



**Brain Circulation:
From
Brain Drain to Brain Gain**

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Discover Europe, Bulgaria, 2011



Concept and Objective of the MOREBRAIN

1. Examines factors causing researchers to emigrate abroad and motives inhibiting their mobility in the context of the European 'Brain Drain'
2. Proposes new concepts of e-reintegration and co-sharing positions to counteract the brain drain phenomenon in Europe



	Bulgaria	Israel	EU
Population	7,093,635 (July 2011 est.)	7,473,052 (July 2010 est.)	492,387,344 (July 2010 est.)
Total Area	110,879 sq km	20,770 sq km	4,324,782 sq km
GDP	\$96.78 billion (2010 est.)	\$213.1 billion (2010 est.)	\$14.82 trillion (2010 est.)
GDP - per capita (PPP):	\$13,500 (2010 est.)	\$29,800 (2010 est.)	\$32,700 (2010 est.)
% R&D of GDP	0.53%	4.3%	2,01%

Source: Eurostat, CIA- The World Factbook and Central Bureau of Statistics

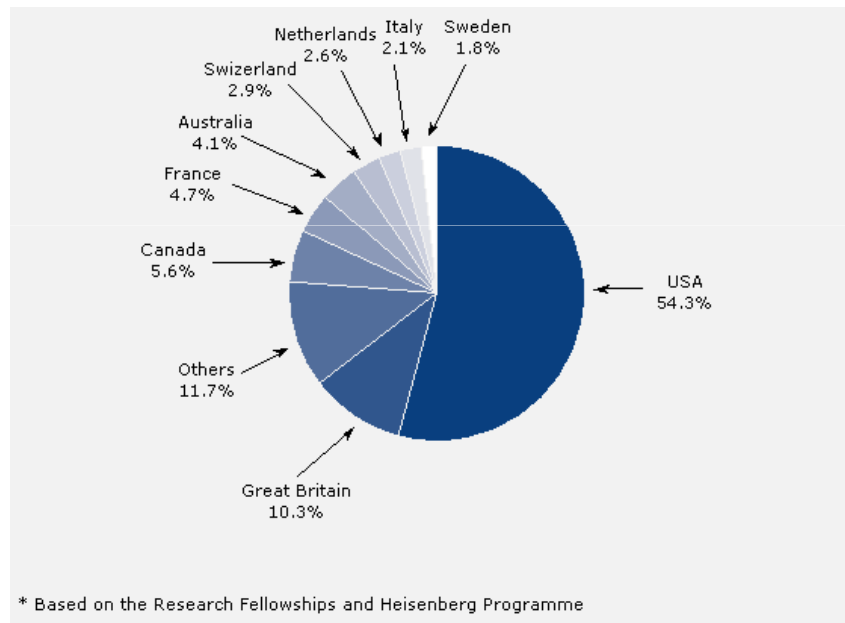


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Brain Drain

Destinations of the Deutsche Forschungsgemeinschaft (DFG) Postdoctoral Fellows in 2007 (in %)



- Young EU scientists travel to the U.S., for Ph.D. studies and for post-doctorate appointments.
- Highly experienced researchers emigrate to the US and stay there
- Scientists from the U.S., post-docs or others, rarely migrate to the EU.
- This situation has led to an EU '**Brain Drain**' – loss of European scientists in favor of the U.S.

