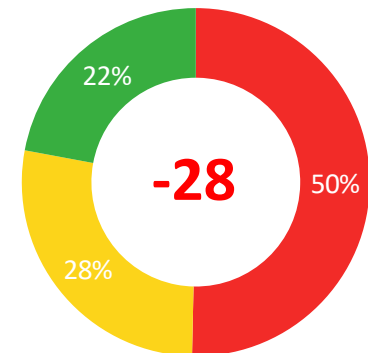
Academics cooperating in research



■ Detractors ■ Passives ■ Promoters

European academics' NPS result: 17

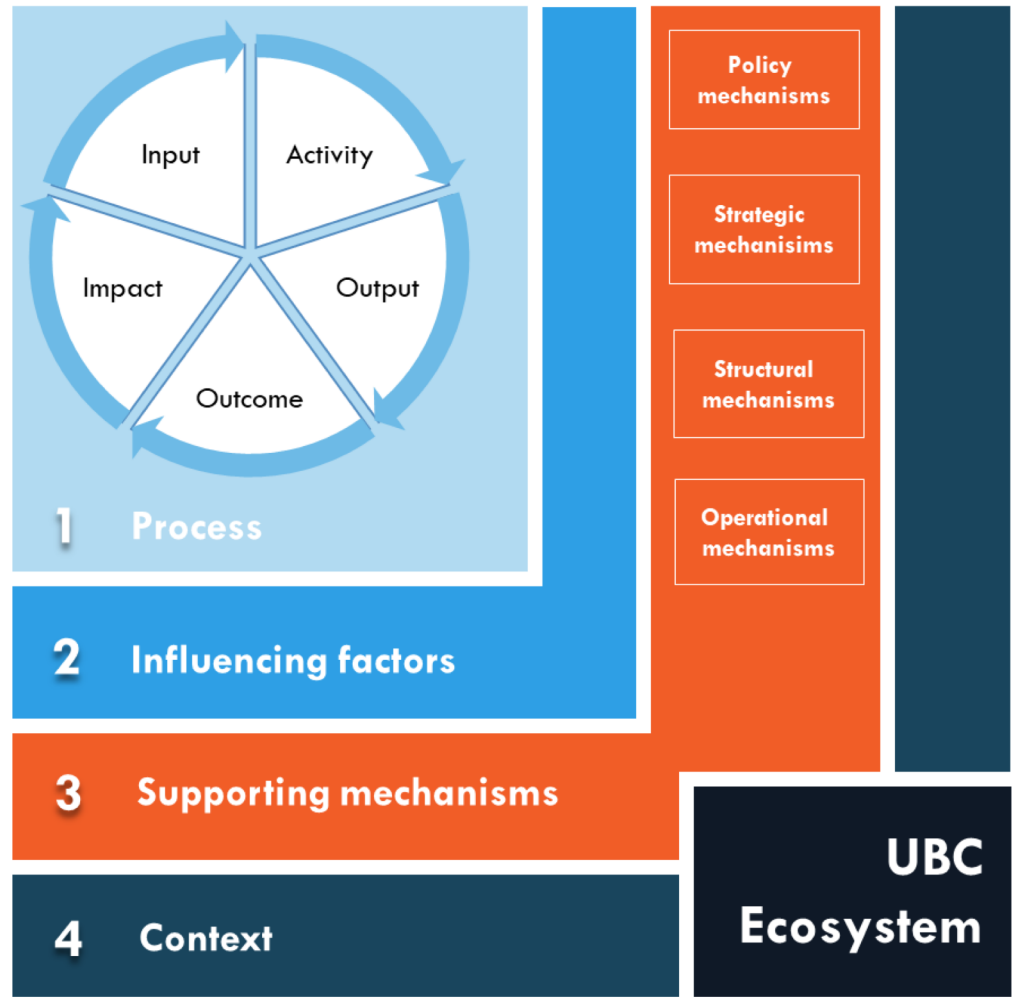
Academics cooperating in education



■ Detractors ■ Passives ■ Promoters

European academics' NPS result: -13.8

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

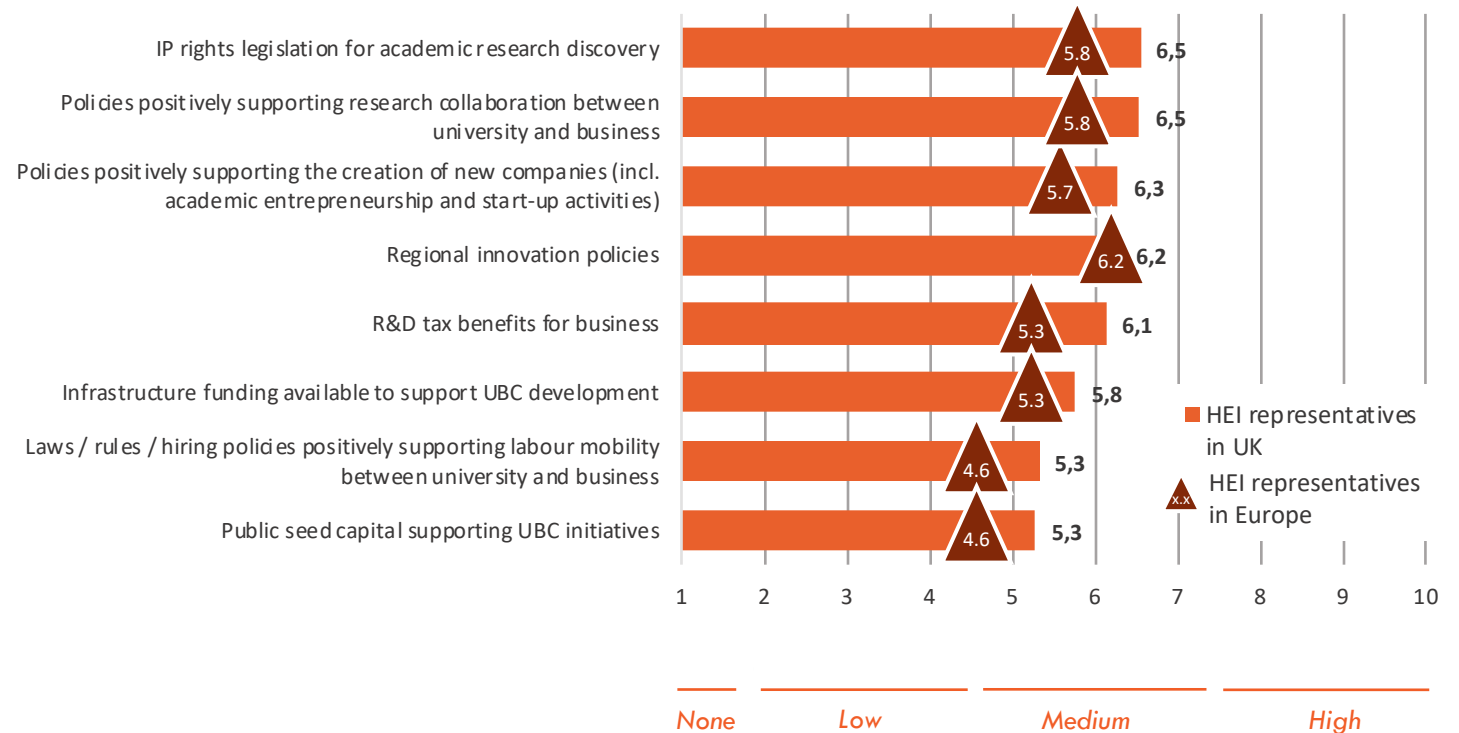
This section outlines the extent to which UBC supporting mechanisms are developed in this sample from the HEI perspective.

