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Results from the 2006 Uppsala Biotech Cluster Survey

Presentation to the Uppsala BIO Steering Committee and STUNS May 2006

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Summary of 2006 Uppsala Biotech Cluster Survey

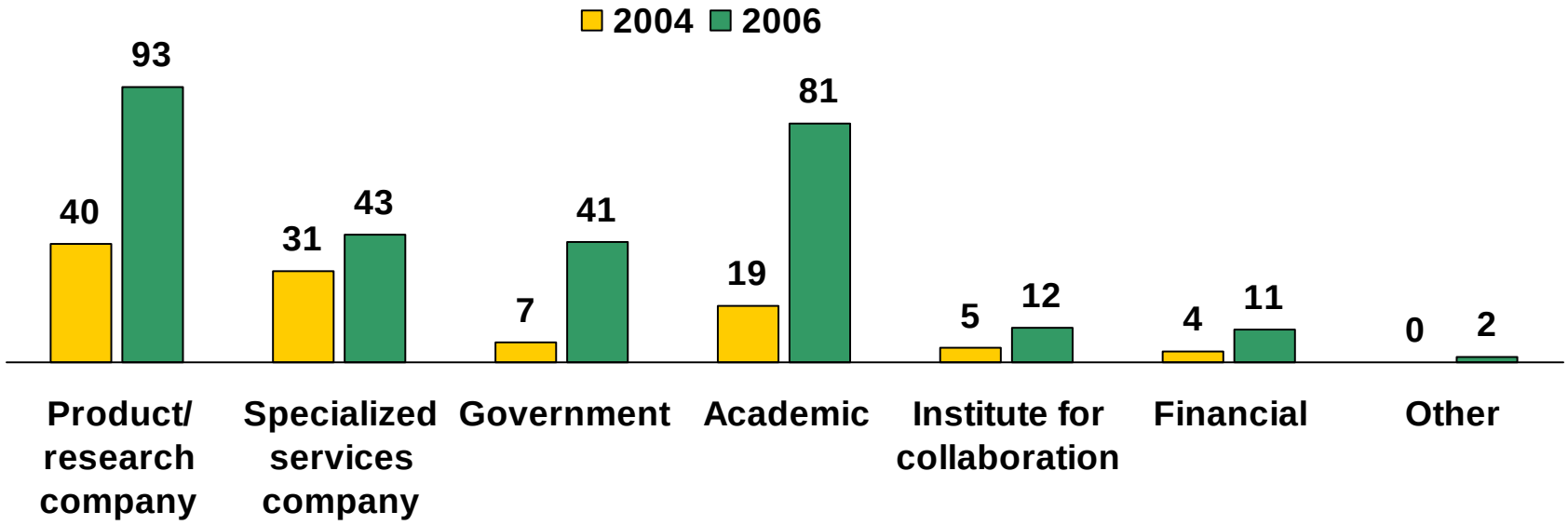
- **Cluster competitiveness**
  - While there is a gap between the leading and second-tier biotech clusters, respondents feel that the Uppsala Biotech Cluster has the characteristics of a competitive cluster. Additionally, respondents view that improvements have been made in the areas of collaboration, research, and visibility of the cluster in the past two years. However, improvements have not been made in the number of jobs and companies nor in financing and investment levels.
- **UB performance**
  - Expectations on UB remain high, and UB appears to be fulfilling these expectations since respondents view UB as a good use of resources and that UB is fulfilling its four focus areas.
- **UB activities**
  - In general respondents view all of UB's activities as valuable; however, opinions do vary greatly by sector and by degree of involvement in UB, thus posing a significant operational challenge to Uppsala BIO.
- **UB in the future?**
  - Respondents view insufficient financing and the potential exit of companies as the biggest threats to the cluster. Moreover, they view that collaboration with other biotech clusters in Sweden should be improved.

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Today's presentation

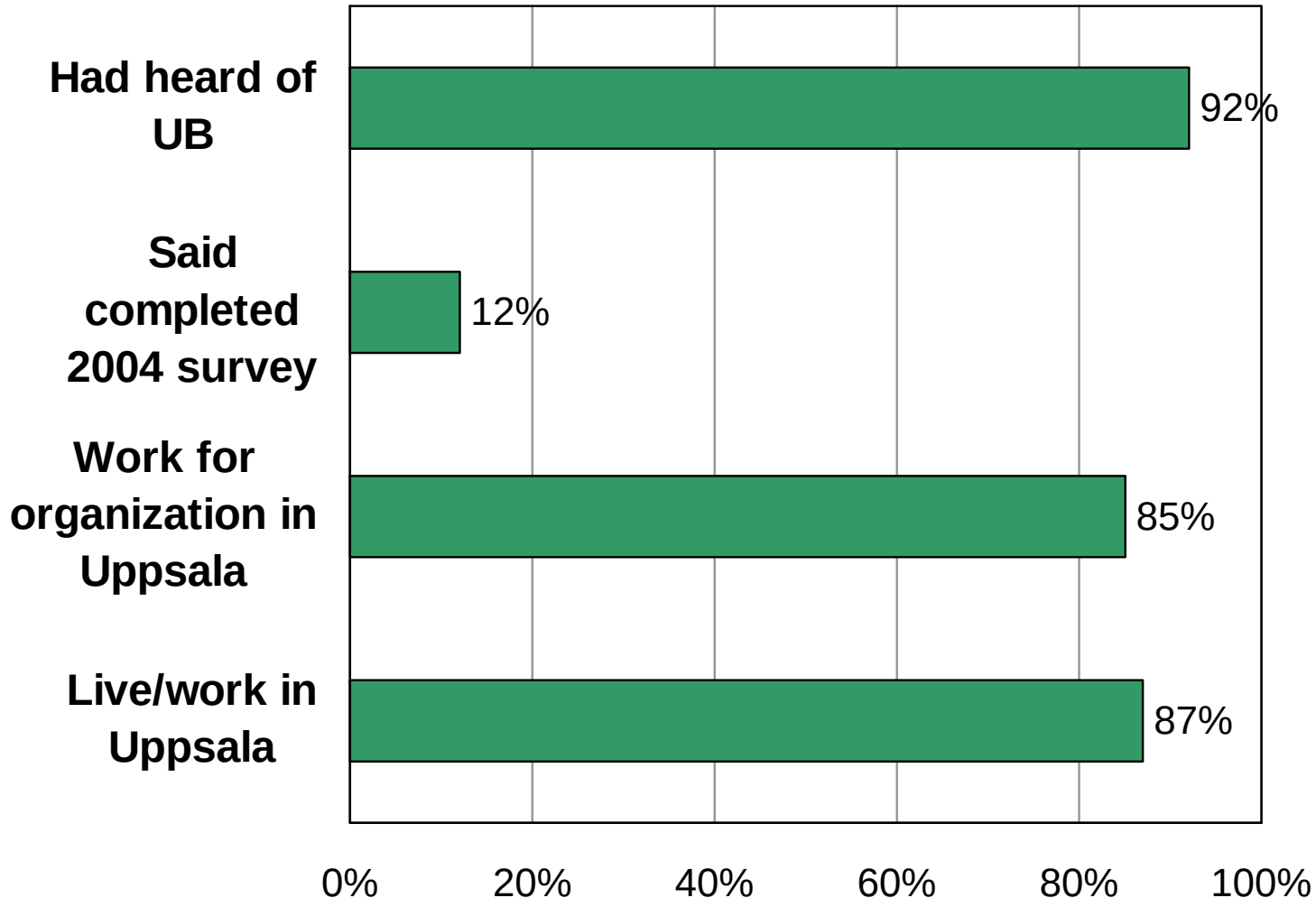
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- How competitive do respondents believe Uppsala's biotech sector to be?
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We achieved a 35% survey response rate in 2006

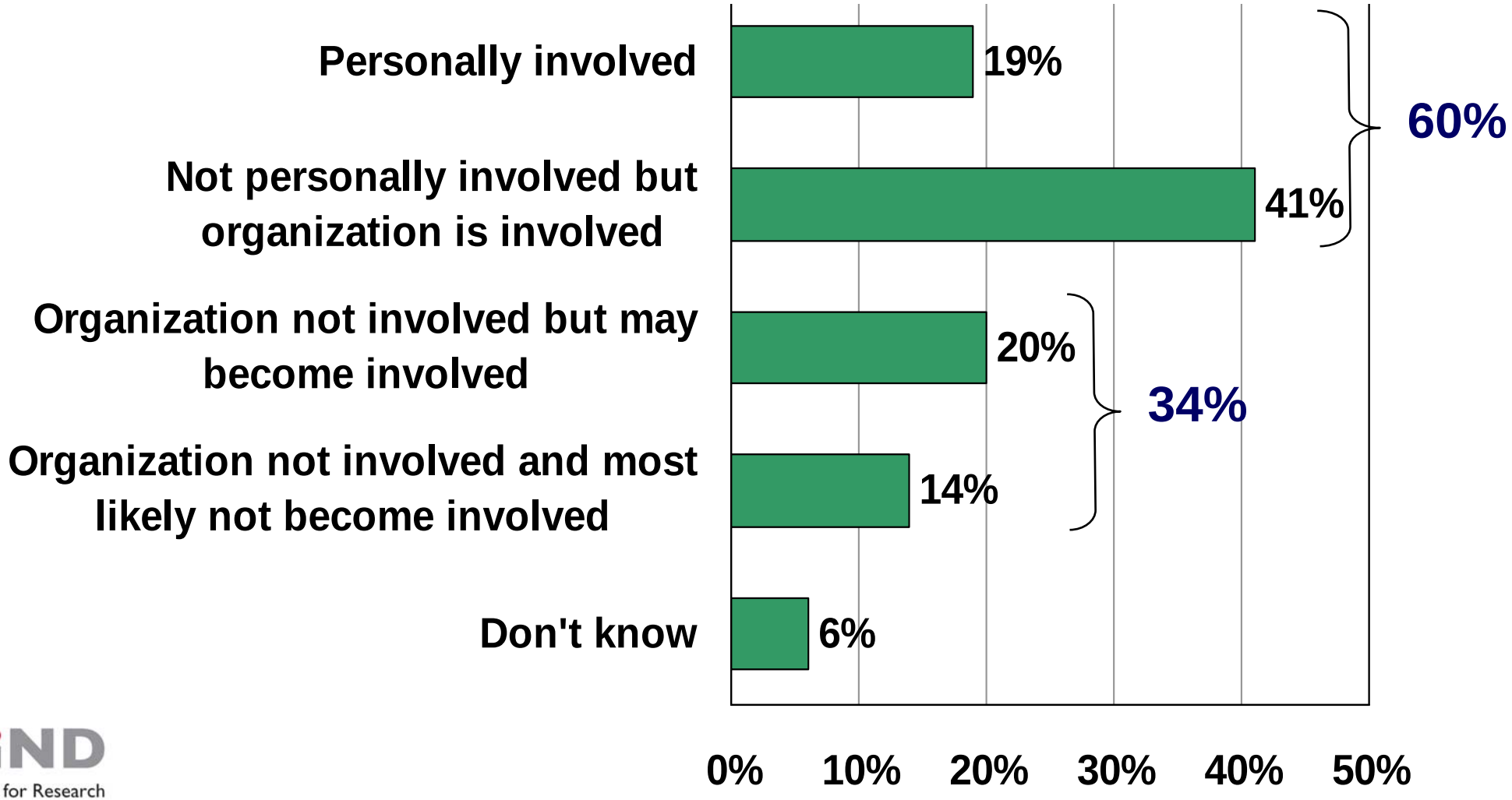


- Respondents were derived from two sources
  - Uppsala BIO's mailing list
  - Through research by CiND with Uppsala BIO's help
- Comparison to 2004 survey
  - 2004: 106 of 249 individuals completed the survey (43%)
  - 2006: 283 of 805 individuals completed the survey (35%)

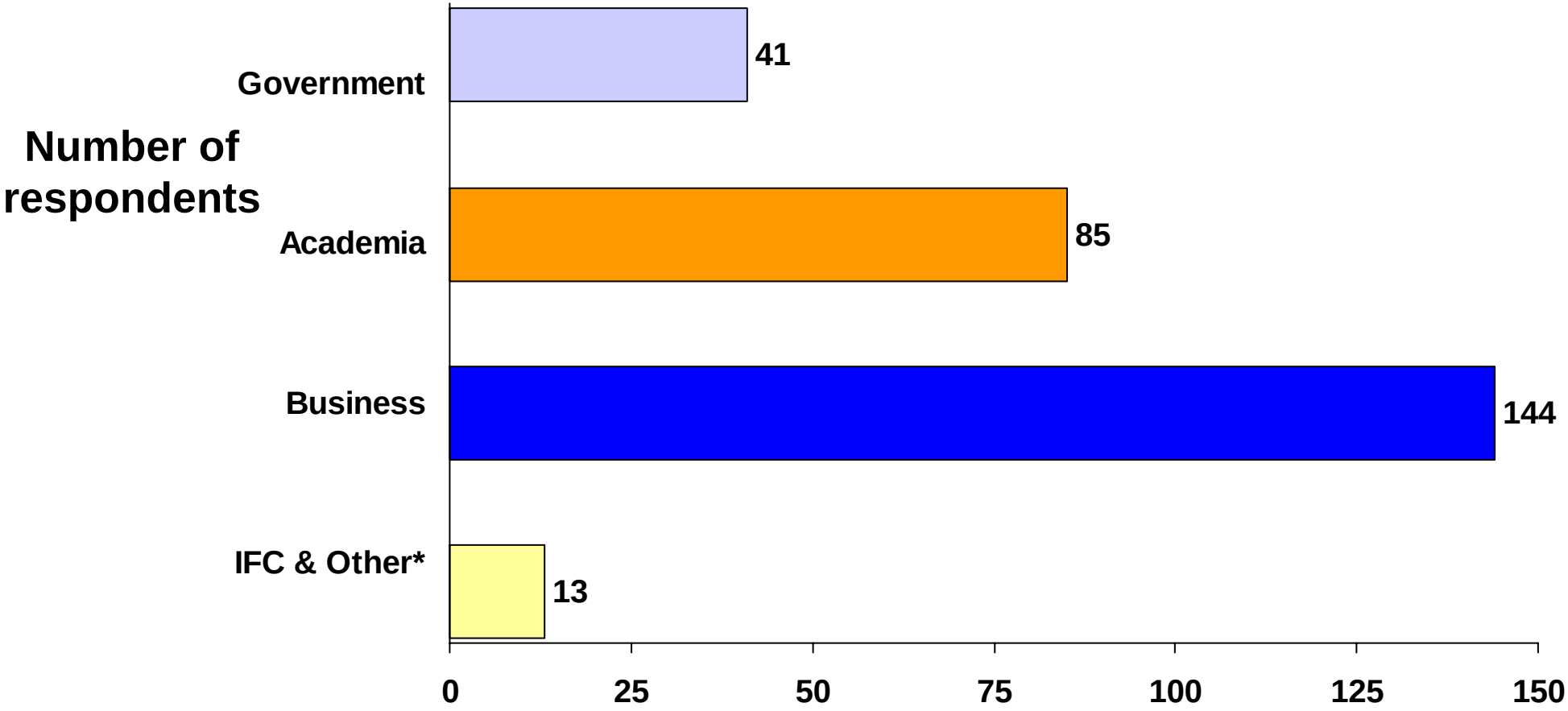
Of the 2006 respondents …



The majority of survey respondents are involved in Uppsala BIO either personally or indirectly through their organization