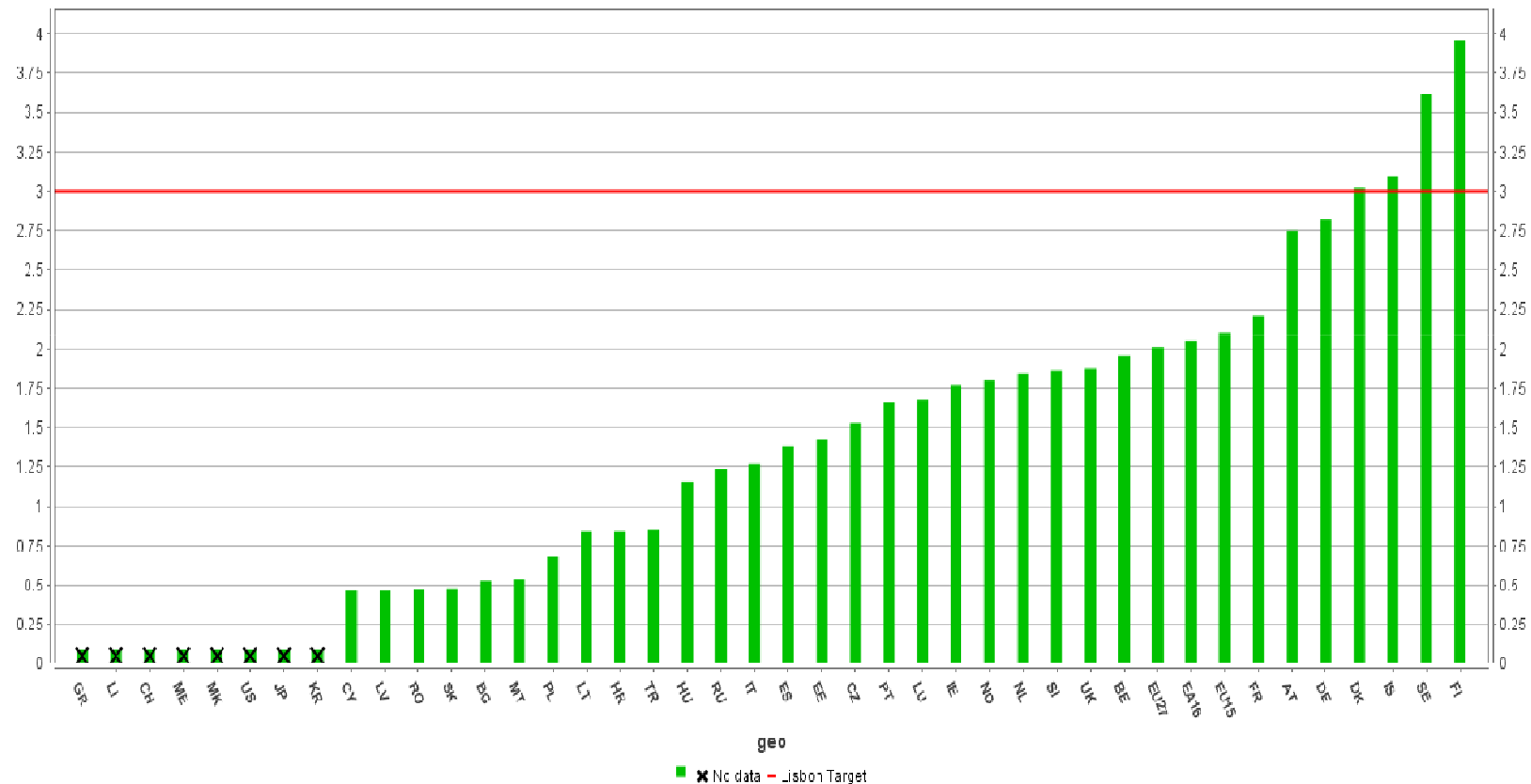
Brain Drain

Why researchers pursue a research career outside Europe & remain there?