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



HEI representatives in the UK perceive policy mechanisms to be developed to a medium-low level. These perceptions are however higher than the perceptions of their European counterparts.

IP rights legislation for academic research discovery and policies positively supporting research collaboration between university and business are the most developed supporting mechanisms (6.5 each), also higher than the EU average (5.8 each).

The mechanism related to R&D tax benefits for business is significantly more developed in the view of the UK HEI representatives than for their European counterparts. In the UK, VAT tax on shared facilities for example, was highlighted as one area the government should address with urgency¹².

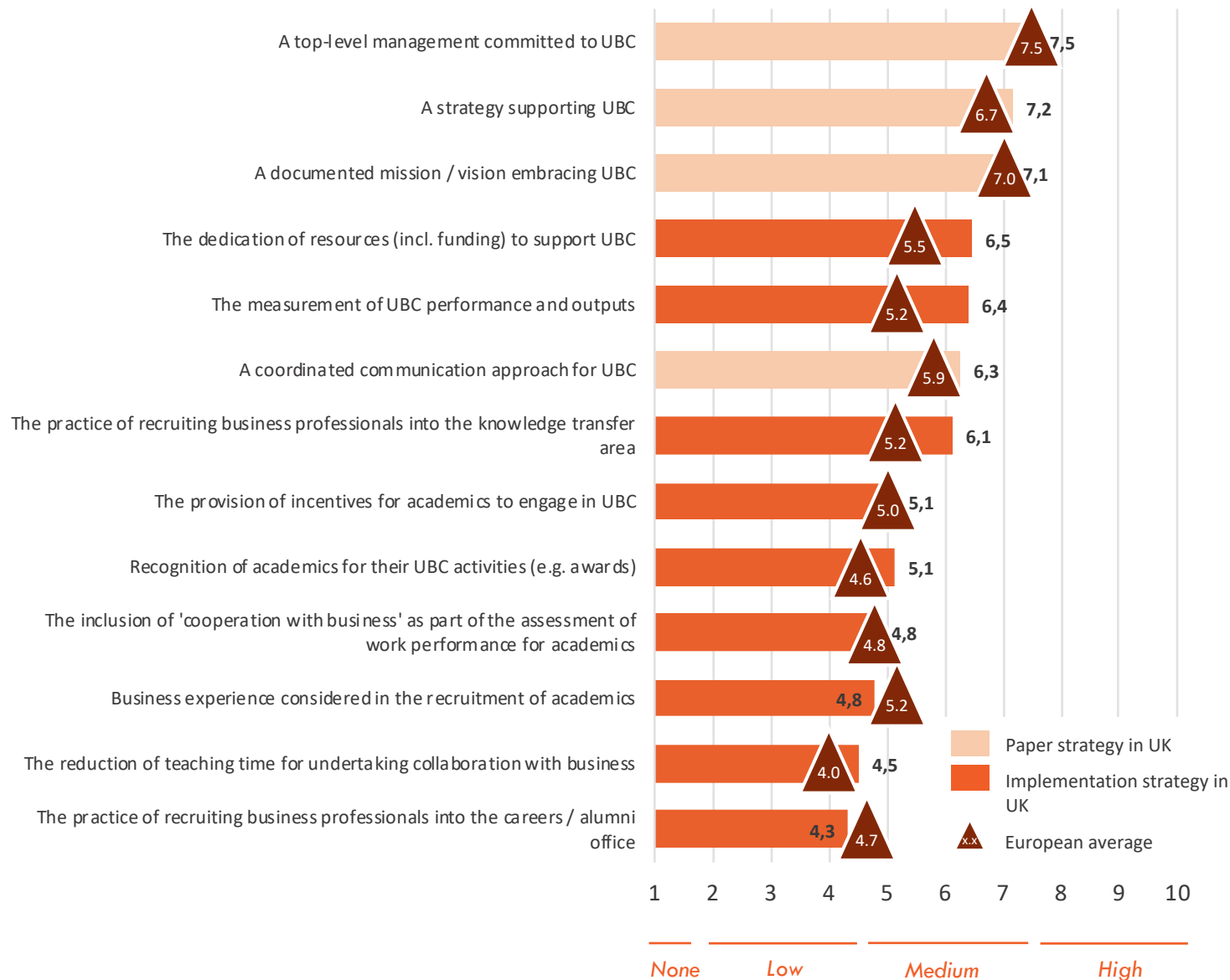
The least developed mechanisms in the UK relate to policies supporting labour mobility between universities and business and public seed capital supporting UBC initiatives, although still ranked higher than the EU average.