To better investigate the survey results, we divided the respondent group into three primary sectors

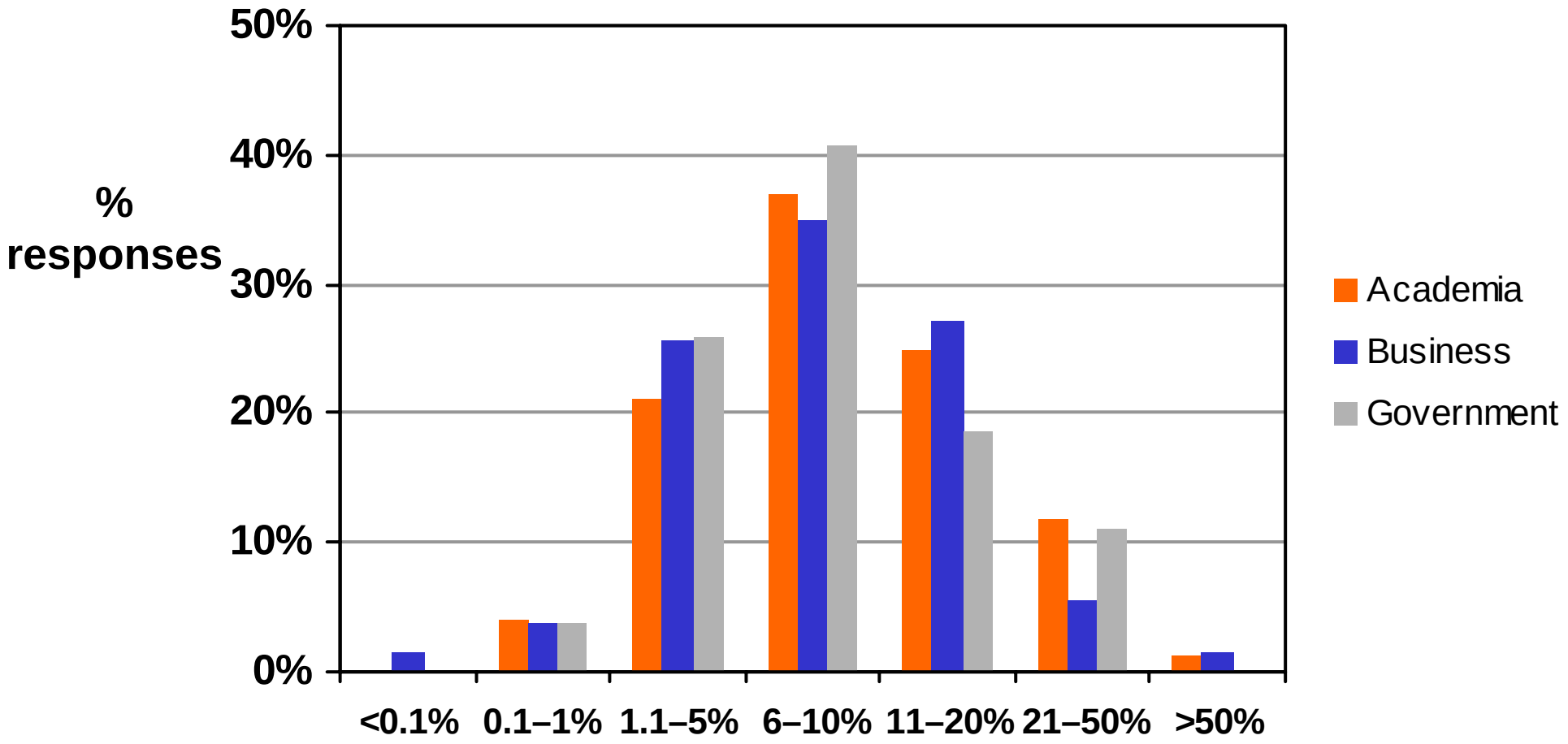


*** IFC is institute for collaboration, e.g., Uppsala BIO, STUNS, etc., and consists of all three sectors. These respondents are not included in the survey results presented here.**

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The three sectors have more or less the same understanding of the economic importance of Uppsala's biotech sector



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UB's vision in Vinnväxt application

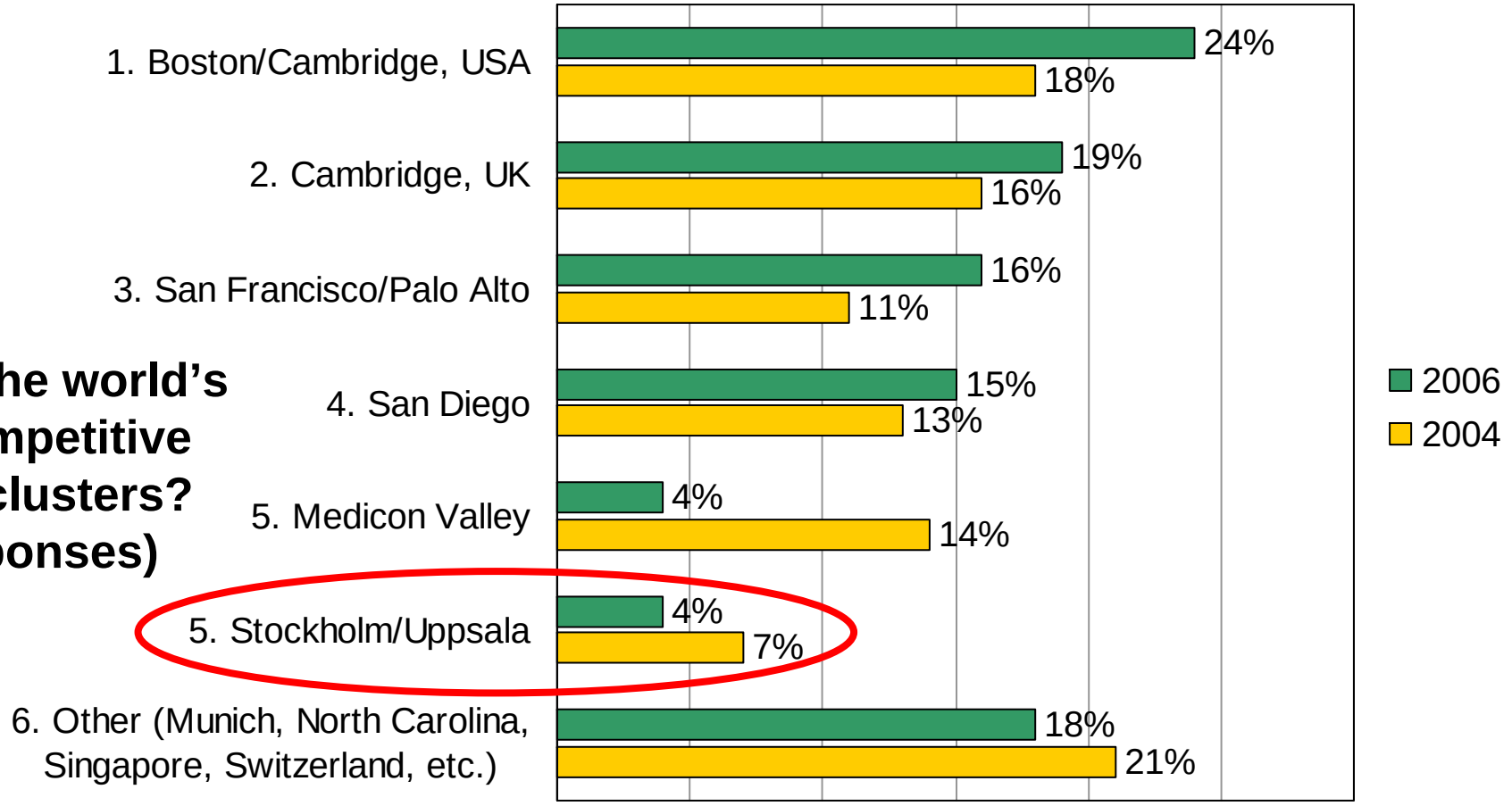
- Within a period of five years
  - *The Uppsala-Stockholm region will be one of the world's five leading biotechnology regions supported by a sustainable competitive industrial base, world-class research and education, and a good climate for companies, academics, and employees.*
  - *In this region, Uppsala will be the center for the research and development of research methods, models, and tools within biotechnology research.*

How do respondents rate the performance of Uppsala and the Uppsala-Stockholm region?

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The difference between the first and second tier worldwide leading biotech clusters appears to be growing

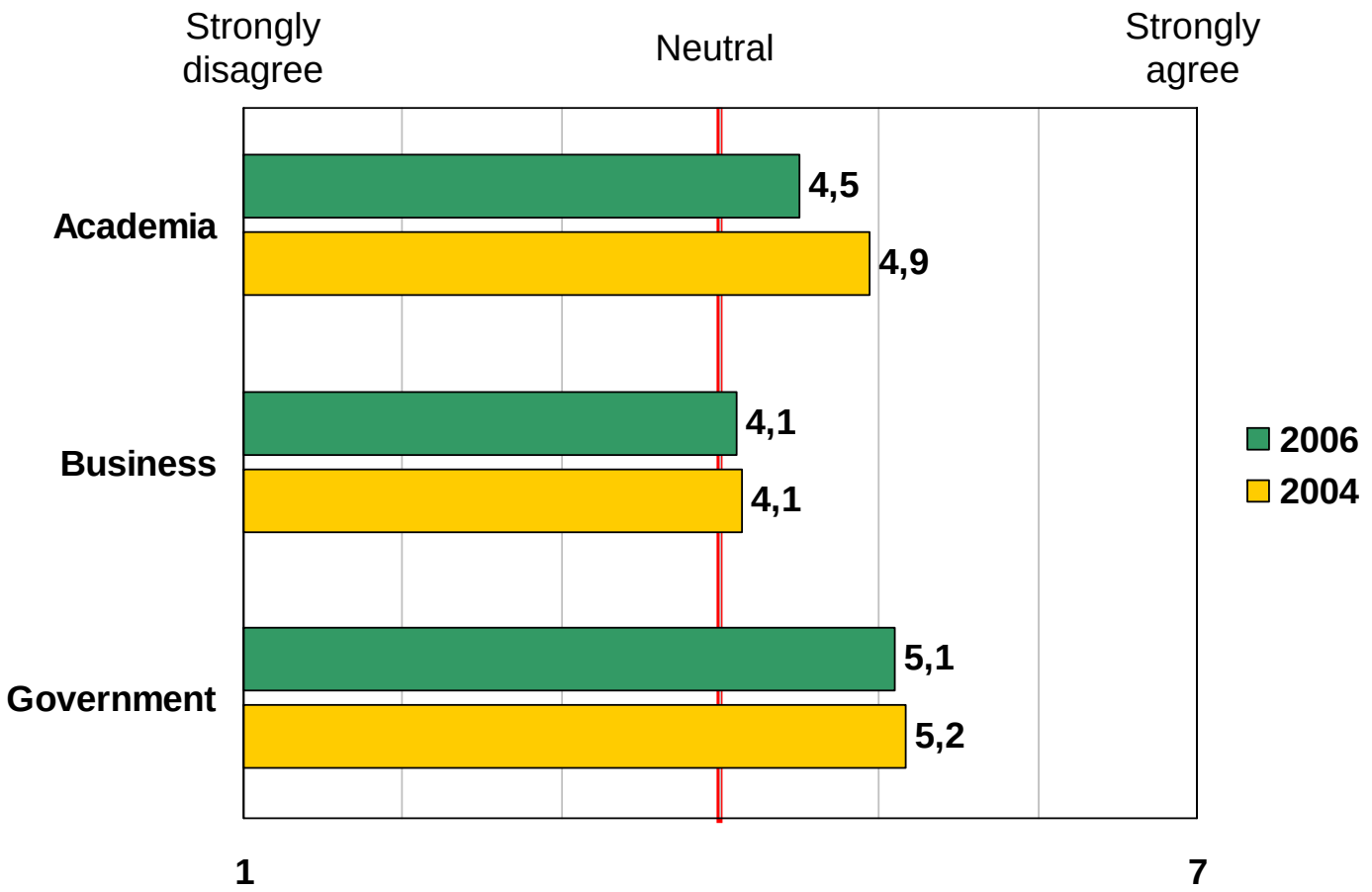
What are the world's most competitive biotech clusters? (% responses)



