



International Mobility of Researchers

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OECD Workshop on Stimulating Knowledge Transfer



EUROPE

RAND Europe is an independent not-for-profit public policy research institute



helping to improve policy and decisionmaking
through research and analysis

Aims of the study

- Provide a better understanding of mobility to and from the UK and more widely in the context of Brexit, but also as an important part of the research system.
- Three main questions
 - What are the patterns of international researcher mobility?
 - What are the drivers of and barriers to mobility?
 - What are the benefits and consequences of mobility?
- Aimed to cover researchers in academia and industry, though most evidence on academia
- UK focus but taking in wider evidence in the literature review

Approach

- Rapid evidence assessment
 - 65 studies included – mix of survey data, secondary analysis, interview data and bibliometric/patent analysis.
 - Also identified 10 datasets relevant for inclusion
- Survey
 - Online survey of academic researchers in the UK in March 2017
 - We received and analysed 1,285 responses

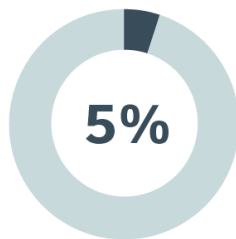
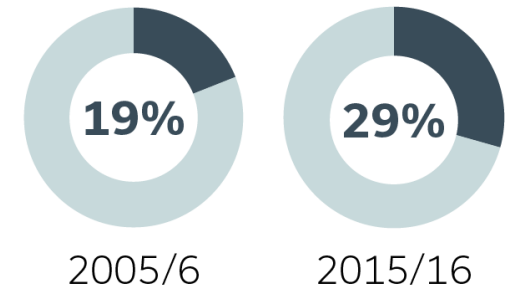
Findings

- Patterns of mobility for the UK
- Drivers and barriers of mobility
- Benefits and disadvantages of mobility

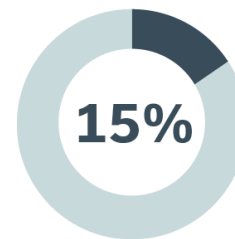
The UK is an attractive destination for researchers and PhD students



Increase in percentage of UK academic staff who are non-UK nationals:

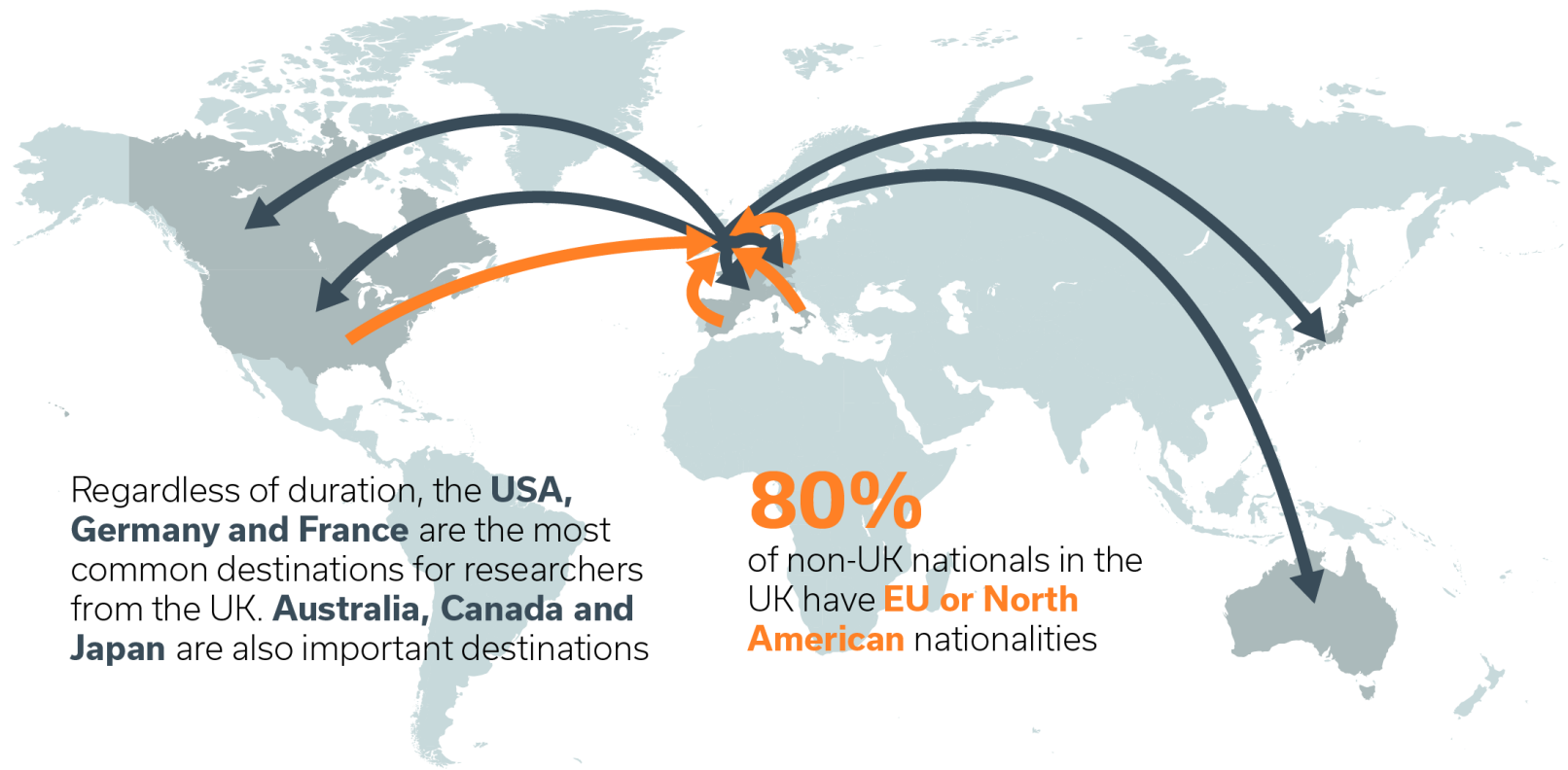


The UK makes up **5%** of OECD countries' population



but hosts **15% of the students studying for masters and PhD degrees** in OECD countries

Most mobility to and from the UK is from a small set of western countries



People move for professional reasons...

Professional opportunities encourage mobility:

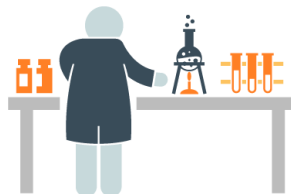
Training



Jobs



Research environment



Professional motivations
are more important than
personal drivers in mobility of
researchers overall

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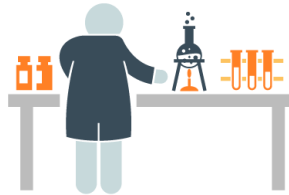
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Professional motivations

are more important than **personal drivers** in mobility of researchers overall



Career development is the most commonly cited reason for mobility to the UK and long-term mobility overseas



Shorter term moves are to **work with particular people and/or on particular topics**, and these reasons also matter to those moving for longer periods

People move for professional reasons... but stay in or return to the UK for a mix of personal and professional reasons

Professional opportunities encourage mobility:

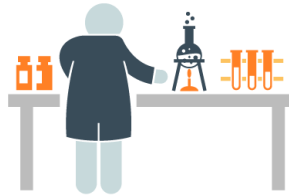
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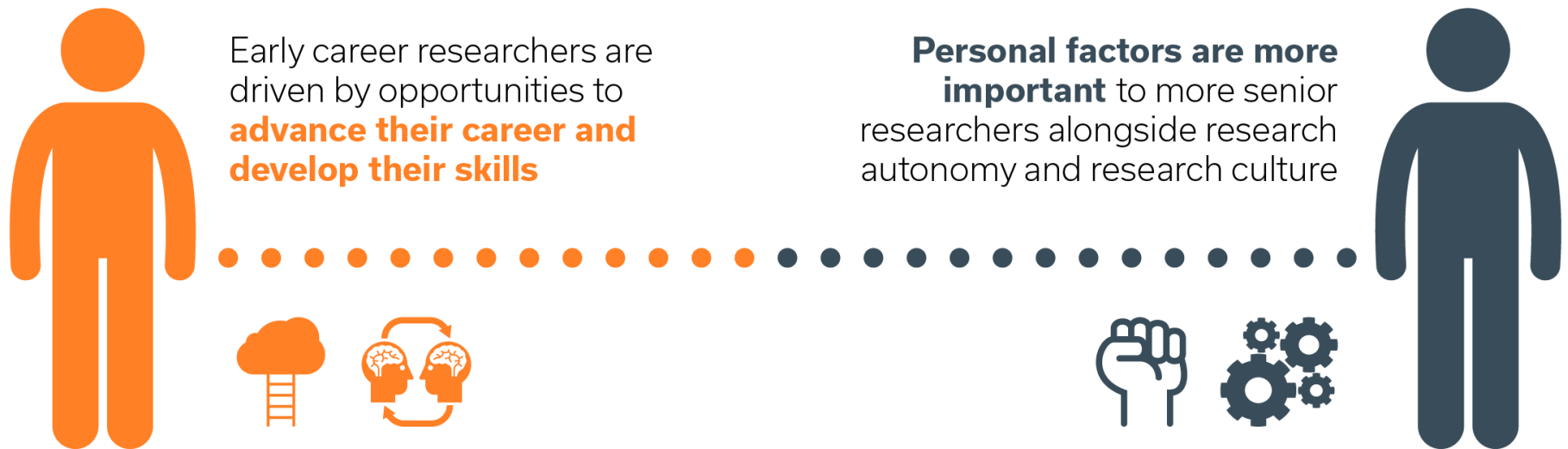
Family and personal reasons are the top two drivers of non-mobility, followed by career development



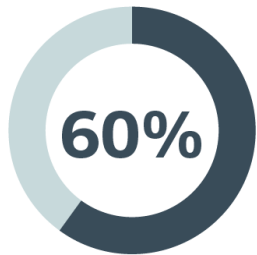
For those returning to the UK, **career development** is the most frequently selected driver, followed by family and personal reasons

Drivers and barriers vary depending on career stage and personal circumstances

- Relative importance of drivers varies across career stages, geographies and gender

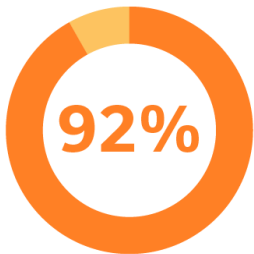


Having a partner and/or children are important barriers to mobility

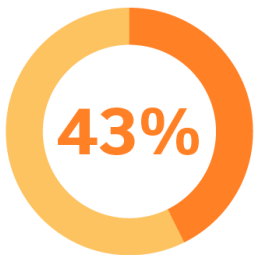


of respondents said that having a **long-term partner** made them less likely to move between countries

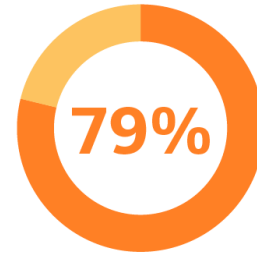
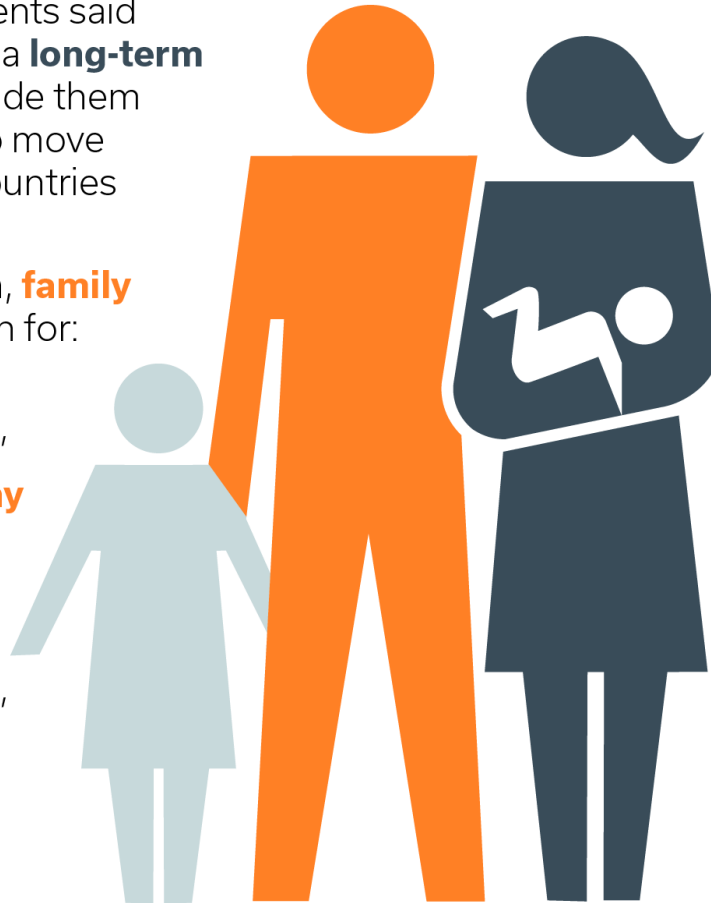
Amongst those with children, **family reasons** are cited as a reason for:



respondents' choice to **stay in the UK**



respondents' choice to **move back to the UK**

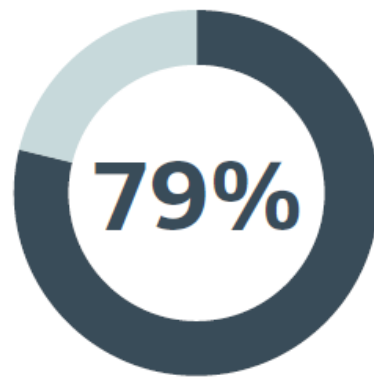


of respondents said that **having children** made them less likely to move between countries

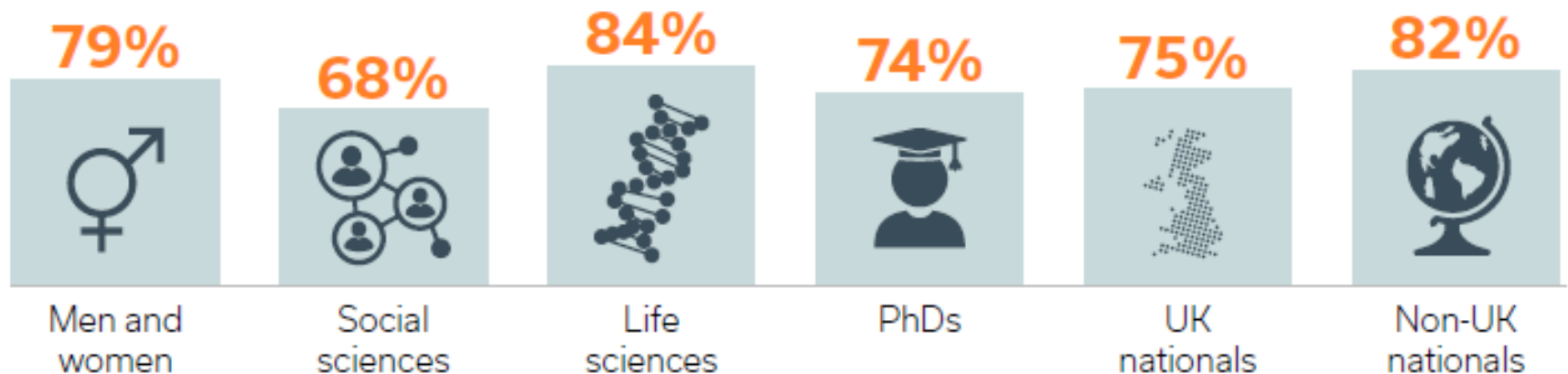


Finding **suitable employment for a partner** is the most frequently cited barrier to mobility amongst those with a partner except for short-term mobility

Most researchers feel good researchers are expected to be mobile



of researchers agree that there is an **expectation of international mobility** in the research community



Who benefits from international mobility?