¹² Dowling, A. (2015). The Dowling Review of Business-University Research Collaborations. Department for Business Innovation and Skills, London, UK.

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 the UK and European HEIs is similar.

Additionally, paper strategies are substantially more developed than implementation strategies, as the latter can take longer to develop, require a variety of resources in place and some, like the measurement of UBC performance and outputs, are processes which will be carried out in time. To date, European HEIs have only moderate development of implementation strategy¹³.

The least developed mechanisms are related to the practise of recruiting business professionals into career offices (4.3) and the reduction of teaching time (4.5).

¹³ Davey, T., Galan Muros, V., Tercanli, H., Meerman, A. (2017, October 24). Flexible UBC Structures Have the Potential to Boost Cooperation [Blog post]. Retrieved from <https://blog.uin.org/2017/10/flexible-ubc-structures-have-the-potential-to-boost-cooperation/>

Supporting mechanisms for UBC

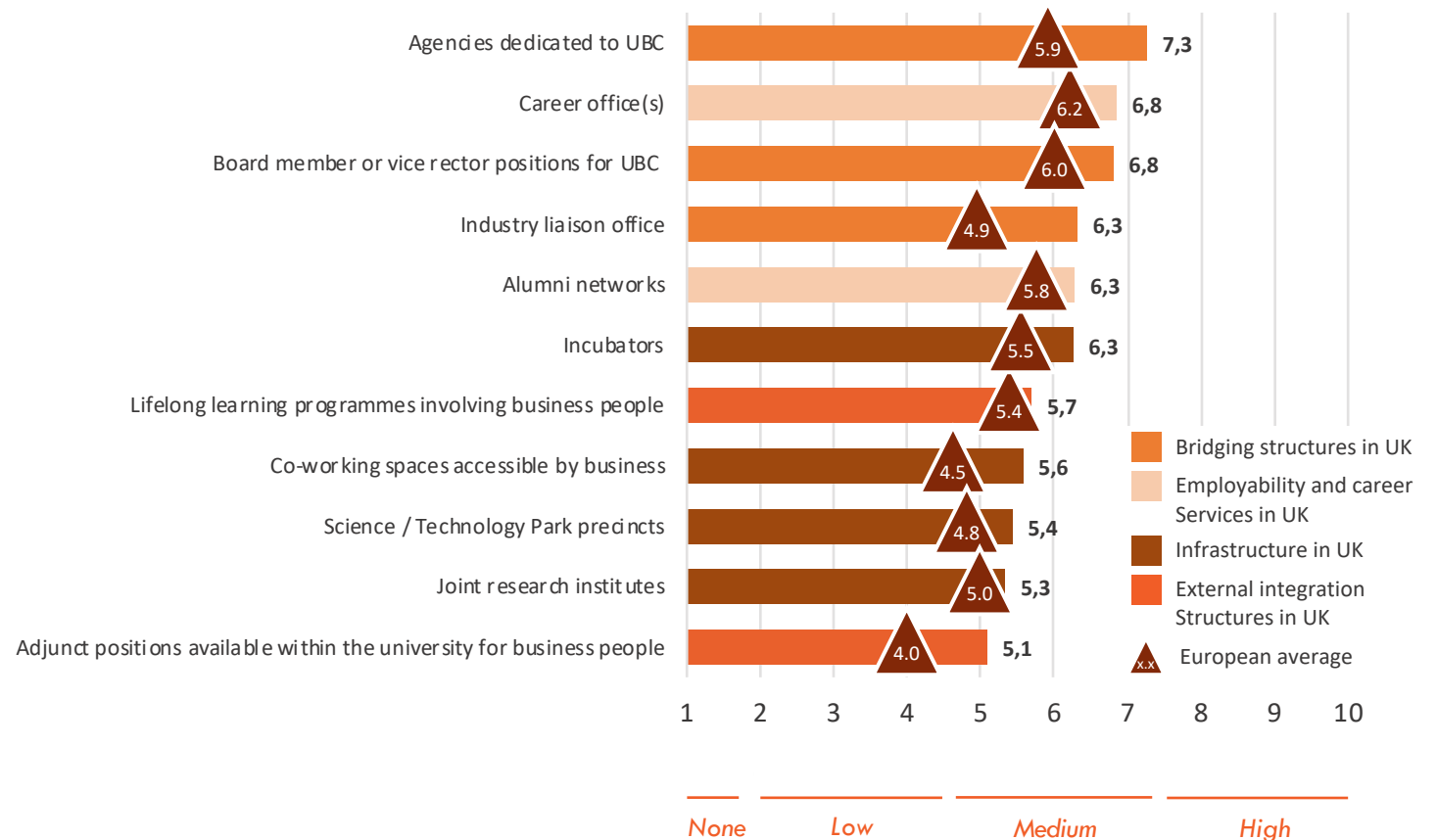
The development of most structural mechanisms is slightly higher in the UK HEIs than in European HEIs, as across Europe many HEIs are not yet equipped with the necessary organisational structures to support UBC as the results of this study shows.

Mechanisms related to infrastructure generally require a longer-term commitment and a high level of finance, so it is not surprising that these are less generally developed.