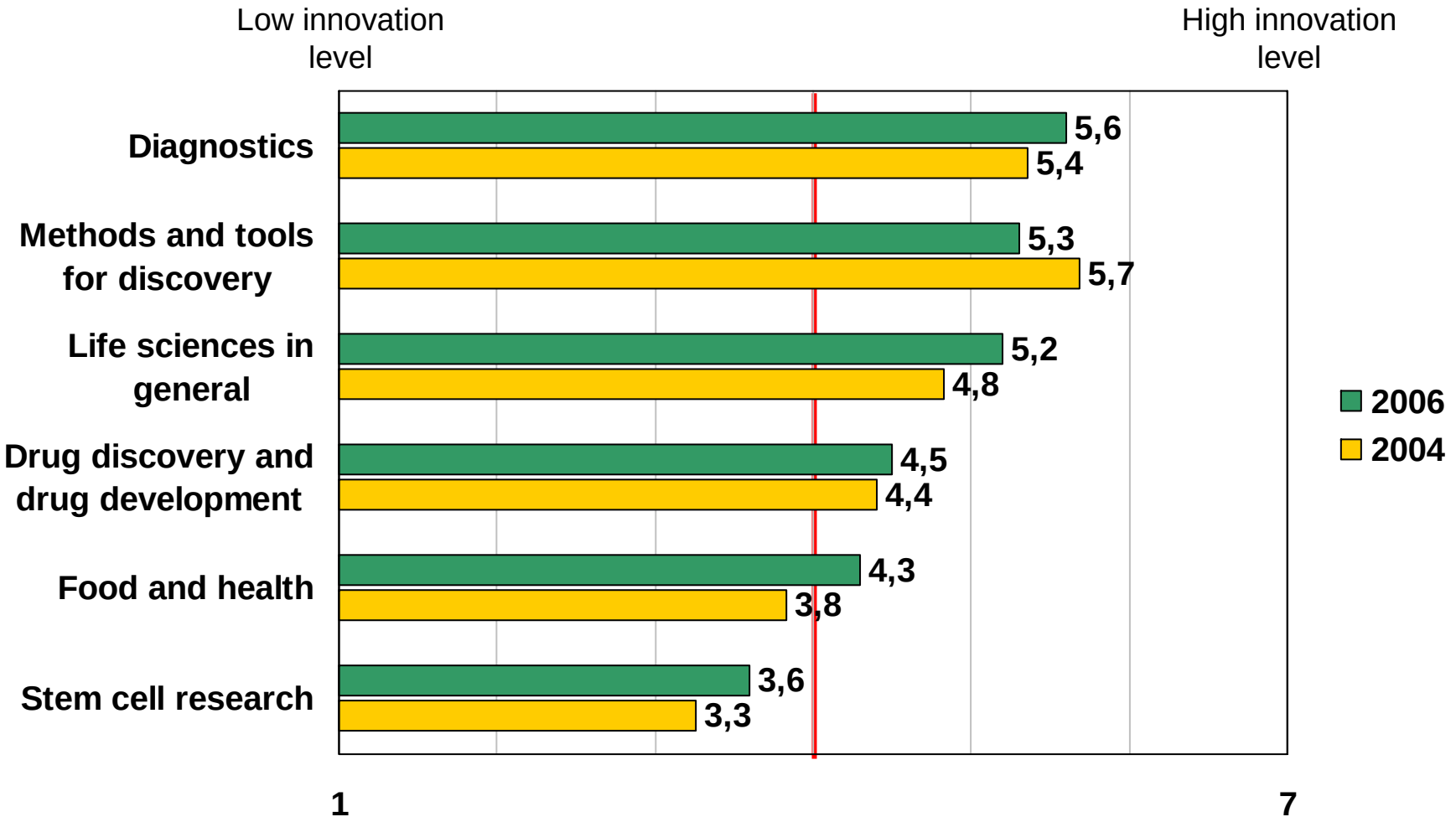
Total responses = 282

Moreover, the business sector is less convinced that the Uppsala-Stockholm region is one of the world's five leading

Uppsala-Stockholm is one of the world's five leading biotech regions



Uppsala's innovativeness is considered to be slightly higher in diagnostics than in discovery methods and tools



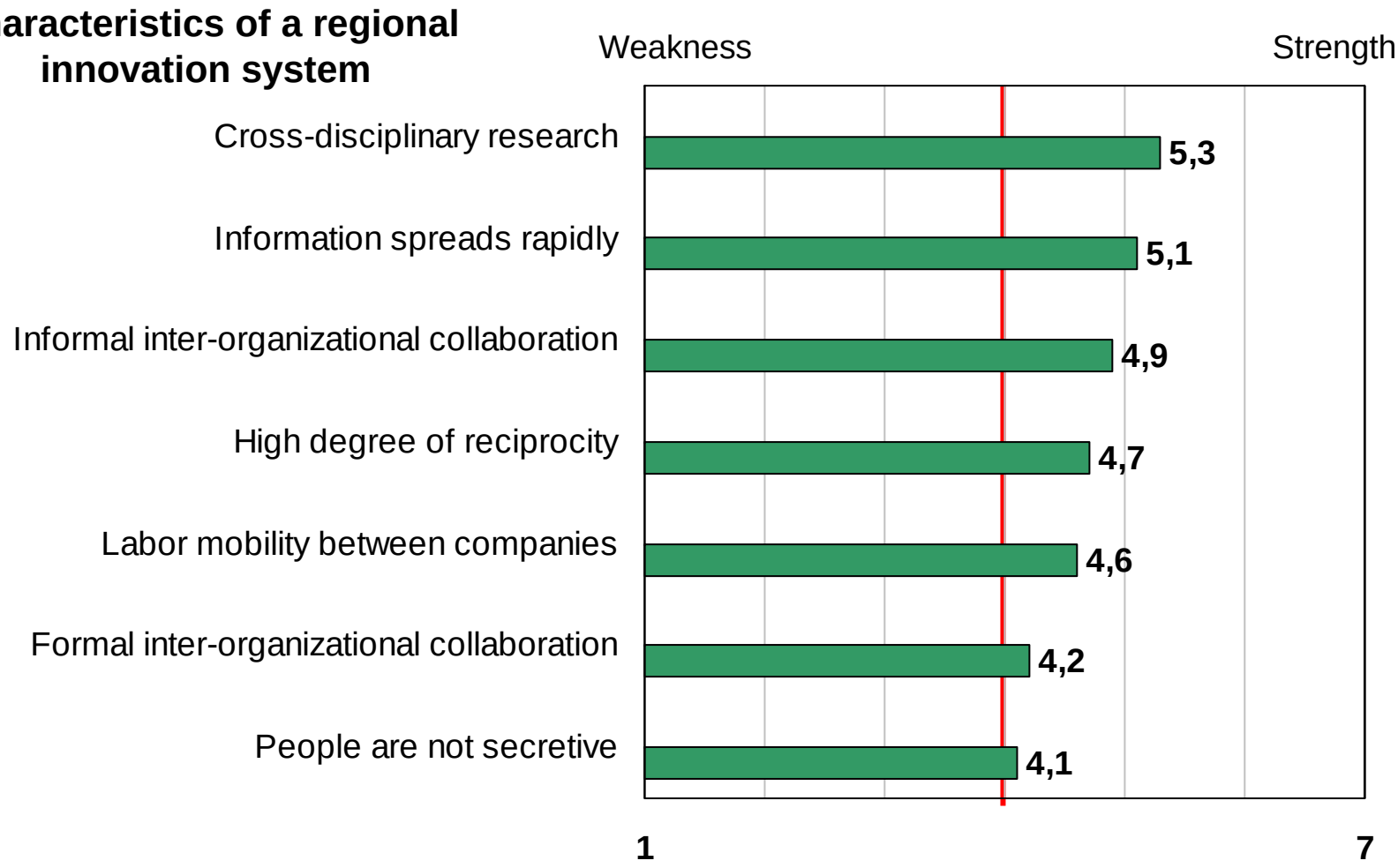
Respondents consider Uppsala to fulfill the conditions for cluster competitiveness to a medium degree

- Medium fulfillment of conditions for cluster competitiveness*
  - Relative cluster weaknesses
    - **Relative poor availability of local and foreign capital and foreign skills**
    - **Low local rivalry despite low barriers to entry**
    - **Ineffective government organizations/policies furthering cluster competitiveness**
  - Relative cluster strengths
    - **Strong local supply of skills**
    - **Local demand and supply seen as moderate strengths**
    - **High level of innovativeness in ”Discovery methods/tools” and in ”Diagnostics”**
- Tightly knit regional innovation system
  - **Moderate to high degree of labor mobility and cross-disciplinary research**
  - **Moderate to high degree of formal and informal cooperation between actors**
  - **Moderate to high degree of openness, information flow, and reciprocity**

* From Diamond Model, Porter 1990

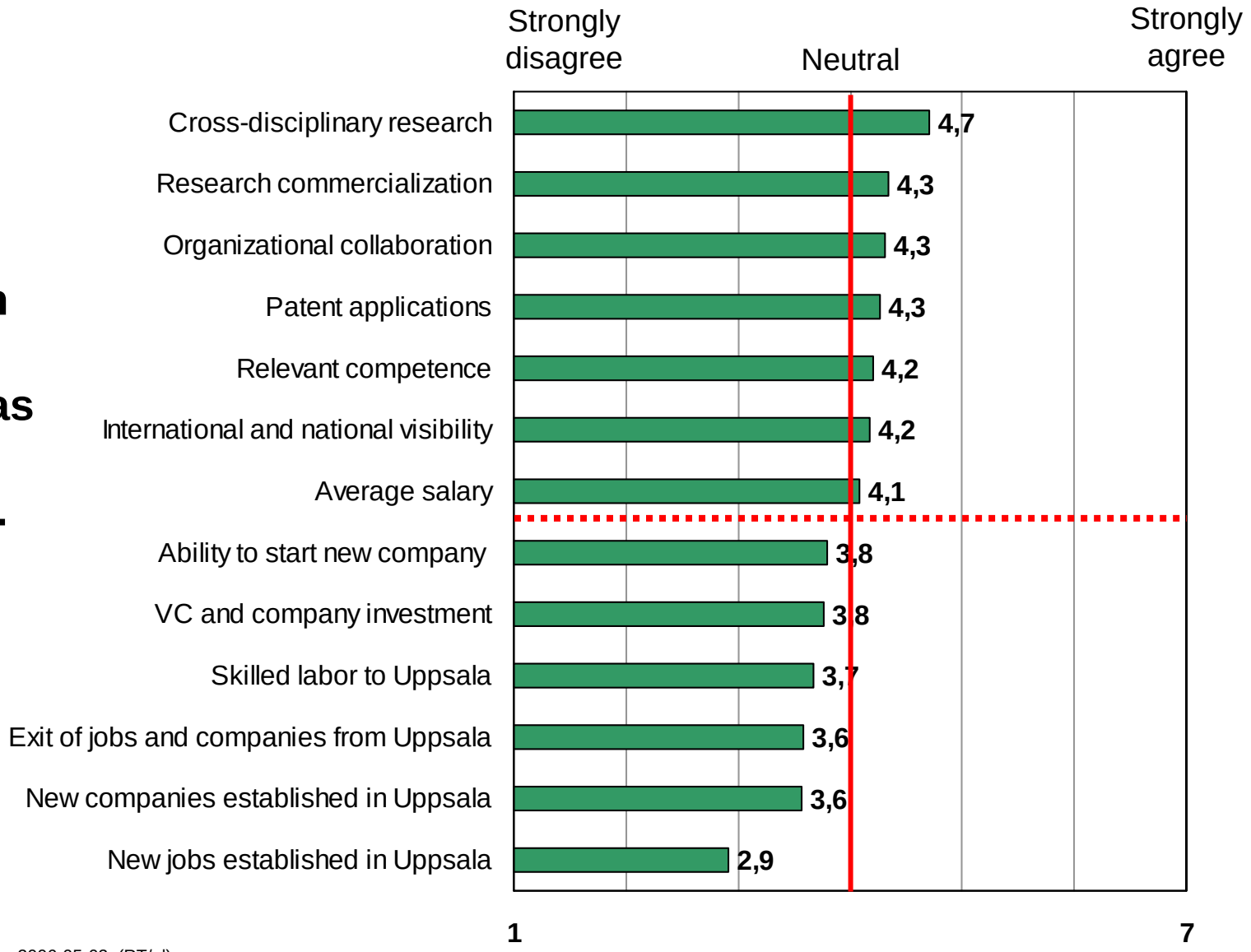
Respondents also view Uppsala as showing strong indications of a tightly knit regional innovation system

In Uppsala, there is a high degree of …



In the past two years, respondents view that collaboration, research, and visibility have increased somewhat; however, the level of investment, jobs, and companies have not

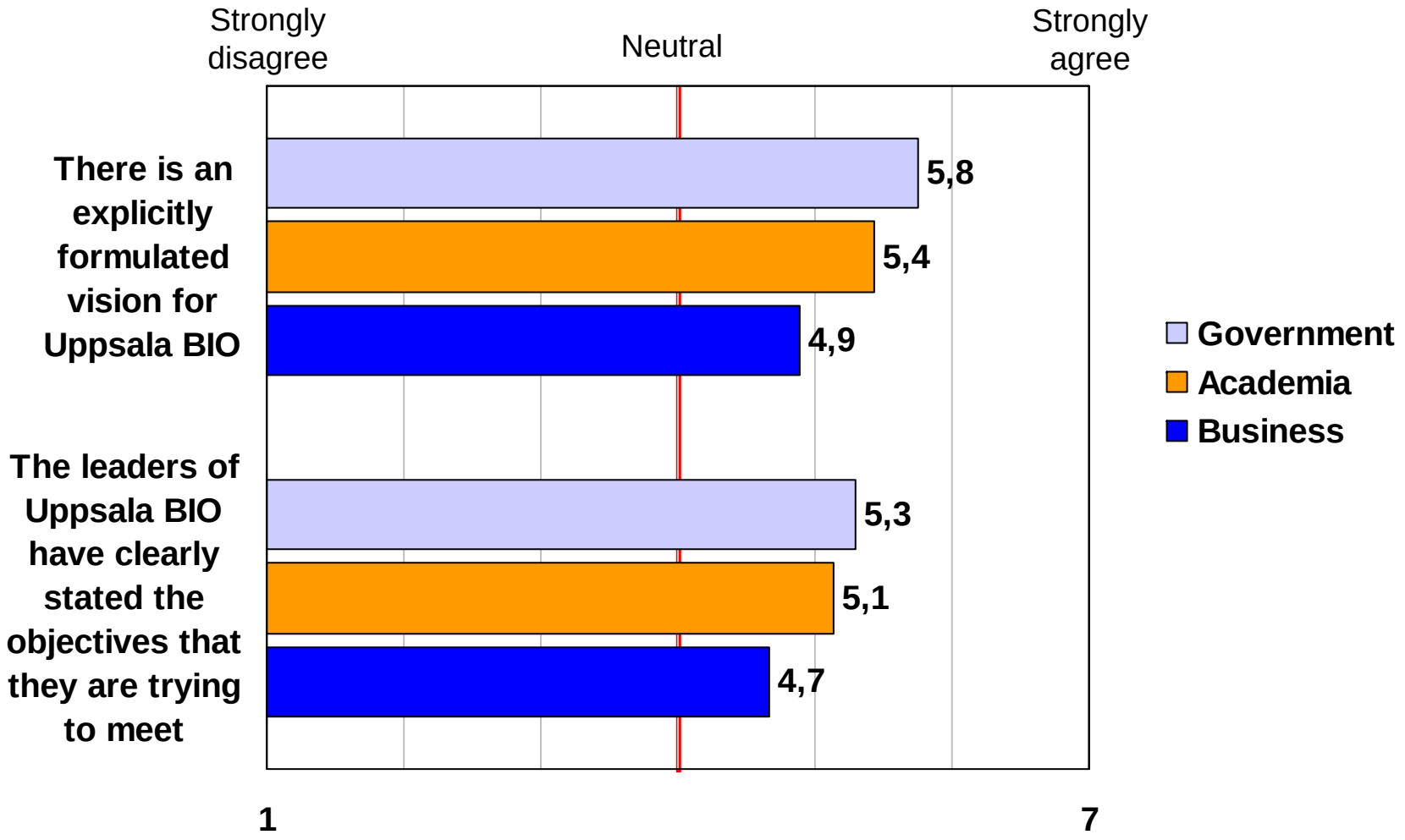
In general, in the past two years there has been an increase in…