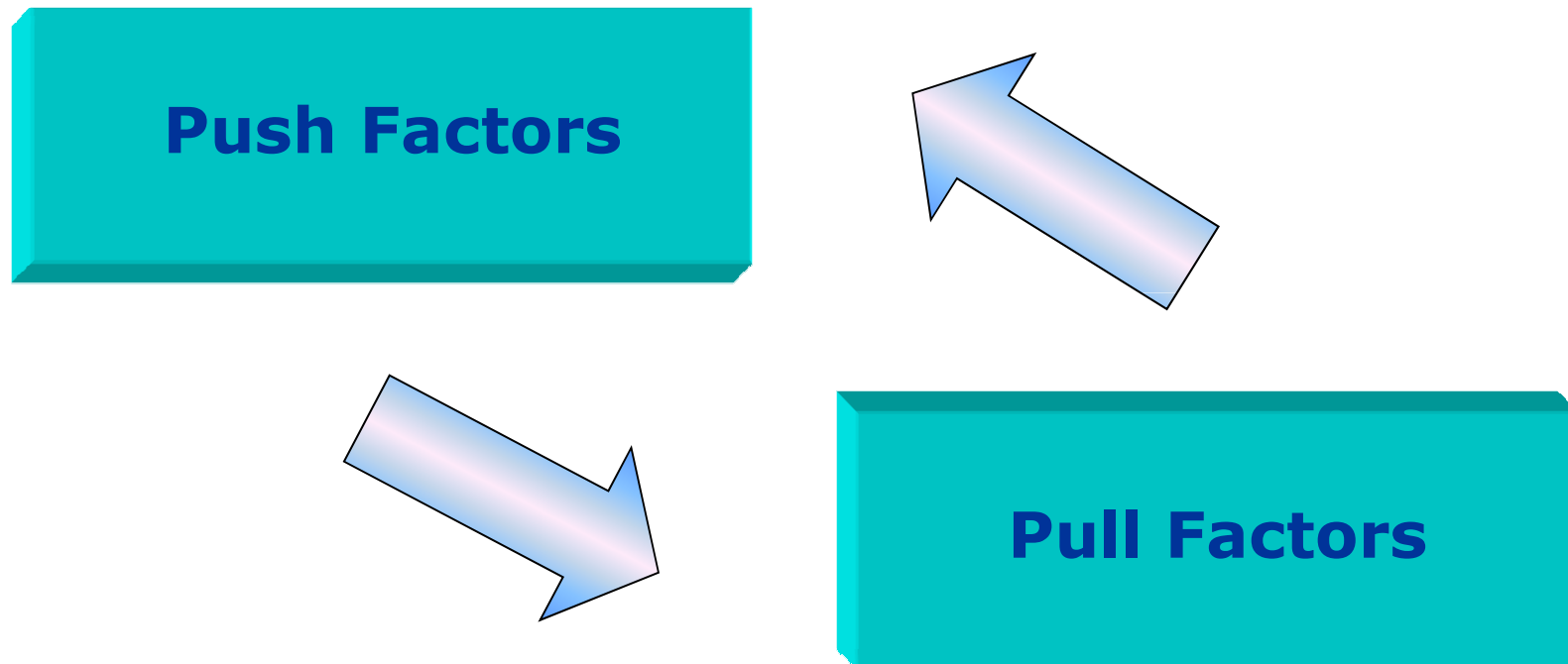
Why researchers choose to return to their home countries in Europe?

Gross domestic expenditure on R&D (GERD)