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

Structural mechanisms

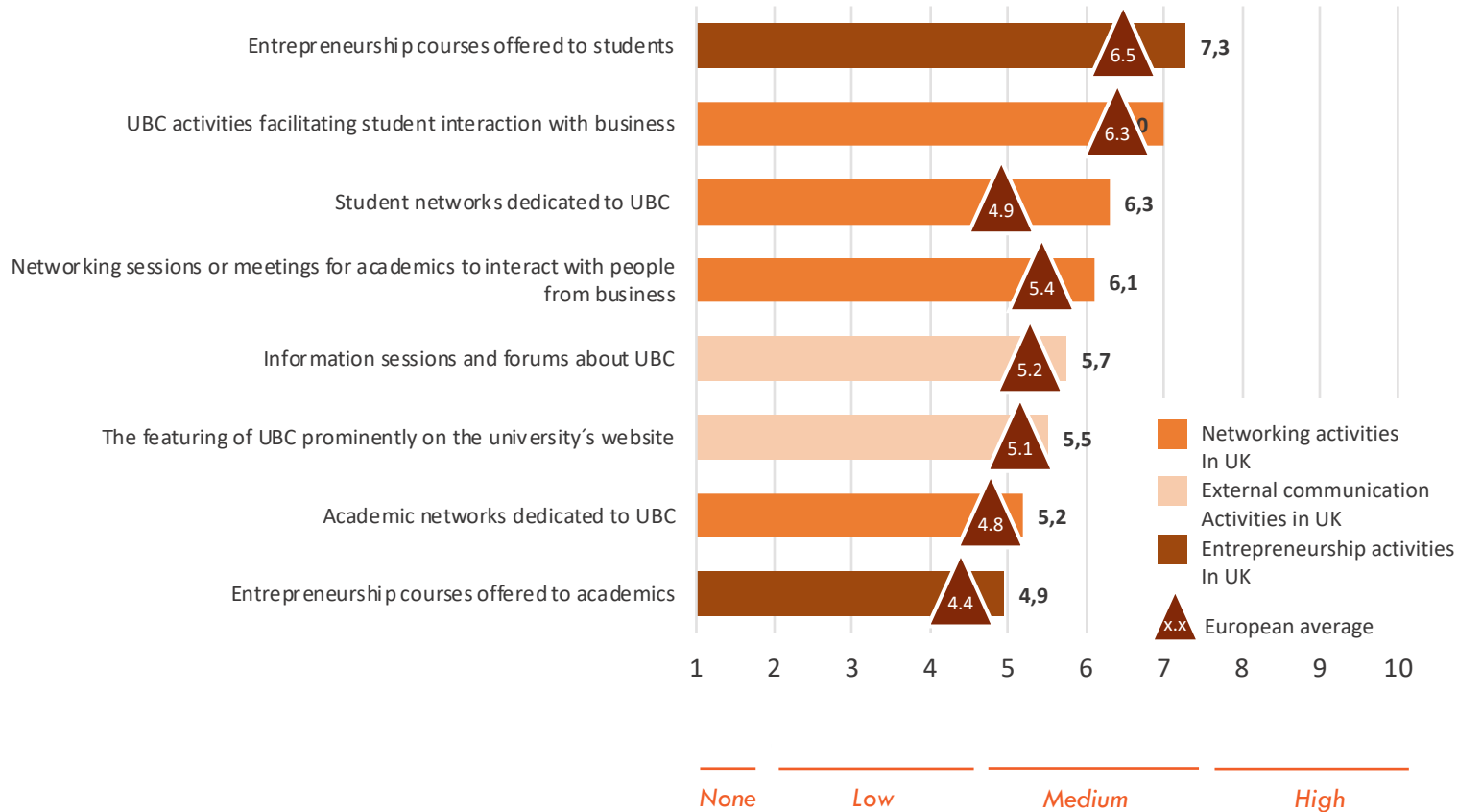
'To what extent do these mechanisms support UBC in your HEI?' - as answered by HEI representatives



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 the UK and European HEI representatives align in respect to the development of operational mechanisms.

Student-centred activities are the most developed operational mechanisms, with entrepreneurship courses offered to students (7.3), UBC activities facilitating student interaction with businesses (7.0) and student networks dedicated to UBC (6.3) that ranked the highest. Among the activities focused on academics, networking sessions for academics to interact with business people are also well developed (6.1).

Other mechanisms, including academics networks dedicated to UBC (5.2) and entrepreneurship courses (4.9) are perceived as less developed. Yet, at the system level, operational mechanisms supporting networks dedicated to UBC and the development of skills that would enable academics and business people to speak the same language would increase the permeability of the interface, and the flow of people, between these two domains. Evidence confirms that the UK lags behind in this respect¹⁴.

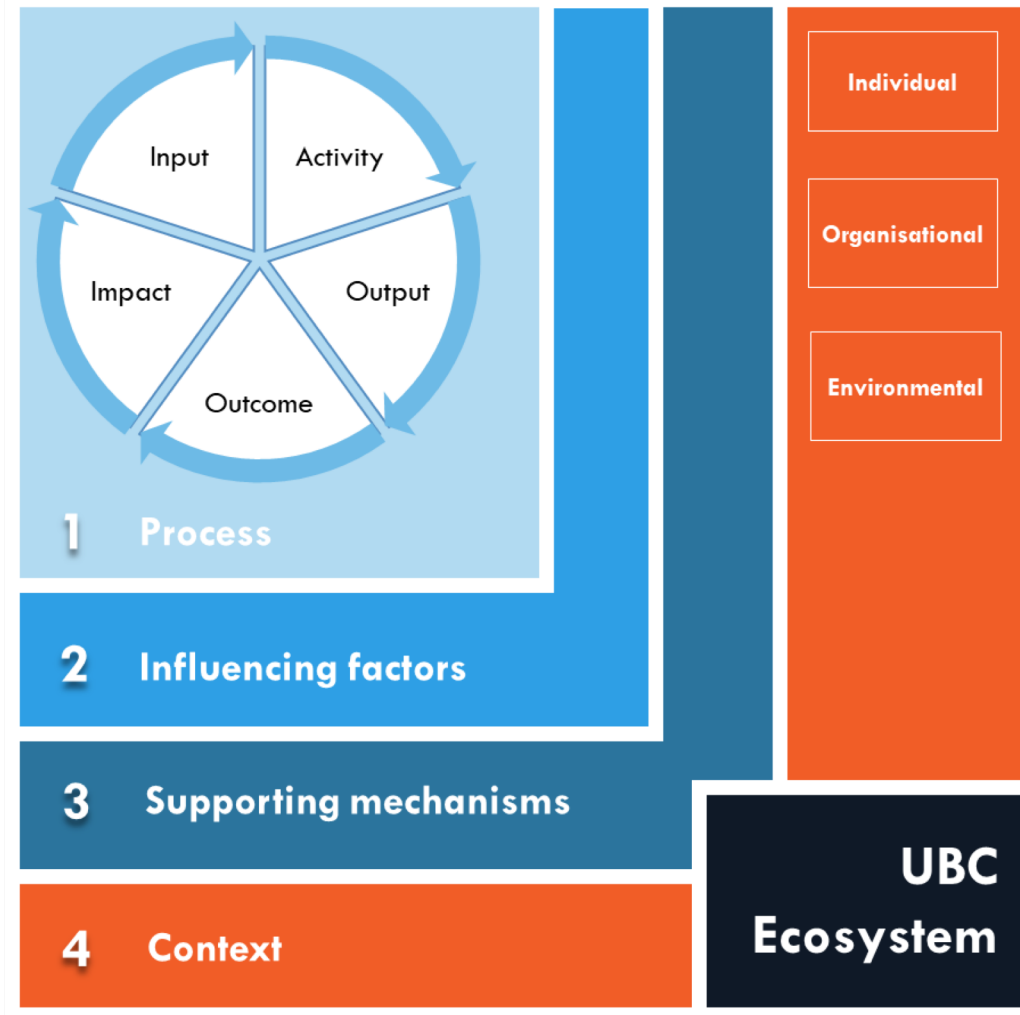
¹⁴ Dowling, A. (2015). The Dowling Review of Business-University Research Collaborations. Department for Business Innovation and Skills, London, UK.