Today's presentation

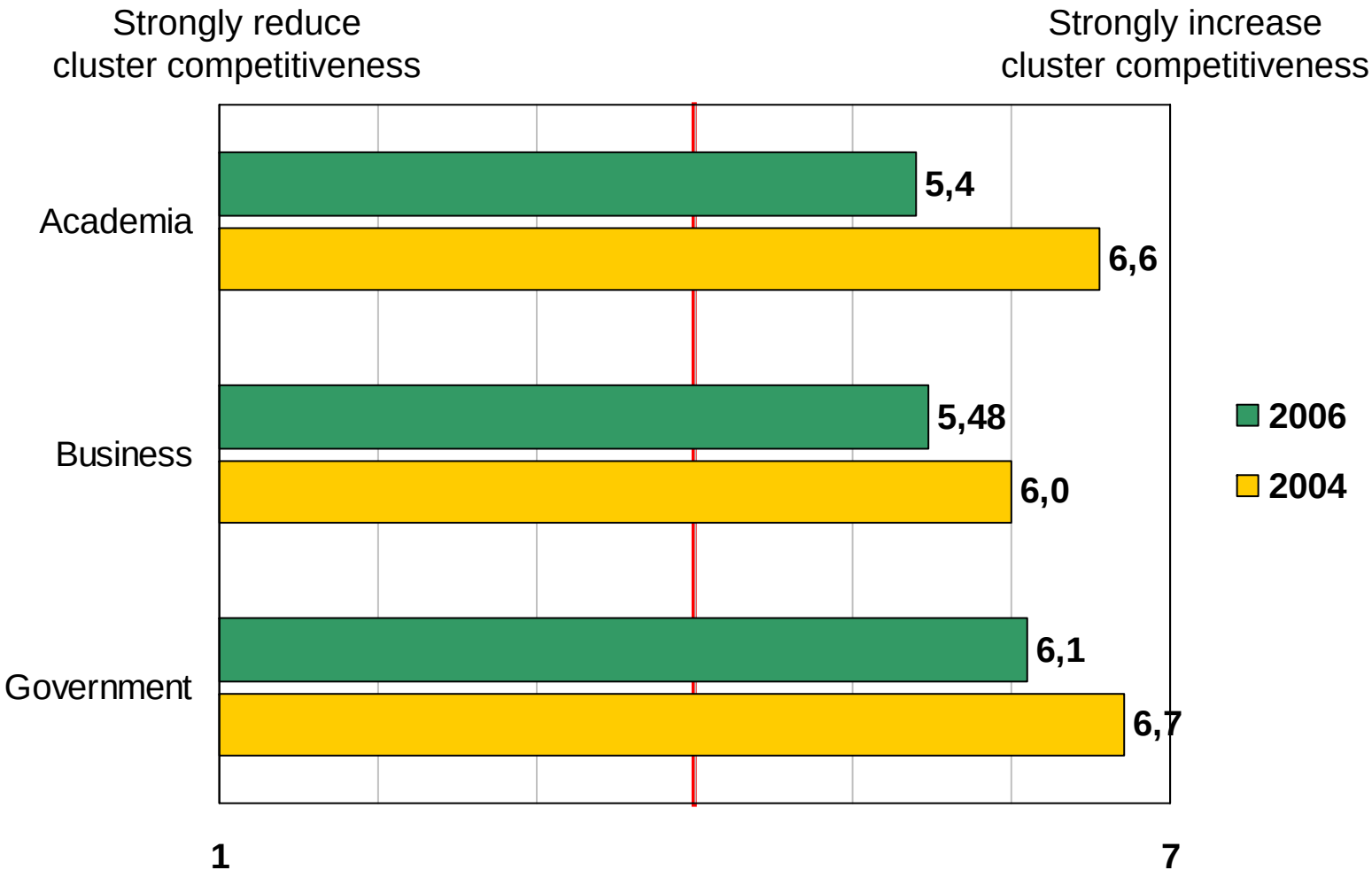
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While Uppsala BIO's vision and stated objectives appear to be clear, the business sector has a less clear understanding



Government has higher expectations on Uppsala BIO to improve the cluster's competitiveness and …

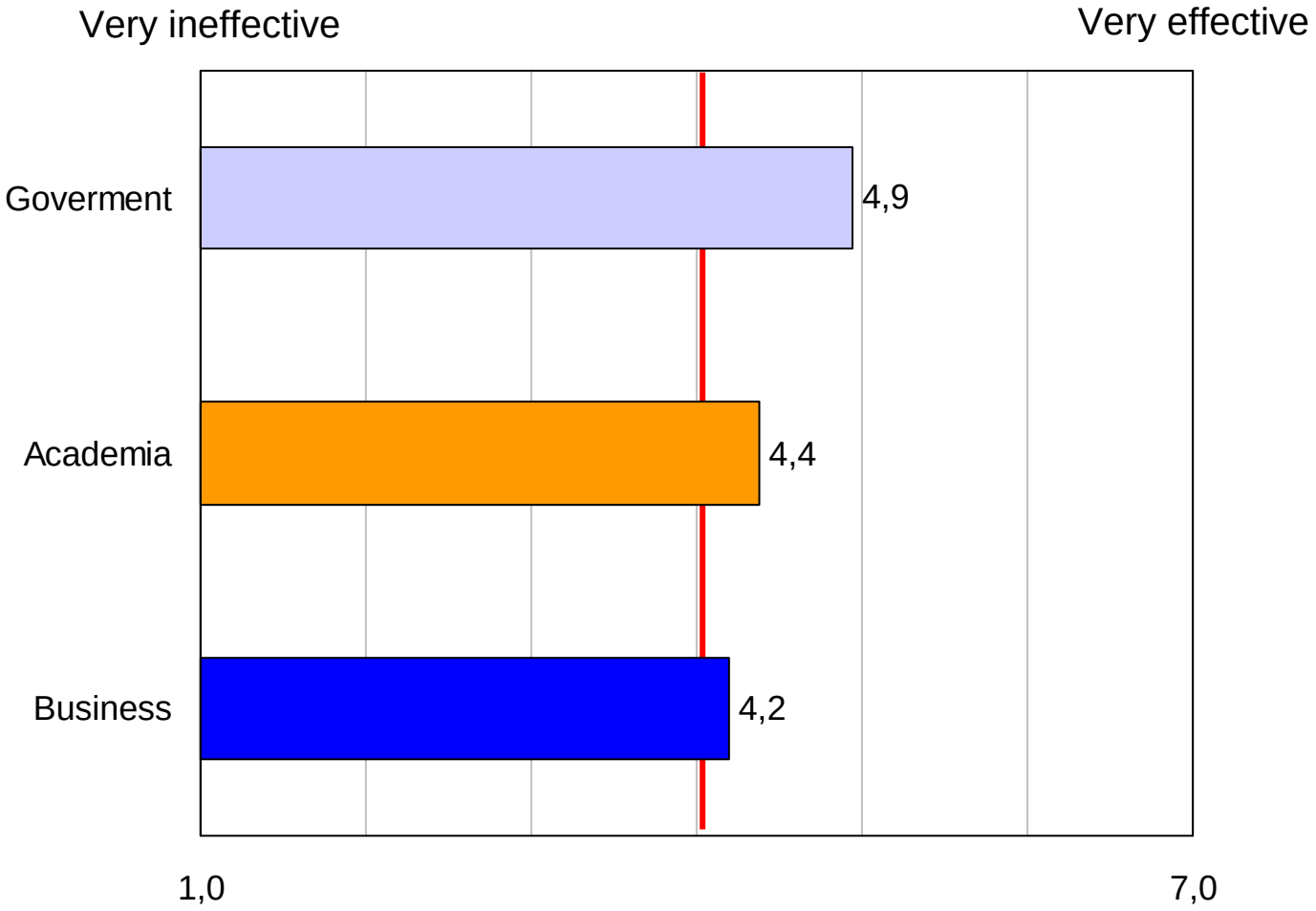
I expect Uppsala BIO to …



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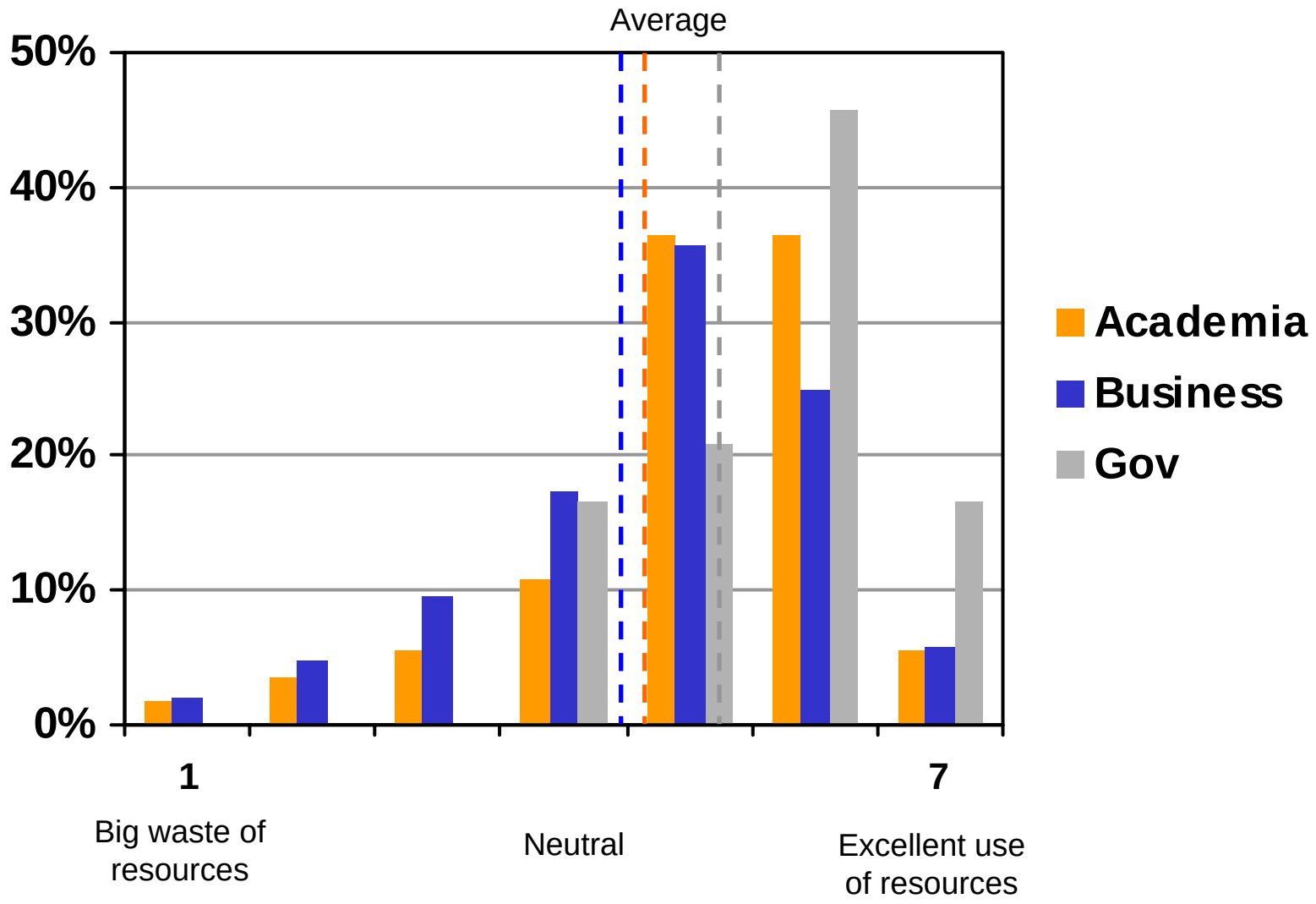
Government feels slightly more strongly that Uppsala BIO has been effective in improving the cluster's competitiveness

Effectiveness of Uppsala BIO in improving overall competitiveness of Uppsala Biotech Cluster