Gross domestic expenditure on R&D (GERD)
Percentage of GDP

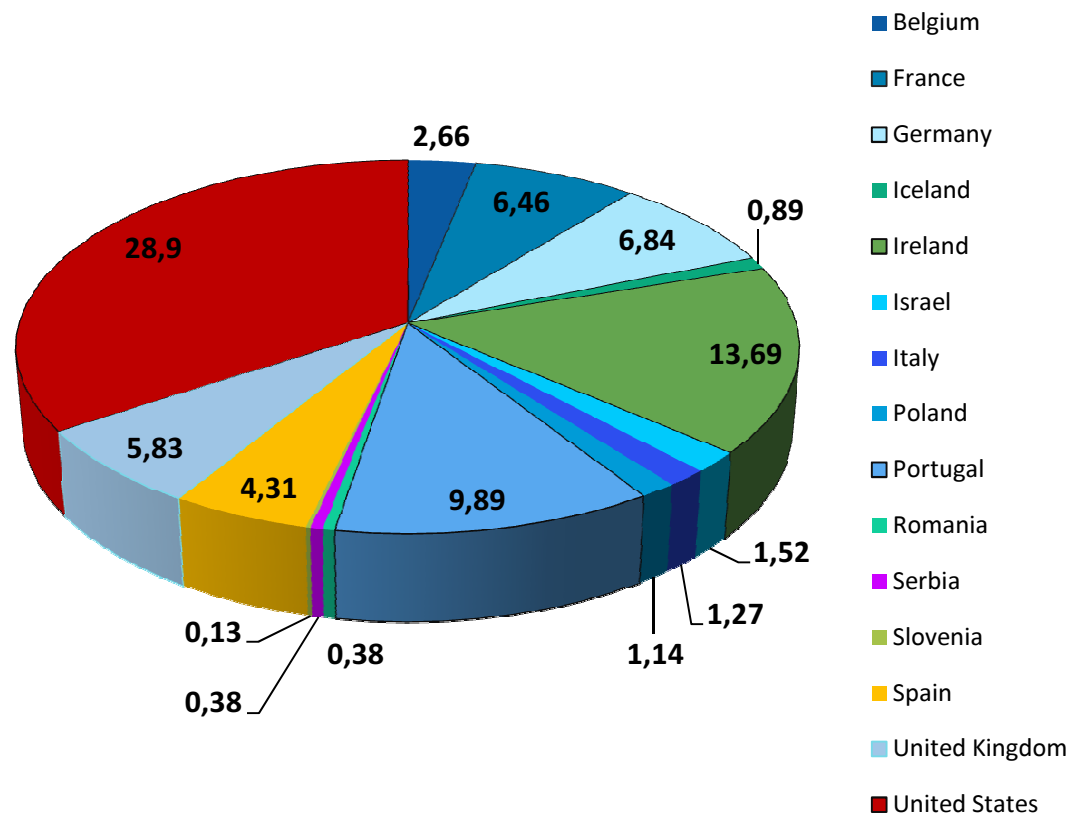


Factors Leading to Brain Drain



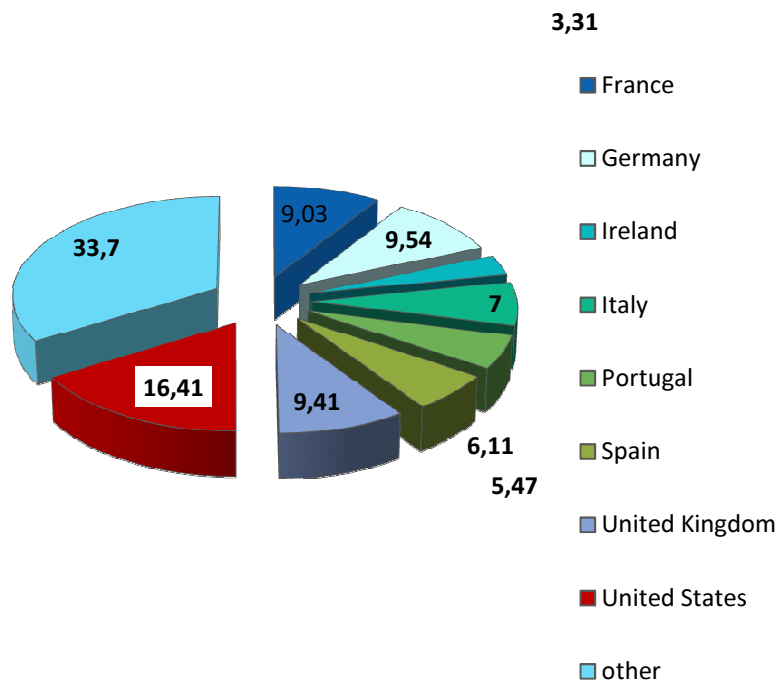
Currently mobile researchers: country of current destination

(Results are based on 2.560 responses)