Context

The degree to which UBC takes place is influenced by a set of elements 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.).

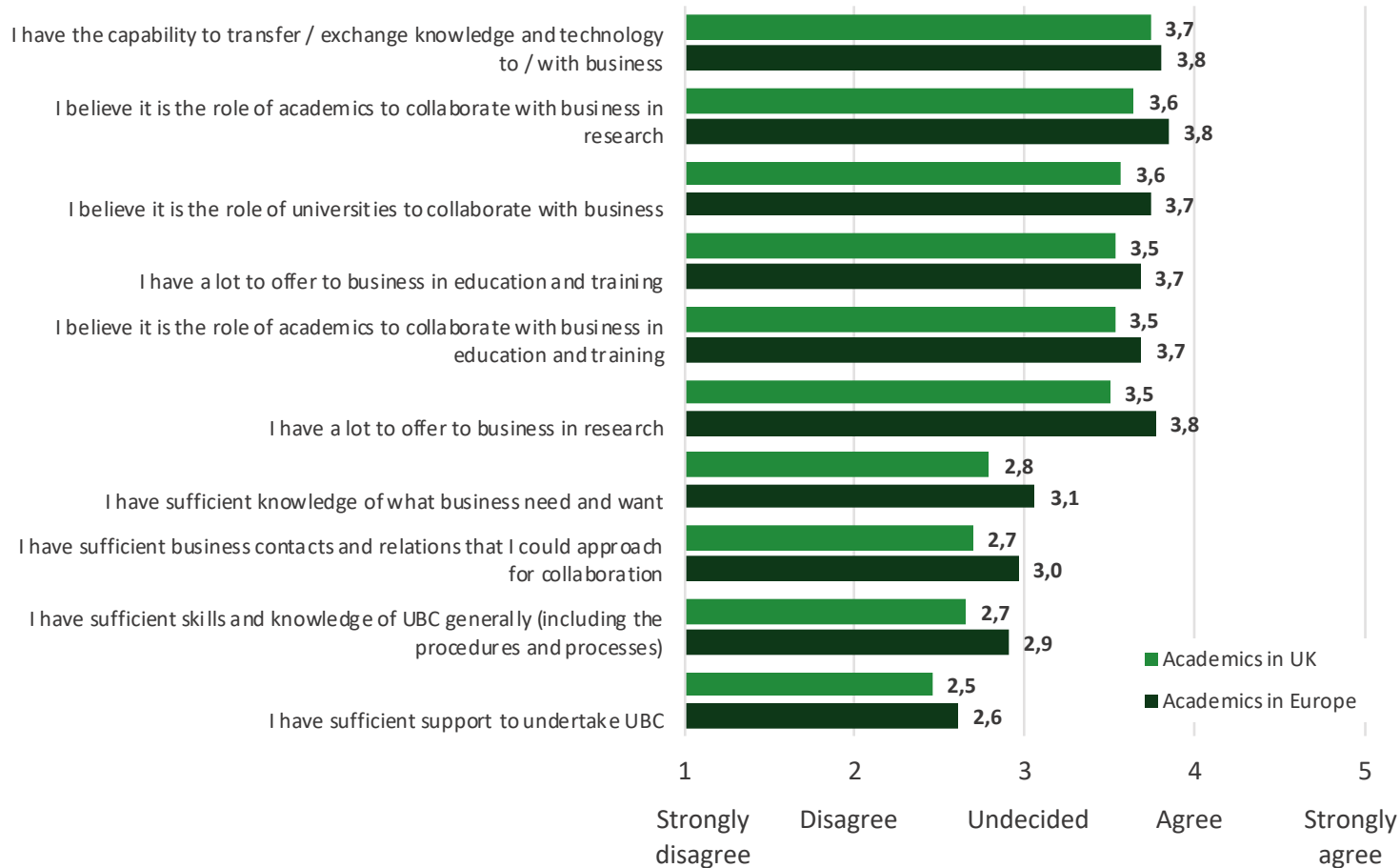
This section outlines how some contextual factors influence UBC in the country.



UBC capabilities

Capabilities for UBC

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



UK academics identified moderate capabilities and beliefs about UBC. Notably, they have a less positive attitude compared to their European counterparts.

UK academics identified their strength in the ability to exchange knowledge and technology (3.7).