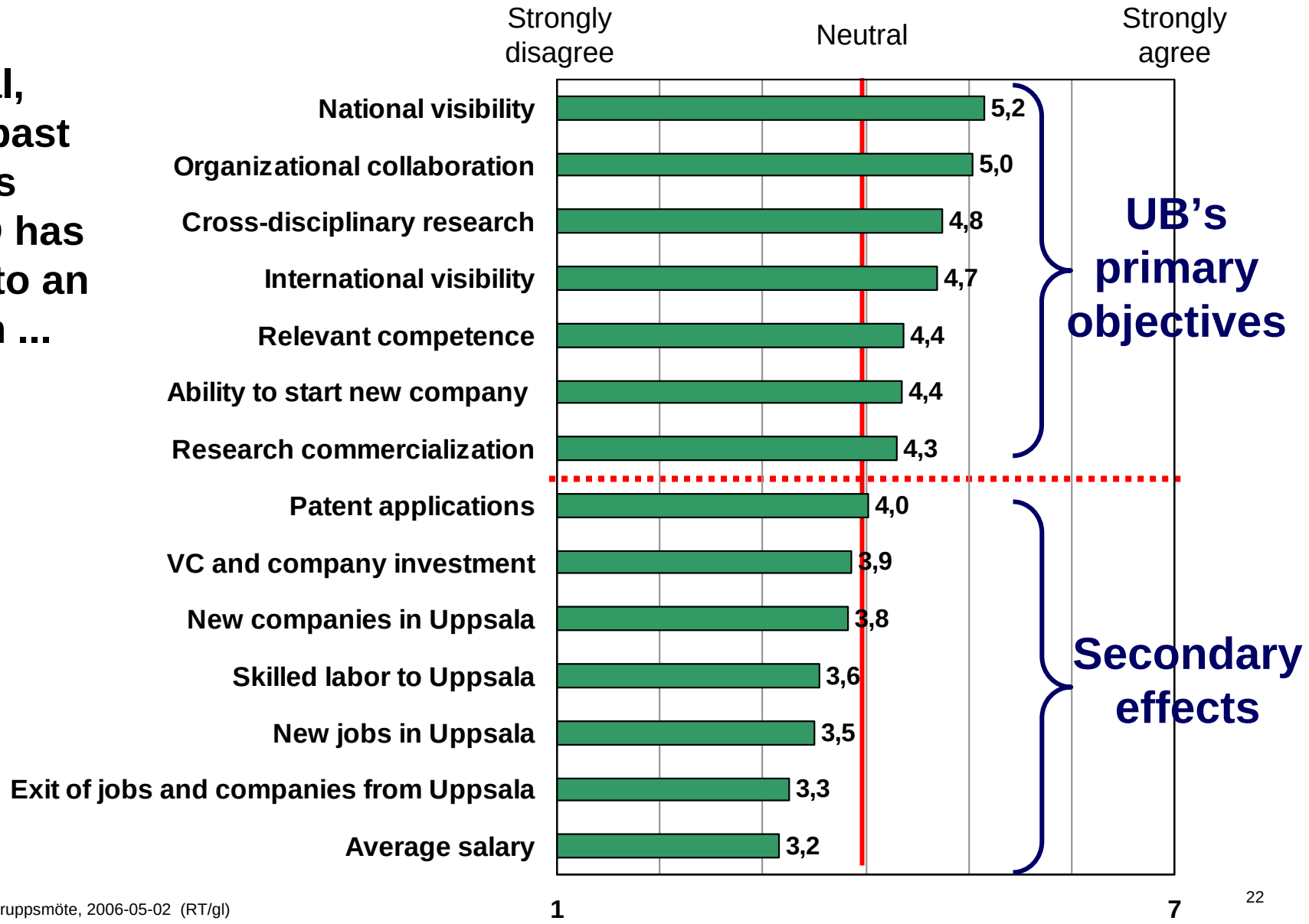
In all sectors, very few respondents see Uppsala BIO as a poor use of resources while Government is more positive

In general, what is your opinion of Uppsala BIO?



While respondents do not view Uppsala BIO as having impacted the level of investment, jobs, and companies in Uppsala, they do see an impact in several areas….

In general, during the past two years Uppsala BIO has contributed to an increase in ...



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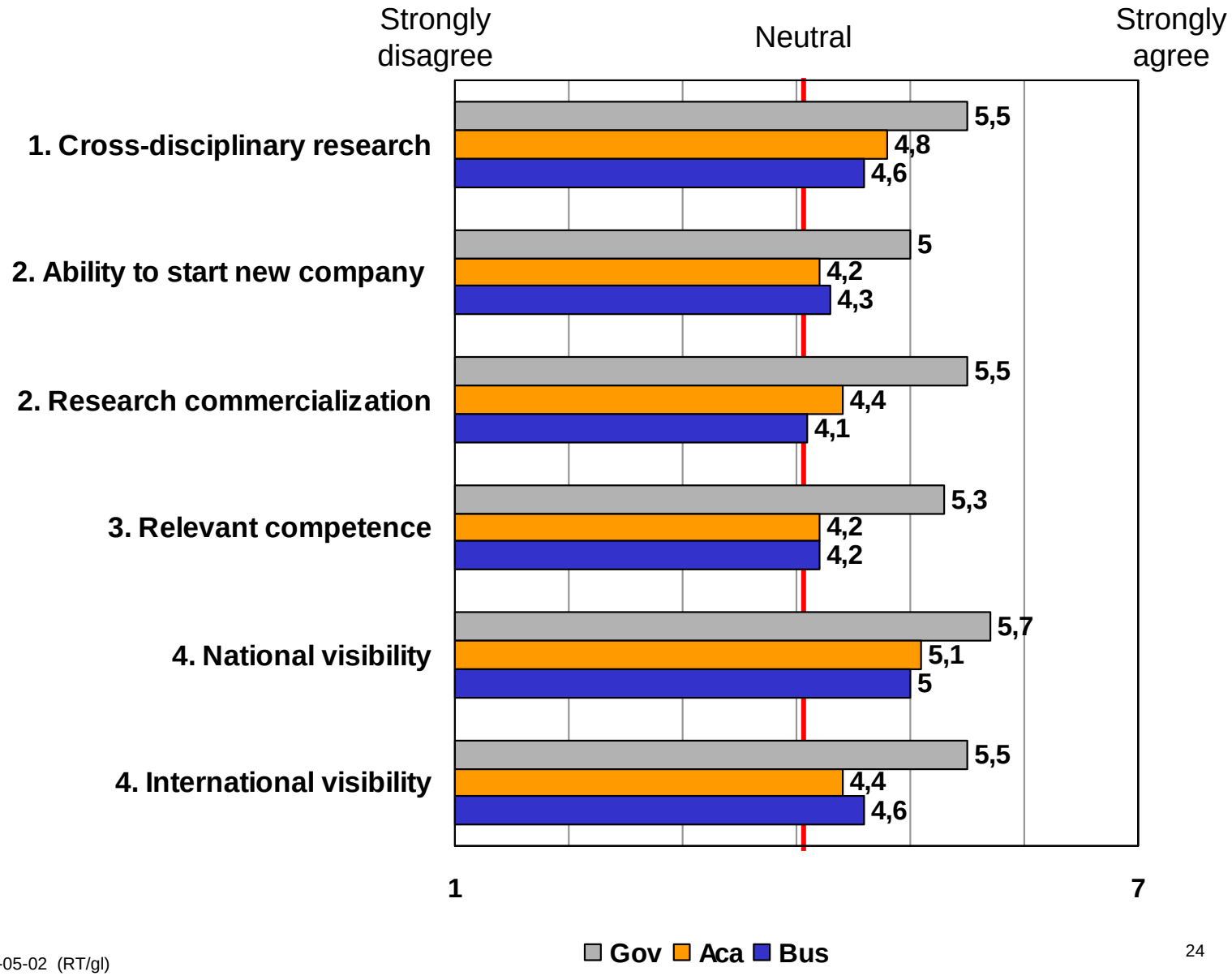
...including the four focus areas of Uppsala BIO

1. To promote cross-disciplinary biotech research — **Yes**
2. To strengthen the region's innovation system through activities such as an incubator — **Yes**
3. To ensure a long-term supply of relevant competence to the region — **Yes**
4. To improve the region's international and national visibility in order to attract investment and competence — **Yes**

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Government rates Uppsala BIO as having made a larger impact in its four focus areas than Academia and Business

In general, during the past two years Uppsala BIO has contributed to an increase in ...



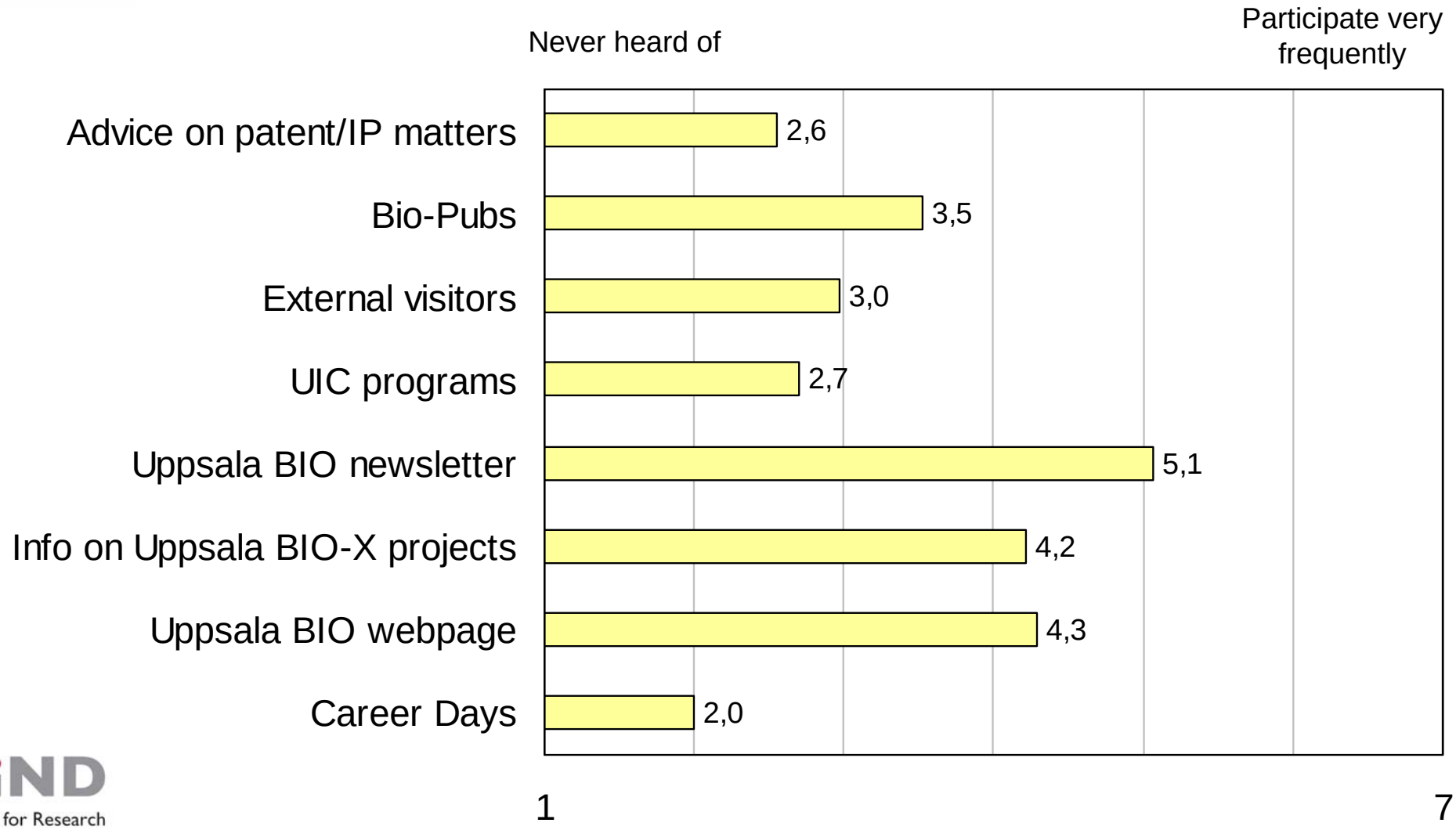
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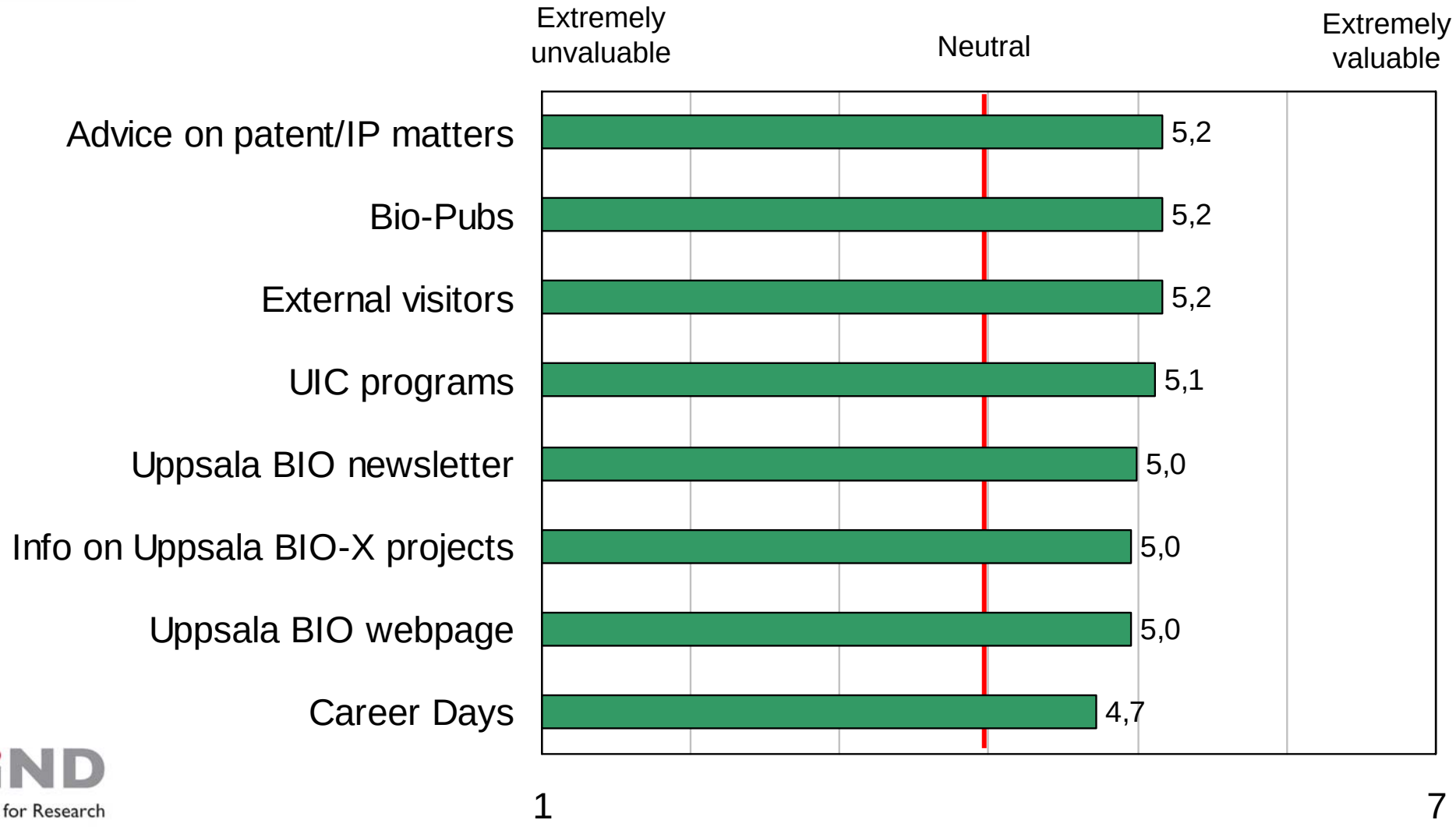
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While the level of participation varies among Uppsala BIO activities,….*