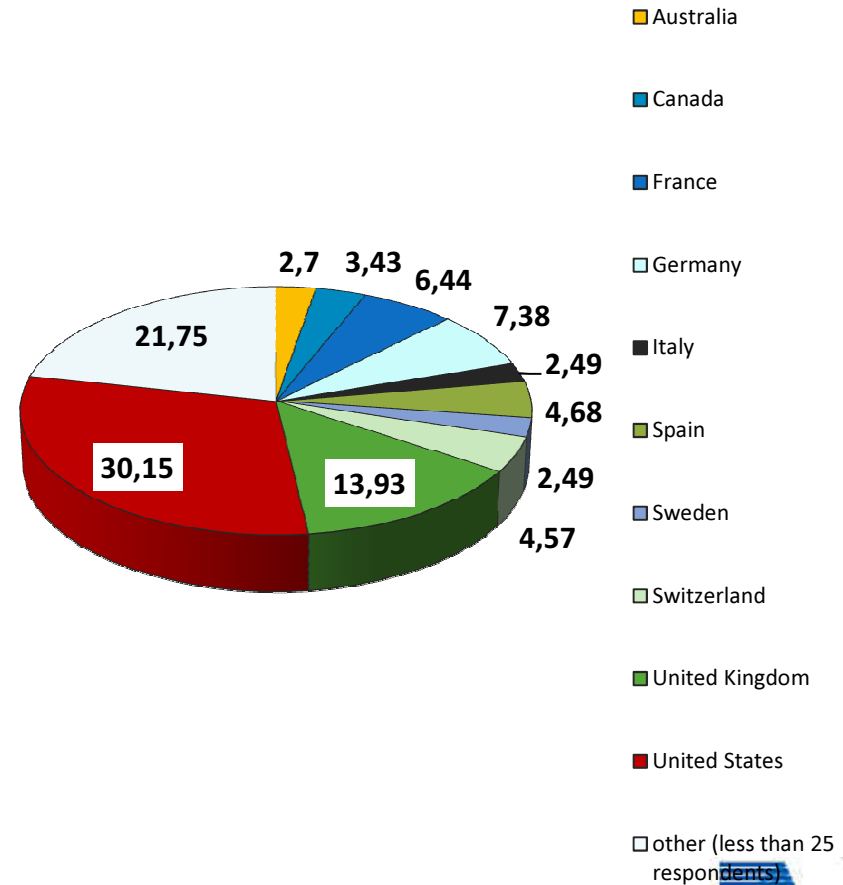


MOBILE RESEARCHERS

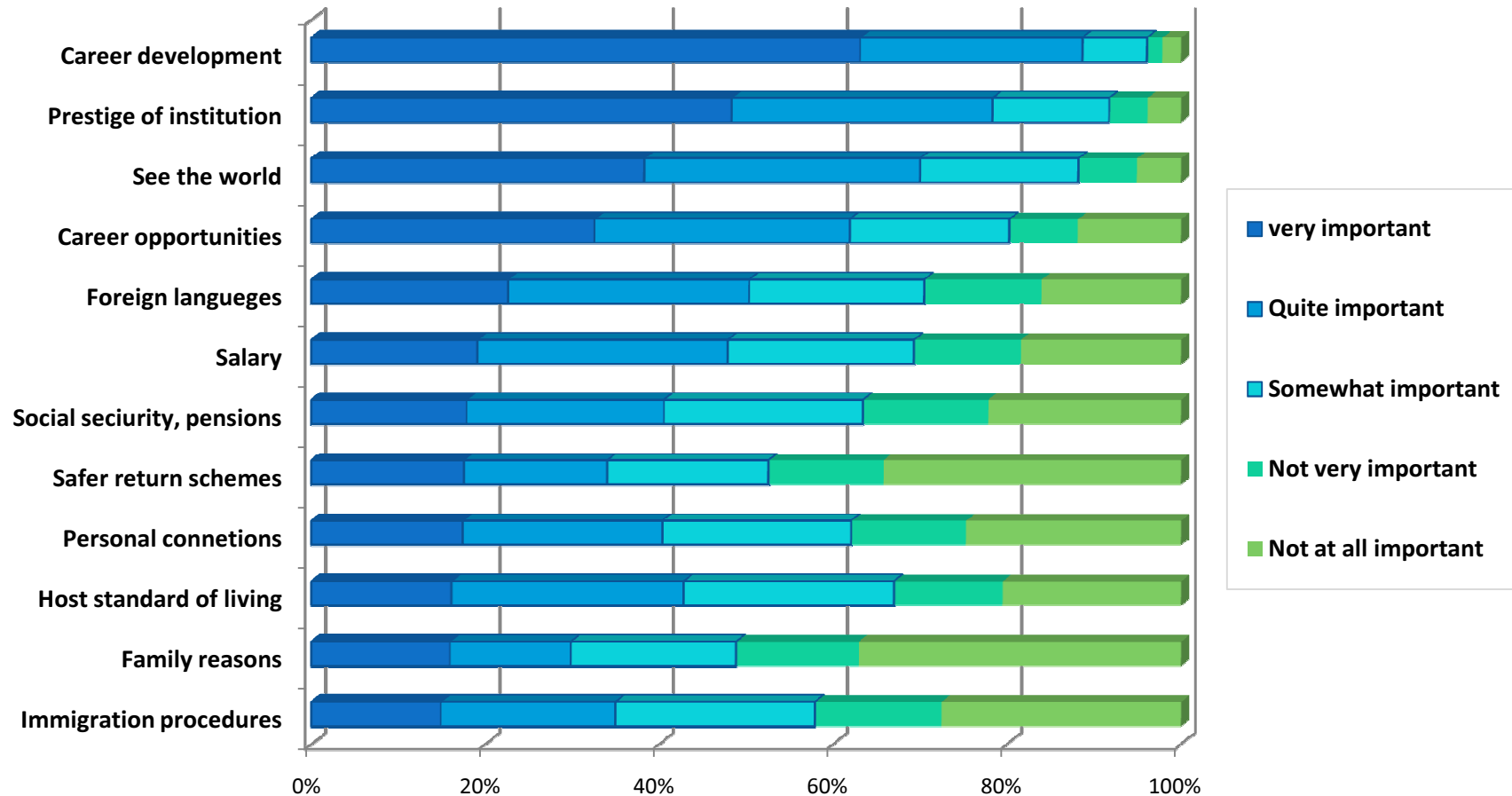
Country where PhD was received



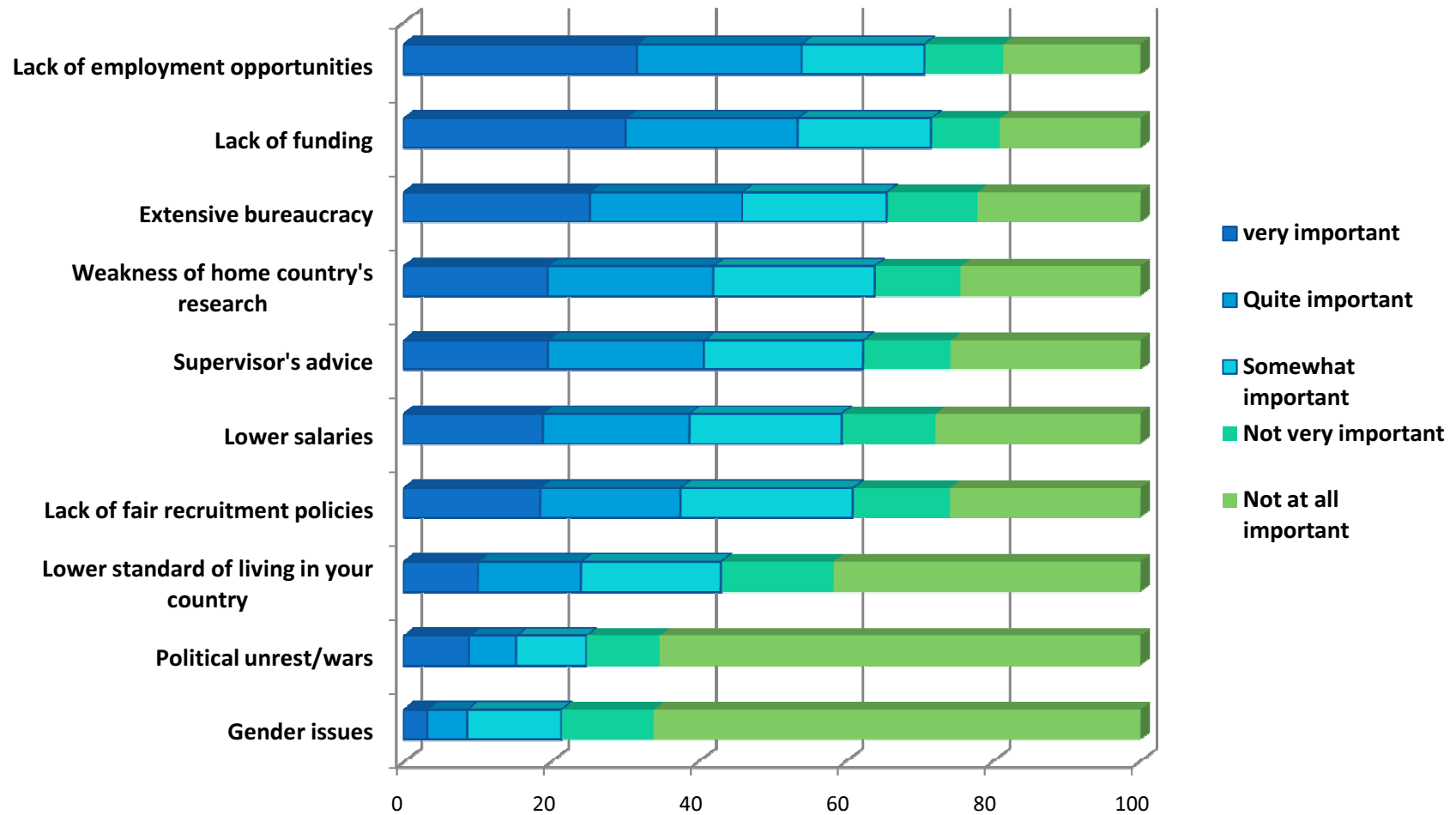
Preferred destination country



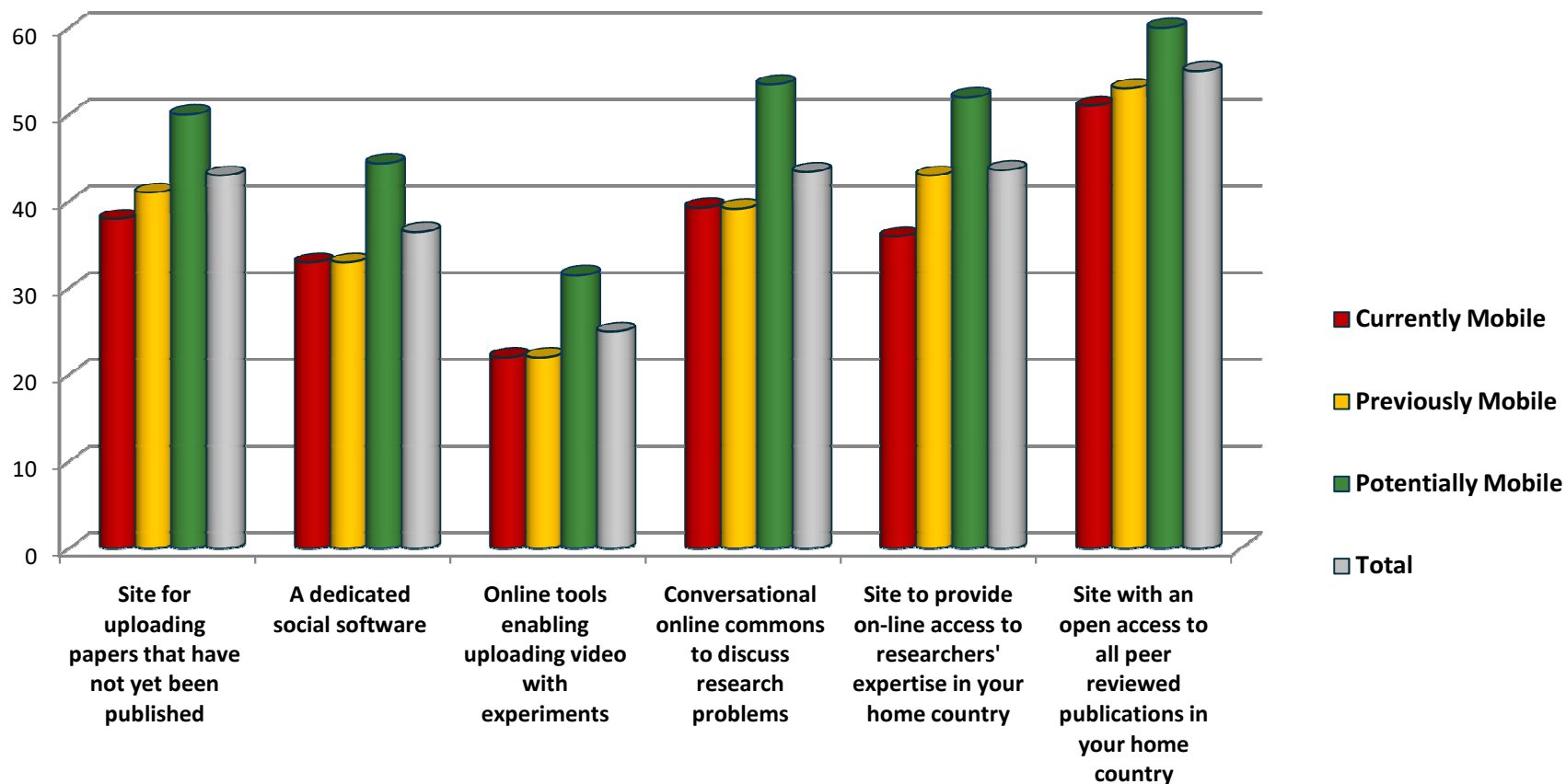
Pull Factors



Push Factors

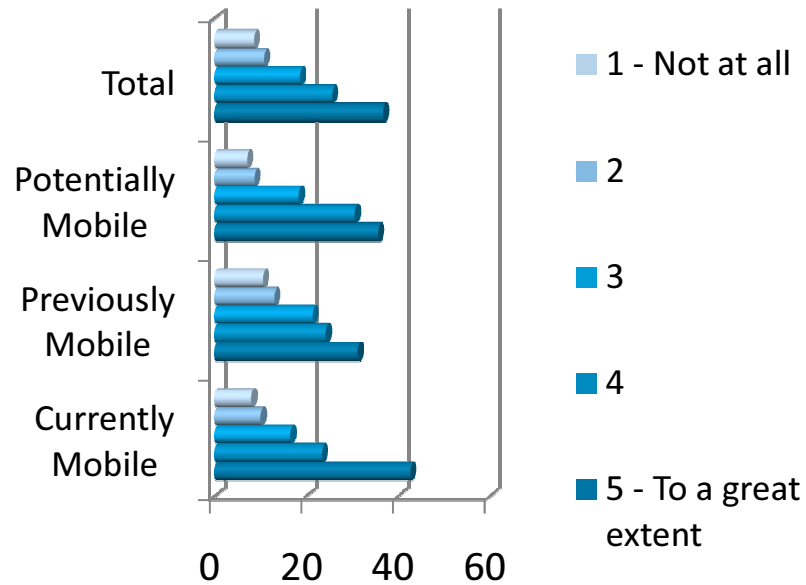


Mobile researchers: Need of e-reintegration (different e-tools were proposed and researchers' preferences analysed)

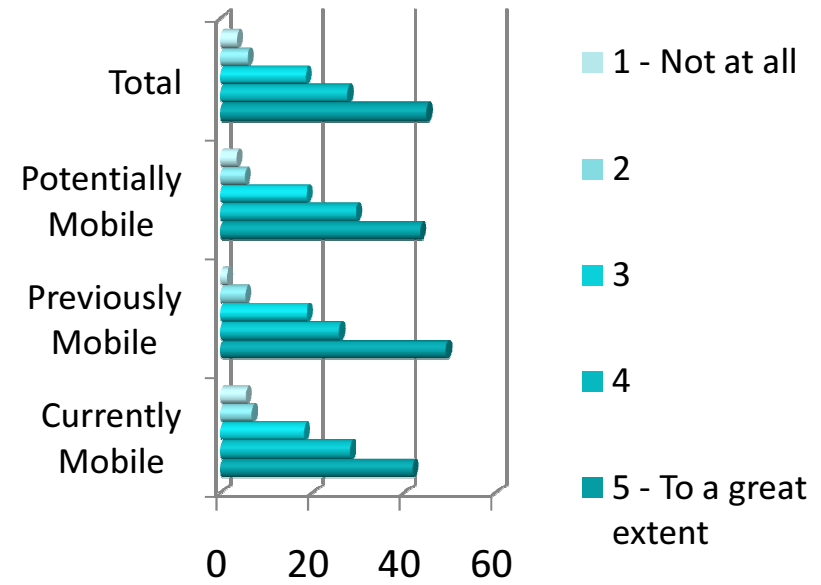


Co-sharing positions

As a mobile researcher, to which extent would you be interested in spending partial time in your home country while working abroad most of the time?



In your opinion would sharing your working time between institution in your home country and visiting country institution increase creative scientific collaboration?



Conclusions

- Young PhD and post-docs researchers (under 40), in science are the most mobile;
- Mobile researchers prefer the U.S as their destination country
- Preferred European destinations : UK Germany or France;
- **Strongest push factors:** Lack of employment prospects and researcher funding opportunities;
- **Strongest pulls:** career development, working at prestigious host institution as well as good career opportunities abroad;

Conclusions

- The following push factors: lack of funding/employment opportunities, low incomes, bureaucracy, weakness of home country research have **much stronger impact** on mobility decision of currently/future mobile researchers, compared to those who returned home;
- An open access to peer reviewed publications is a leading e-tool in maintaining scientific bounds with home countries;
- All respondents expressed interest in co- sharing their working time between visiting country institution and their home research organisation/this would increase research collaboration;



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THANK YOU

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