They also believe that it is their and universities' role (3.6) to collaborate with business in both research (3.6) and education (3.5).

They, however, perceive they have insufficient knowledge (2.7) and general support (2.5) to undertake business contacts (2.7), skills and UBC. For example, funding bodies and universities could do more to promote examples of researchers who have derived particular benefit from collaborating with industry. Universities could also ensure that PhD students in appropriate subjects receive wider business skills training in order to be able to connect with business at the outset of their academic career¹⁵.

¹⁵ Dowling, A. (2015). The Dowling Review of Business-University Research Collaborations. Department for Business Innovation and Skills, London, UK.

Context

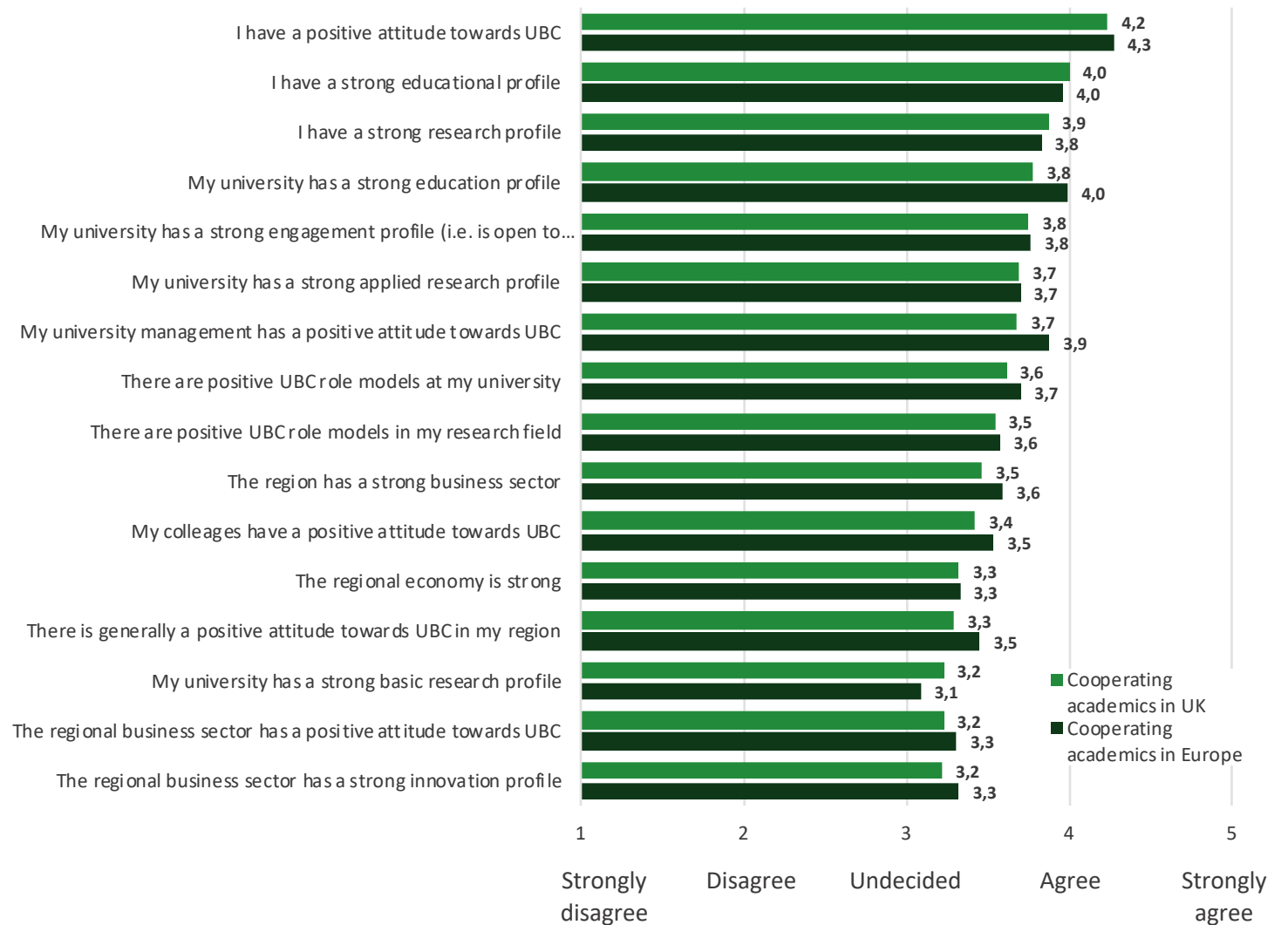
Although UK and European academics perceive their contextual factors similarly, the perception of most contextual factors is slightly more negative in the UK. This may be pointing to the fact that in the UK there is high awareness of the benefits deriving from UBCs, but also of the fact that the UK is not yet reaping their full potential. The negativity may also reflect an expectation that the government should foster the conditions under which these collaborations can happen at scale and deliver enduring impacts for all parties involved¹⁶.

Yet, both UK and European academics have a positive attitude towards UBC (4.2 and 4.3). Both groups also have a positive perception of their educational and research profiles.

Hence, compared to UK average, academics in the EU perceive a more positive attitude of their colleagues, HEIs and regions towards UBC.

Contextual factors affecting UBC

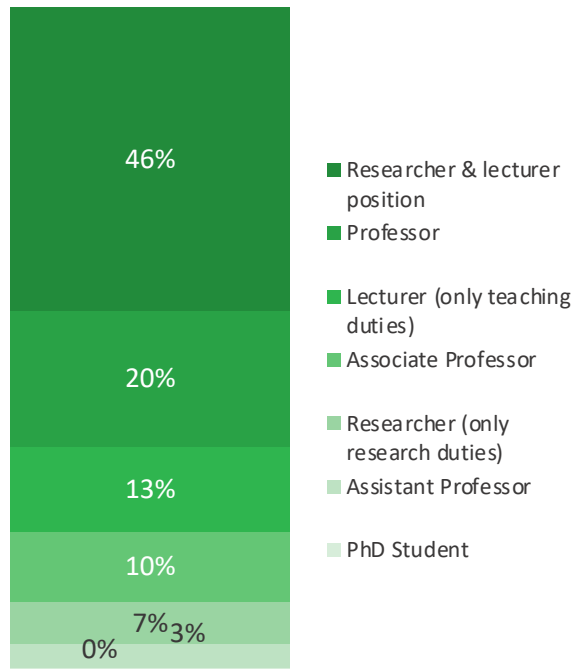
'To what extent do you agree or disagree with the following statements?' - as answered by academics



¹⁶ Dowling, A. (2015). The Dowling Review of Business-University Research Collaborations. Department for Business Innovation and Skills, London, UK.