* More information on UB activities is in the appendix

All Uppsala BIO activities are seen as valuable *



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However, the relative value of UB activities varies greatly by sector and by degree of involvement in UB

Activity	Academia			Business			Government		
	Pers inv	Inv org	Uninv org	Pers inv	Inv org	Uninv org	Pers inv	Inv org	Uninv org
Bio-Pubs			–	++	+++	++			–
Uppsala BIO website	+		+++		–	+	++		
Uppsala BIO newsletter		–	++			+++			+
BIO-X projects	+++		++				++	–	
UIC programs		+	++	+++			+++	++	–
Advice on patent/IP	++	+++		+	++		++		+++
Career Days	–	++		–		–	–	+	
External visitors' activities			++		+		++	+++	++

+++ 1st valuable, ++ 2nd valuable, + 3rd valuable, – Least valuable

Some columns have several activities with same value ranking due to equal values

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Selected respondent comments

- *”Förstår inte varför denna enkät är skickad till mig. Jag kan inte svara på dessa frågor. Har varit på en del mötet som Uppsala bio har haft men som universitetsprofessor känner man sig rätt borta bland alla kostymklädda unga män som till större delen verkar vara ekonomer. Vem skall vi naturvetare ha dialog med?”*
- *”Jag fick nog enkäten redan tidigare, men ansåg att den inte angår mig alls. Jag har nämligen ingen aning om vad/vem/var Uppsala bioteknikkluster är. Och har svårt och inbilla mig att jag kunde ha någonting med saken att göra i framtiden heller.” -UU forskare*
- *“The Uppsala BIO program is valuable, but the ambitions for the BioX effort have undergone changes over the years. A first aim was to build long-term competence and innovation, while currently the ambition is to promote commercialization of existing innovations. Both are valid ambitions but the change of aim has created some problems.”*
- *“I´m mainly working with former students (alumni) and responsible for the Uppsala University Alumni Database. Some of the data may be useful to Uppsala BIO. Many former students may also have an interest in actively following/participating in the development of the biotech cluster.”*

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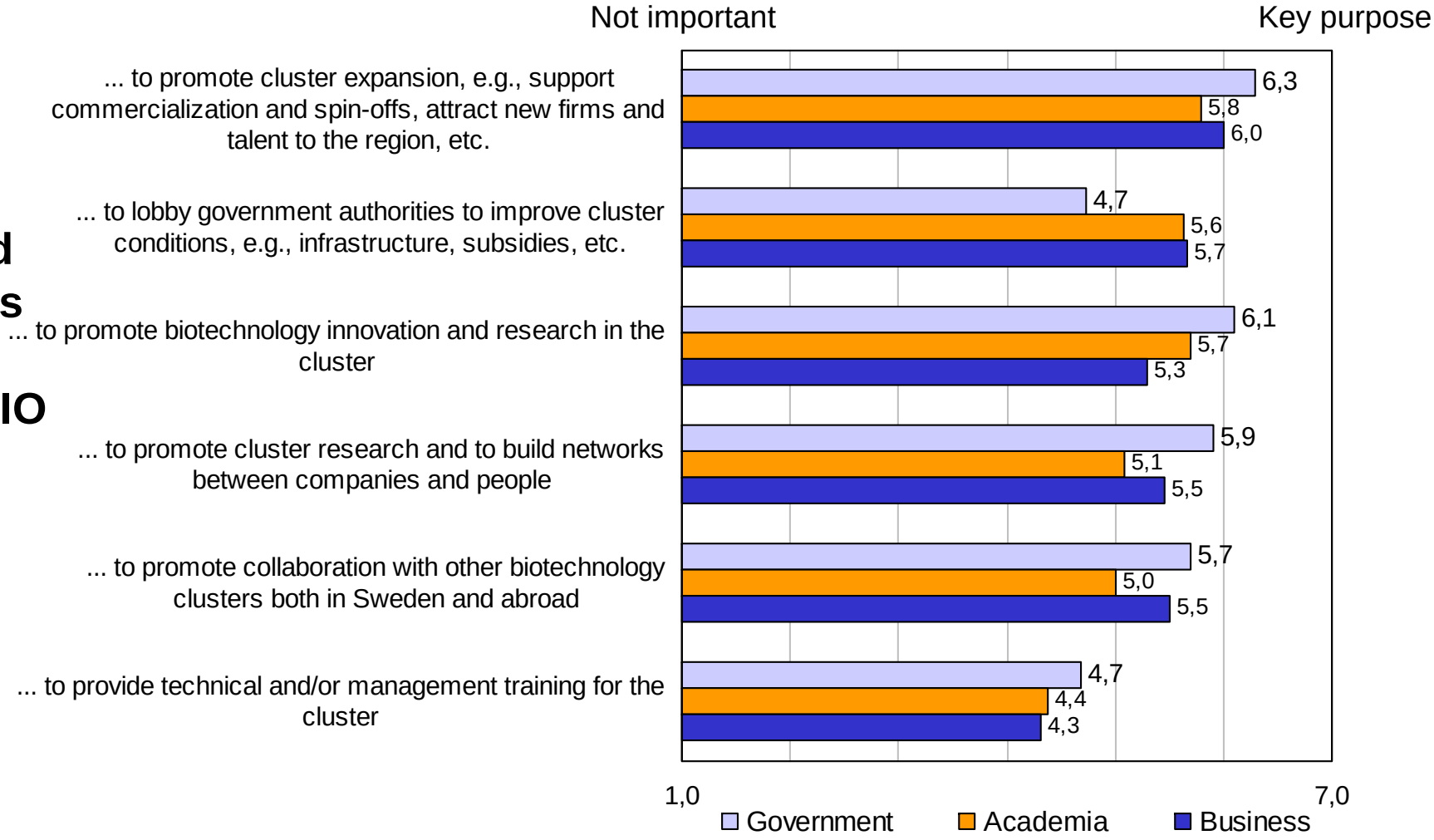
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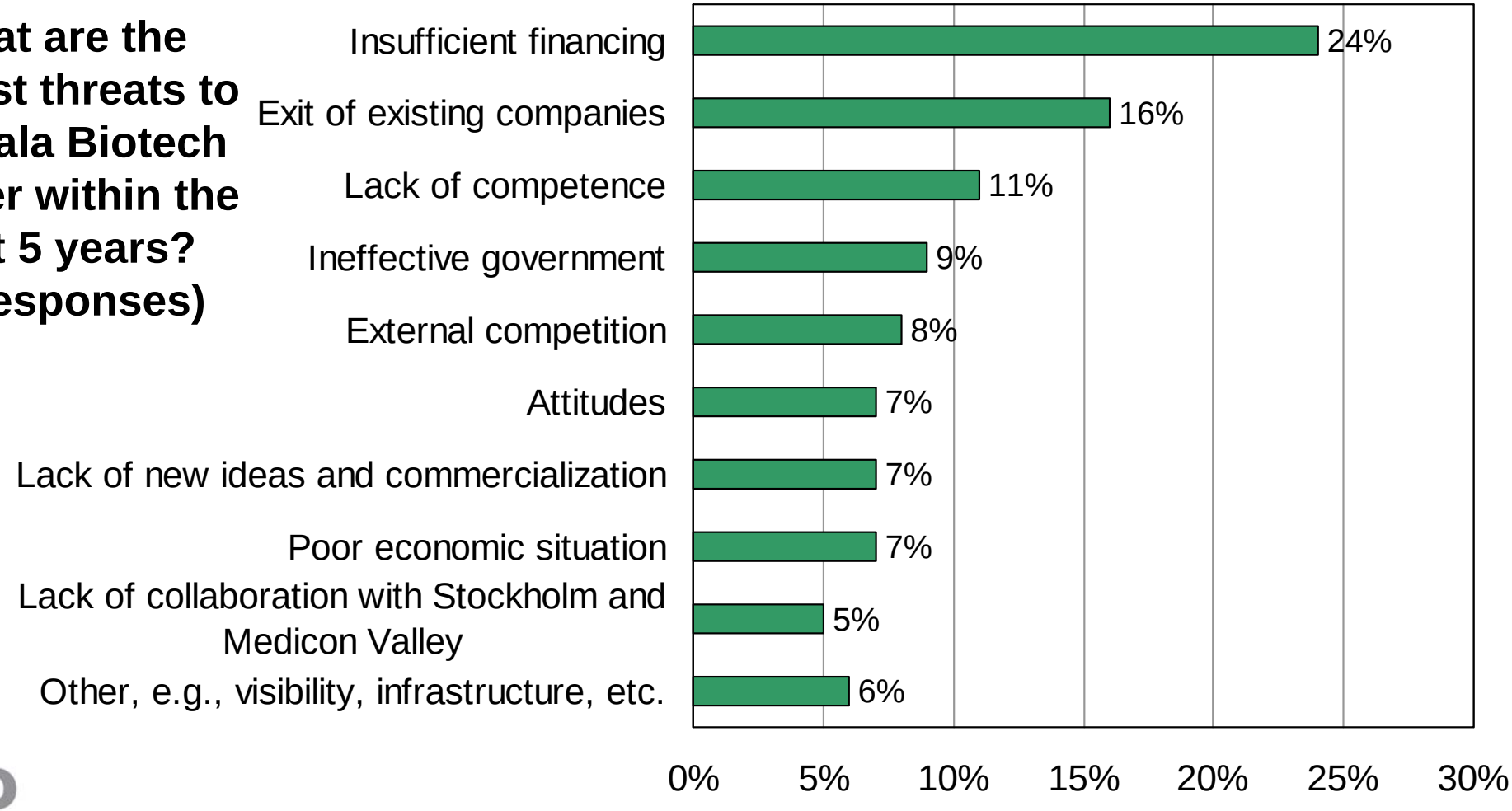
How interested is UB in better fulfilling the respondents' top preferred objectives of promoting cluster expansion and lobbying?

Preferred objectives for Uppsala BIO



Respondents view insufficient financing and potential exit of existing companies as the biggest threats to the Uppsala Biotech Cluster

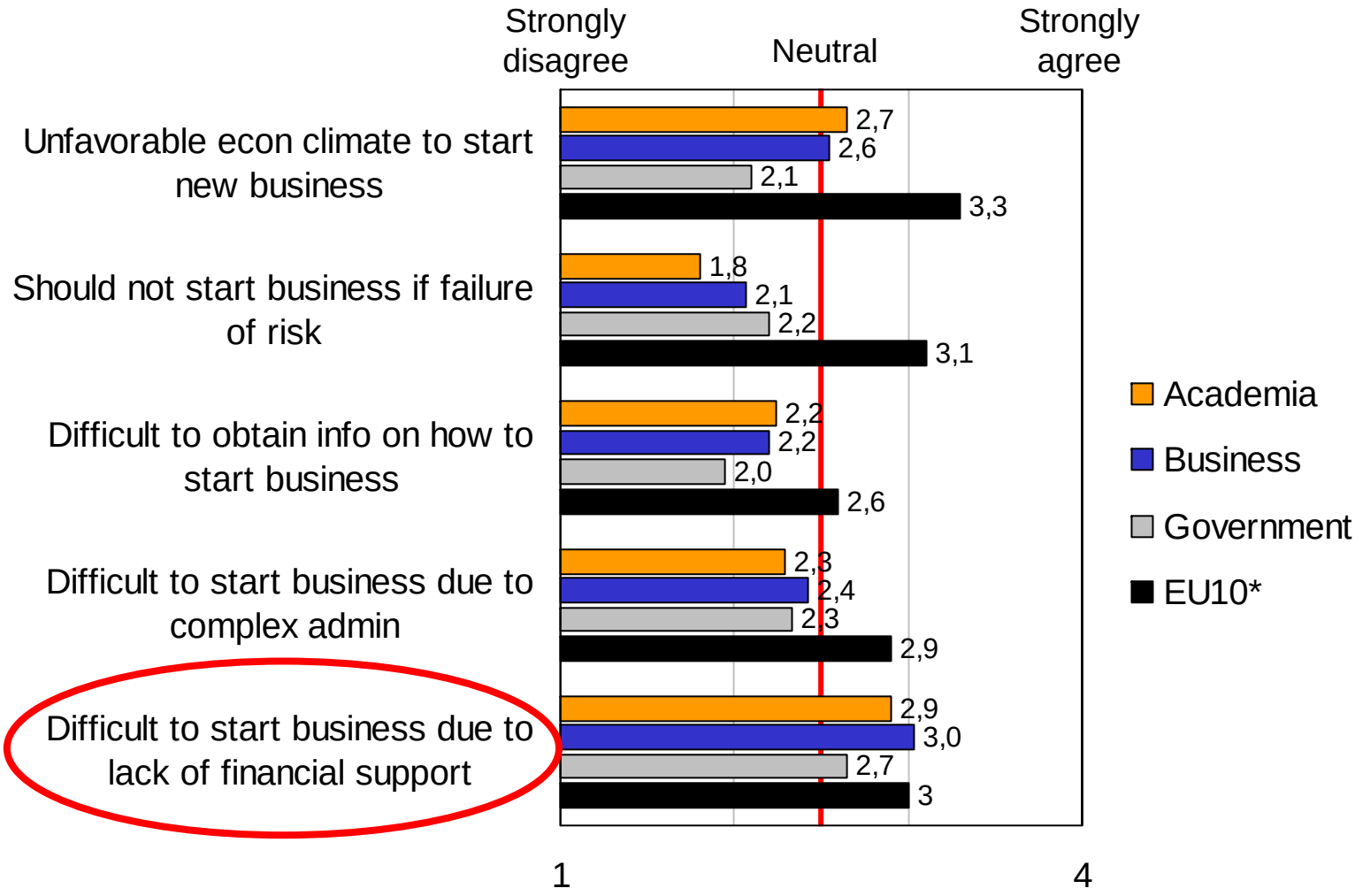
What are the biggest threats to Uppsala Biotech Cluster within the next 5 years? (% responses)



Total responses = 241

While there is a strong entrepreneurial climate in Uppsala, the lack of financial support is seen as the biggest barrier to starting new companies

Factors affecting a region's entrepreneurial climate



* Flash Eurobarometer 2004 on Entrepreneurship

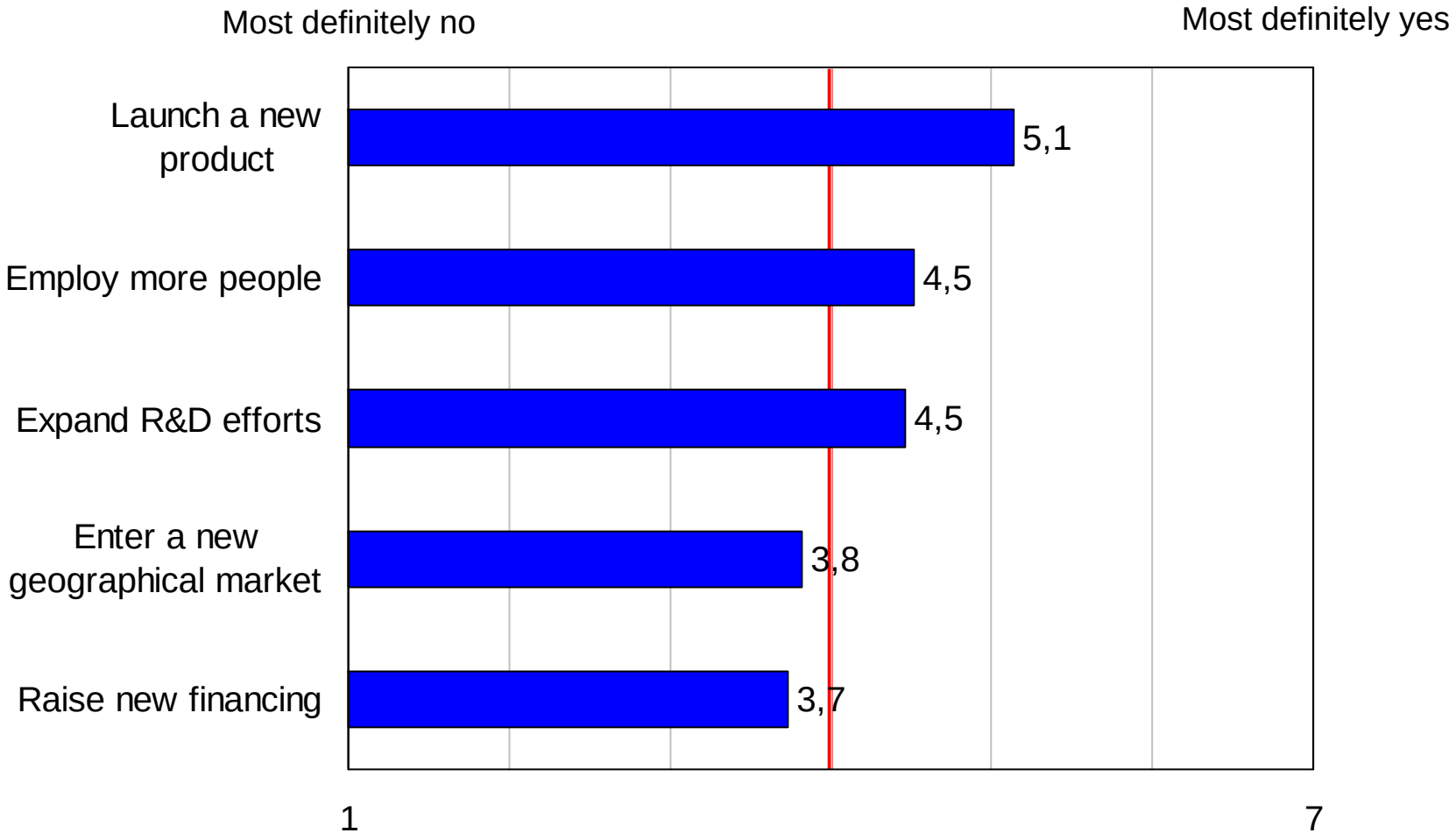
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Several respondents see help with financing as a priority for Uppsala BIO

- *"Promoting inflow of venture capital is by far the most important activity for the long term survival of a cluster like Uppsala. Without money no new companies can emerge, it is that simple!! All other activities are just glazing the cake!!"*
- *"Help with venture capital - the most important thing is to find more money for start-up companies. Compare with Karolinska, which has its own Fund."*
- *"Find investors. There are about 4000 investors around the world who are interested to get information about Biotech in Uppsala today."*
- *"Competence and finance must be available during the different development stages of project and companies. The innovation process is a very dynamic process and a lot of things can happen during this "journey". All competence for a successful commercialization can be found within the region of Uppsala/Stockholm and Mälardalen. However, suitable financial solutions are needed for access to professional competence. Without a proper financial situation for the entrepreneurs, and assisting organizations, very few companies will be successful. Then all the efforts could be a waste of time and money. In my opinion this type of work is important and it should be done in a professional way, with access to sufficient resources."*

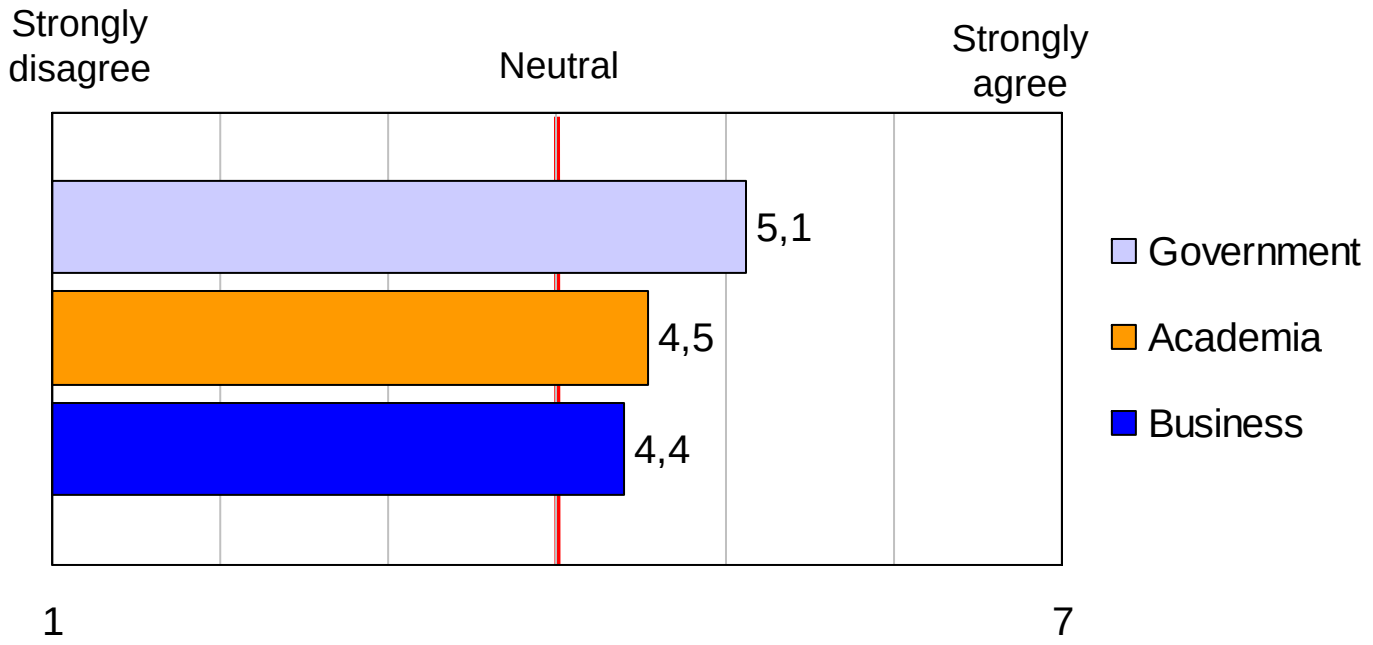
However, existing companies are in less need of raising financing

Within the next 12 months, I expect my company to..



What about improving collaboration with other biotech regions, e.g., Stockholm, Mälardalen, Medicon Valley?

Uppsala Biotech Cluster is a distinct system in relation to the wider Stockholm / Mälardalen biotech cluster

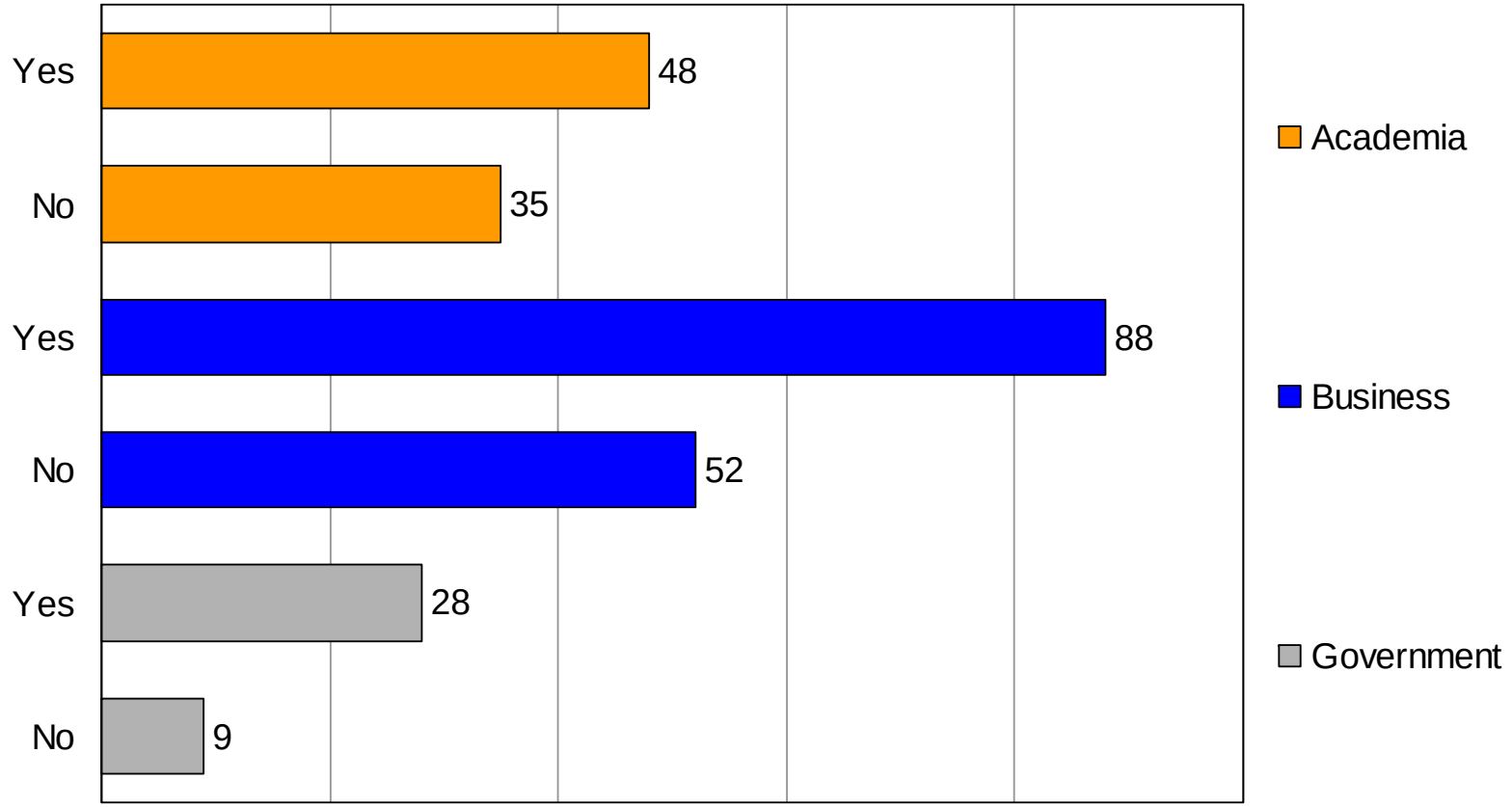


Several respondents stressed the need for better collaboration with Stockholm and other biotech clusters

- *"Uppsala Bio has limited resources. Must use its resources to strengthen potentially unique features of Uppsala in cooperation with other actors and resources in the region. This involves the development of strategic links with complementary resources elsewhere. In the world, Stockholm-Uppsala-Södertälje-Strängnas (with Linköping and Norrköping in the vicinity) must present a unified image, strategy and organizational framework for contacts (especially with international industry) with meaningful roles for all parties involved. Too strong focus on Uppsala as a separate cluster is counterproductive."*
- *"Get the act together with all Nordic/Scandinavian clusters to get a critical mass and to be attractive on the world market. Not to focus on local competition amongst clusters/regions/governments."*
- *"Jag har svårt att motivera ett deltagande i enkäten då jag och min organisation arbetar för att stärka motsvarande verksamhet i Stockholmsområdet. Det vore dock värdefullt för oss alla (inom det här området) att bedöma hur vi uppfattas sinsemellan och därefter anpassa vår verksamhet och kommunikation. En enkät av slaget vore därför klart intressantare om den gjordes på ett nationellt perspektiv och där samtliga deltagande aktörer kunde få tillgång till resultaten."*
- *"Jag tycker att Stockholm/Uppsala borde lanseras som ett bioteknik kluster och att varken Uppsala eller Stockholm har nytta av att Uppsala lanserar sig som egen region."*

The majority of respondents are willing to discuss their cluster activities and may serve as a valuable resource to Uppsala BIO for determining future activities.