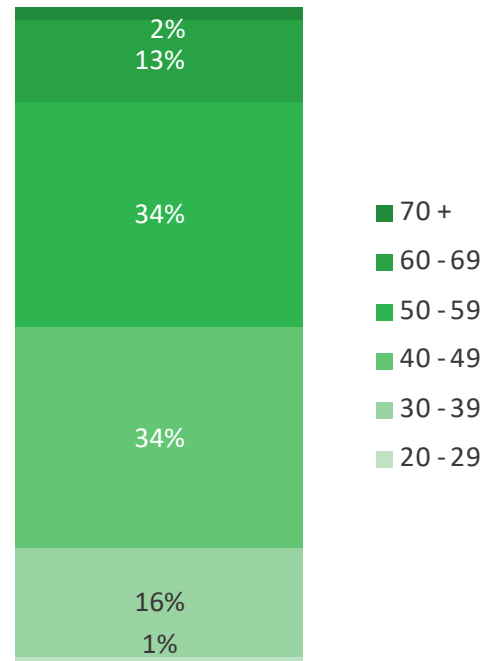
Respondent profile – academics

Position of respondent



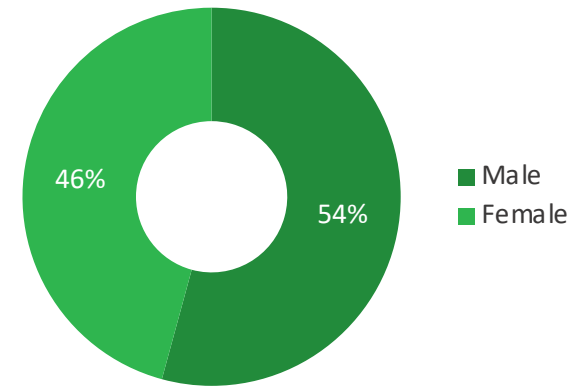
Researchers and lecturers comprise the largest group (46%), followed by professors (20%). The remaining academics identified themselves as lecturers (13%), associate professors (10%), researchers (7%) and assistant professors (3%).

Age of respondents



Over two thirds of the UK academics in the sample are aged between 40 and 59. Other significant groups are those aged 30-39 (16%) and 60-69 (13%). Academics older than 70 are only 2% and those aged 20-29 are represented by only 1% of the sample.

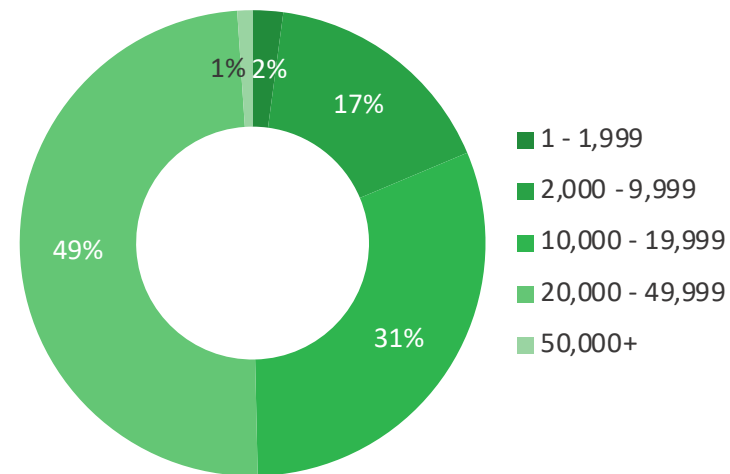
Gender of respondents



The gender distribution in the academic sample in UK is skewed towards male respondents, 54% of male and 46% female respondents.

Respondent profile – academics

Number of students of the HEI

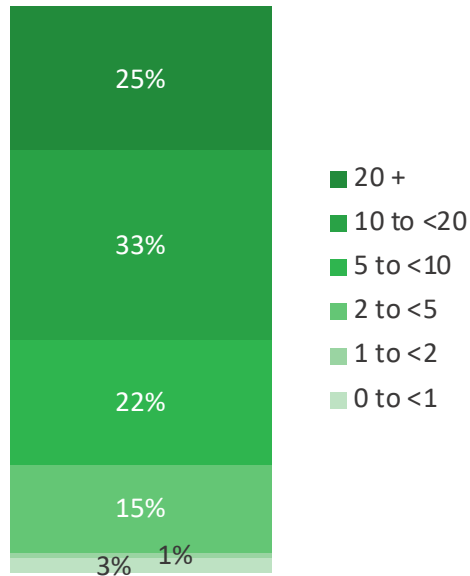


Sample Size	
UK Academics	n=430
European Academics	n=10.836
UK HEI representatives	n=266
European HEI representatives	n=3.482

Almost half of the academics in the UK sample (49%) work for medium-large HEIs (20,000 to 49,999 students). Medium-sized HEIs (10,000 to 19,999 students) are represented by 31% of respondents and small HEIs (with less than 10,000 students) by 19%. Only 1% of the academics work at very large HEIs with over 50,000 students.