May we contact you at a later date to discuss your involvement in the Uppsala Biotech Cluster? (No. of responses)



A total of 164 respondents said yes!

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  - Respondents view insufficient financing and the potential exit of companies as the biggest threats to the cluster. Moreover, they view that collaboration with other biotech clusters in Sweden should be improved.

Questions or interested in learning more?

- Contact Robin Teigland
  - CiND and Stockholm School of Economics
  - robin.teigland@hhs.se or 070-781 4422
- CiND publications and reports on Uppsala BIO and the Uppsala Biotech Cluster, available at www.cind.se
  - Uppsala BIO – the Life Science Initiative: Experiences of and Reflections on Starting a Regional Competitiveness Initiative. In R. MacGregor (Ed.) ***Small Business Clustering Technologies: Applications in Marketing, Management, IT and Economics,*** London: Idea Group Inc. (forthcoming).
  - Seeing eye-to-eye: How do public and private sector views of a biotech cluster and its cluster initiative differ? ***European Planning Studies*** (forthcoming).
  - What is Local and What is Global in Biotech Innovation: The Case of the Biotech Cluster in Uppsala, Sweden. Paper presented at DRUID, 2005.
  - Att sjösätta ett regionalt klusterinitiativ: Erfarenheter och lärdomar av Uppsala BIO - en Vinnväxtsatsning. Årsrapport 2004, Uppsala University, CIND.
  - Investigating the Uppsala Biotech Cluster. Research Paper 2004:1, Uppsala University, CIND.

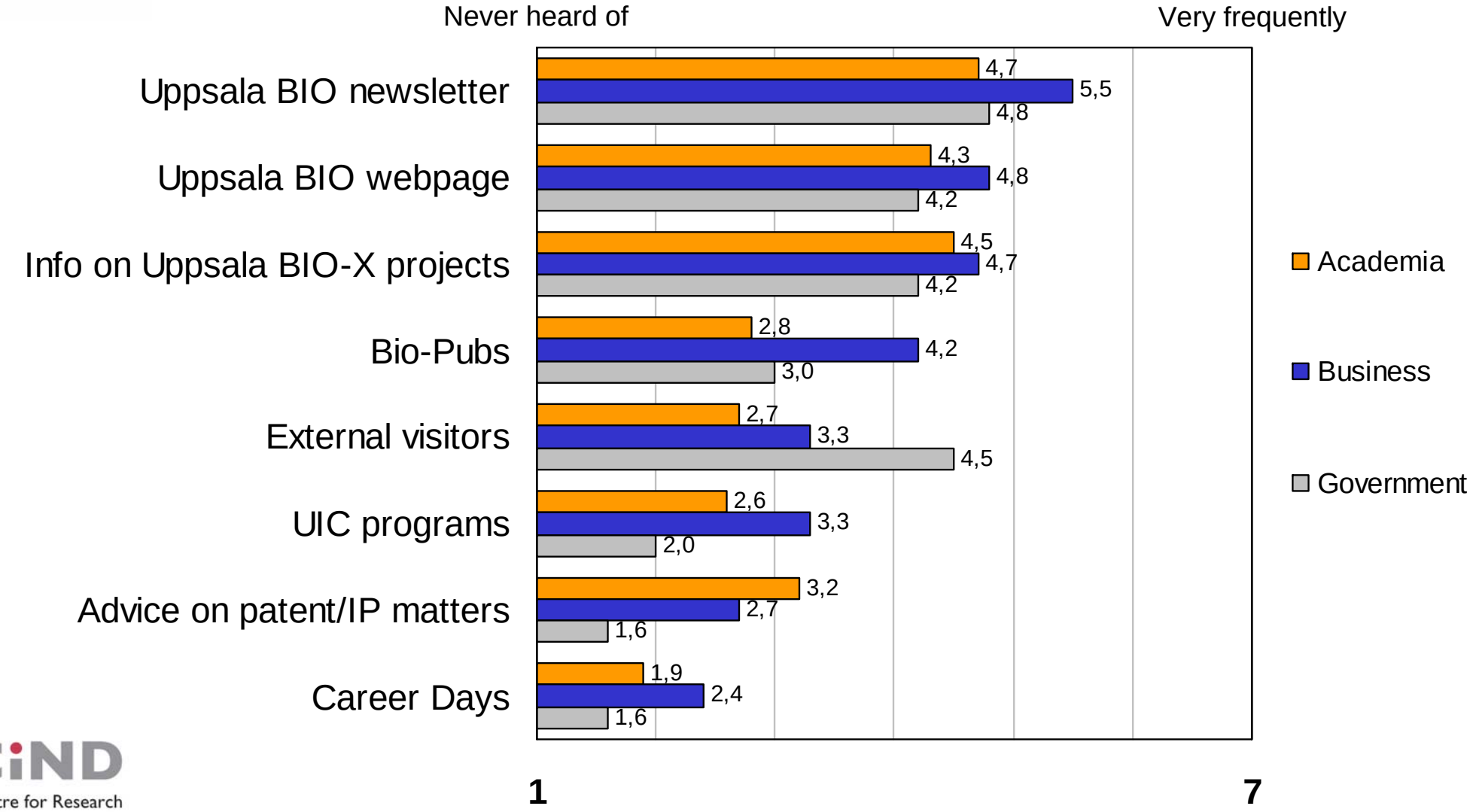
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Appendix

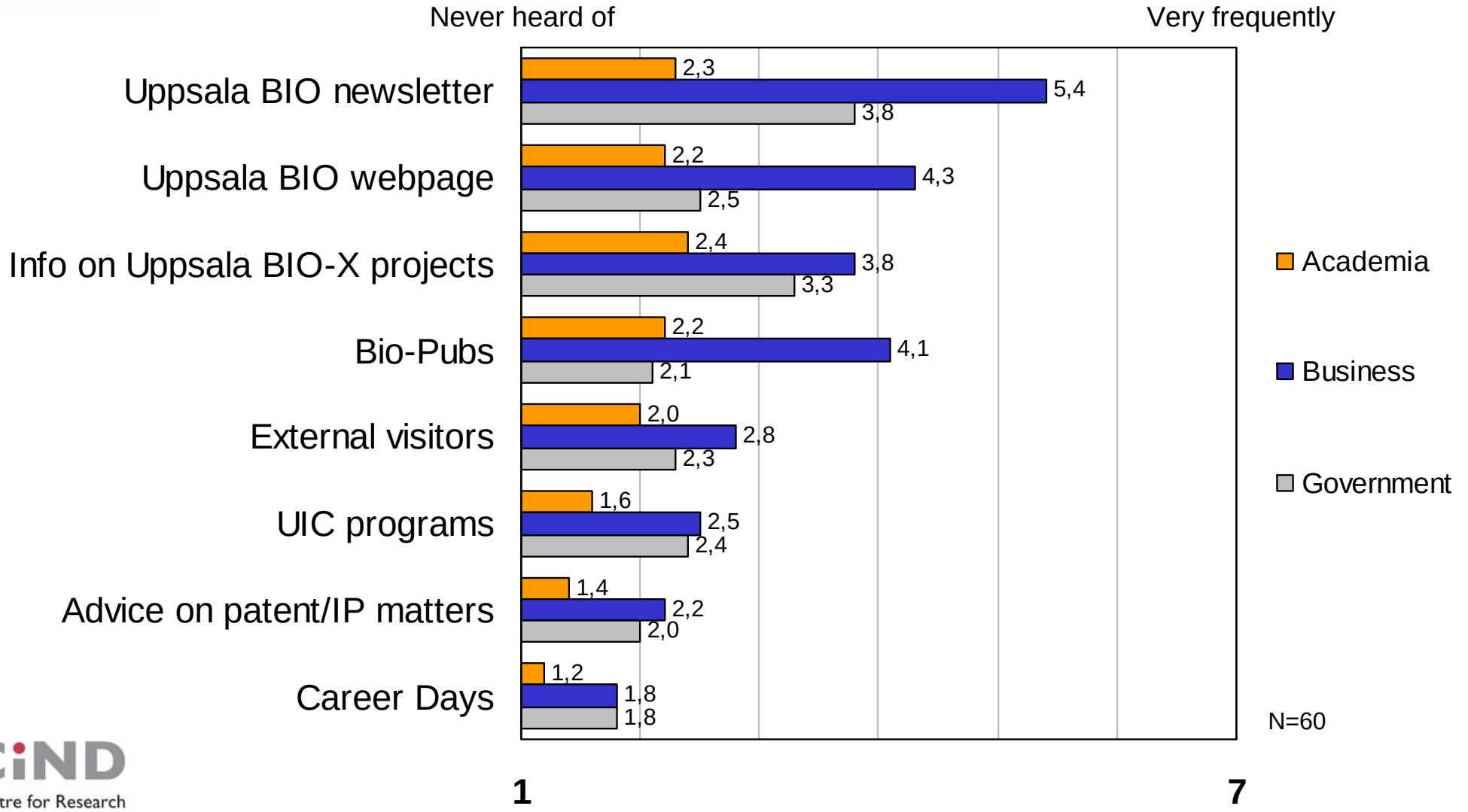
- Participation in UB activities by respondents *involved directly or indirectly* through their organization in UB
- Participation in UB activities by respondents whose organization is *not involved* in UB
- Value of UB activities by respondents *involved directly or indirectly* through their organization in UB
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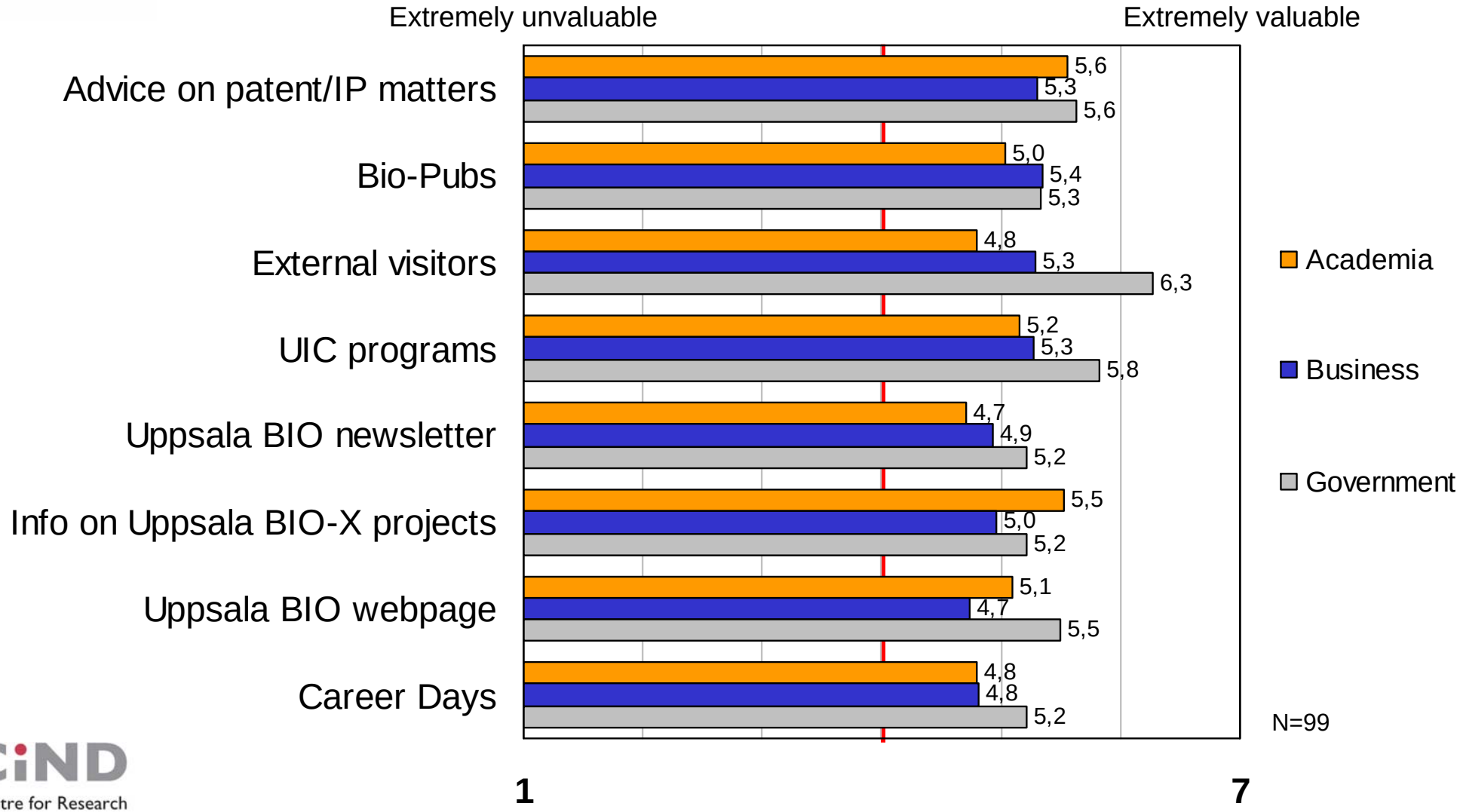
Participation in UB activities by respondents *involved directly or indirectly* through their organization in UB



Participation in UB activities by respondents whose organization is *not involved* in UB



Value of UB activities by respondents *involved directly or indirectly* through their organization in UB



Value of UB activities by respondents whose organization is *not involved* in UB