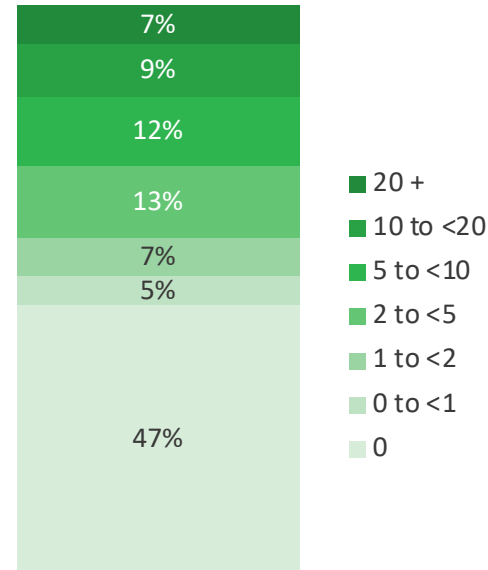
Respondent profile – academics

Years working in university



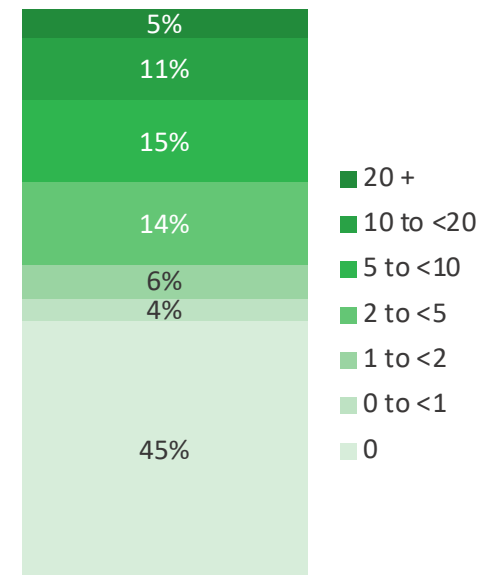
Most academic respondents have worked in academia for several years. More than a half of them (58%) have worked in academia for over 10 years. 22% have 5-10 years of experience, followed by 15% who have worked in academia for 2-5 years. 4% of the academics have less than 2 years of experience.

Years working in business



Almost a half of the UK academics (47%) have never worked in industry. 25% have 2-10 years of experience, followed by 16% who have worked for business for over 10 years. Only 12% have done so for less than 2 years.

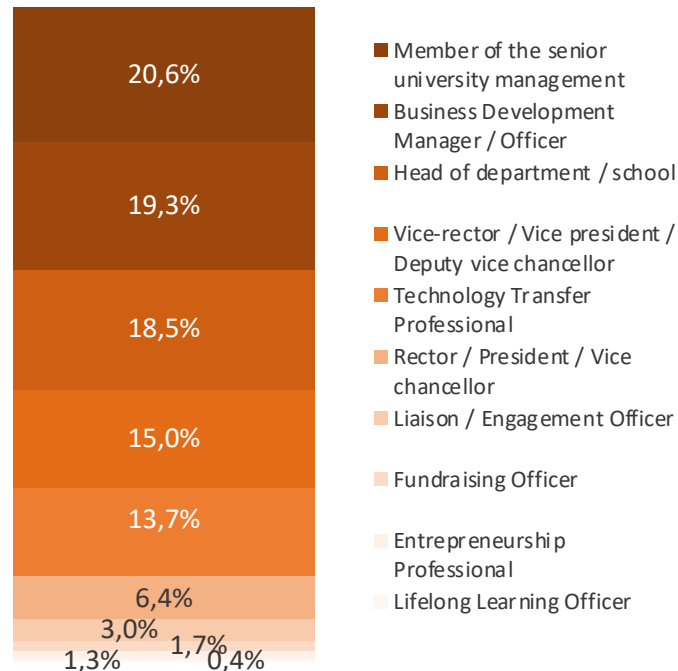
Years involved in UBC whilst working at a university or business



More than half of the respondents in the UK have some UBC experience. Although only 5% have been involved in UBC for over 20 years, 26% have 5-20 years of experience and 24% 1-5 years of experience. 45% of academics in the sample have never engaged in UBC.

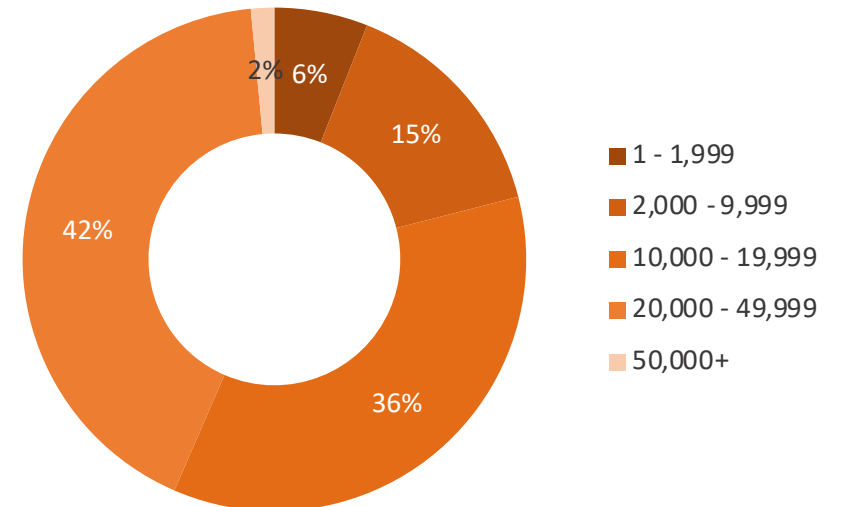
Respondent profile – HEI representatives

Position of respondent



The UK HEI representatives hold a variety of roles. 20.6% of them are members of the senior university management, 19.3% are business development managers and 18.5% hold a head of department position. Other positions represented in the sample include vice-rectors, technology transfer professionals, rectors or presidents and liaison officers among others.

Number of students of the HEI



Overall, 42% of HEI representatives in the sample work for large HEIs (20,000 to 49,999 students) and over one third (36%) for medium-sized HEIs (10,000 to 19,999 students). Small HEIs (under 9,999 students) are represented by 21% and only 2% of HEI representatives work in very 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