- International mobility linked to ‘brain drain’
 - Term coined following a report by the Royal Society (1963) on emigration of scientists to US – helped establish it as an issue
- The UK benefits as a destination country:



wider supply of
well-qualified
researchers



high-quality
researchers



access to
mix of skills



development of
international
networks

International mobility can benefit both source and destination countries

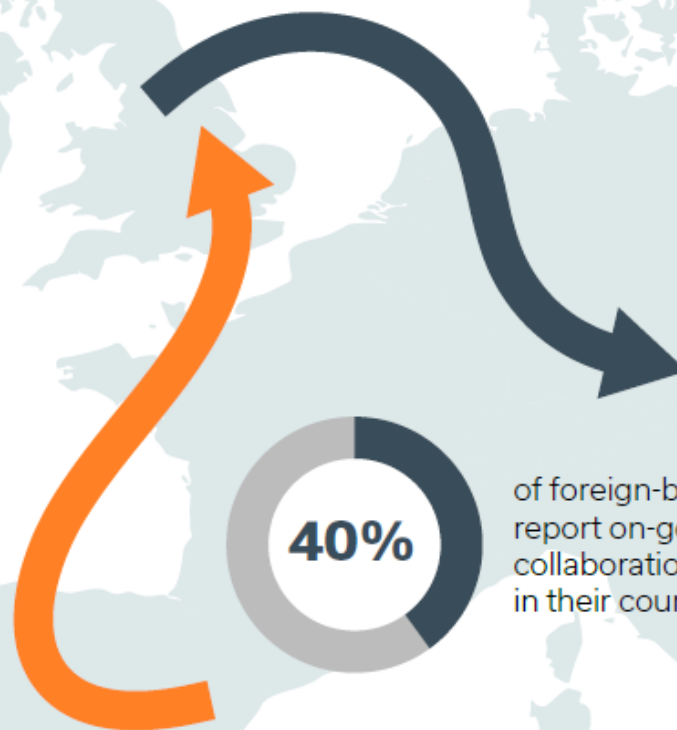
- Source countries also benefit



access to
networks
and skills



UK is host to many EU-funded early career researchers and doctoral students, many of whom will return home with skills, knowledge and networks



How to attract, retain and support researchers so they best contribute to country development?

- Reasons for moving rather than staying
 - extent to which there are good prospects for advancing careers in home country,
 - ability to work with good quality researchers on interesting topics
- Ideas for encouraging staying and returning
 - Offering more job security for early career researchers
 - Clear and accessible pathways to pursue and advance careers within and outside academia
 - Support those overseas to maintain their relationships with those in their home country (e.g. small scale funding for travel costs, joint funding calls)



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Postdoctoral researchers



The **postdoctoral period** is important for mobility yet receives less focus in literature than PhDs



38%

of UK researchers move to take a postdoctoral position in another country following their PhD studies

Graduates from elsewhere in the EU are **even more likely than UK nationals to move overseas after graduation**, and there is also the indication that international postdoctoral mobility is becoming more common



43%

of postdocs cite that the **availability of research funding** is a particularly important barrier to mobility for early-career researchers



A key driver of mobility for postdocs is **career progression**, and personal circumstances are generally considered to be less of a barrier for this group than for more senior researchers

Elite scientists



Elite scientists are drawn to **research excellence**



Funding is less of a barrier for this group



Elite scientists are drawn to **strong institutions** who already have excellent researchers



The **US and UK** are key destinations for elite scientists



More senior scientists may better maintain **collaborative links with their country of origin** and may be better able to benefit from networking benefits as well as gains in terms of academic performance

Women



Women are less internationally mobile than men, facing greater personal barriers



Personal relationships, children and family care responsibilities can inhibit mobility



Male researchers are more likely to be mobile than female researchers



Childcare arrangements are important factors in mobility decisions, especially for women

When they do move, **women report greater benefits from mobility**

Mobile researchers perform better...

- Mobility is associated with
 - Better international networks
 - More research outputs (publications, patents)
 - Higher-quality outputs
 - Better career outcomes



- Benefits for early-career researchers:
 - » Skills gained
 - » Career development

- Benefits for senior researchers:
 - » Collaboration and networking
 - » Academic outputs



Mobile researchers perform better... but it's not clear if mobility is the cause

- Few studies have tried to establish a causal link between mobility and research performance
- Results are mixed:
 - Some studies suggest the positive outcomes are a result of mobility
 - Others suggest the differences come from differences in the characteristics of researchers who choose to be mobile
 - Others find no difference, e.g. in productivity of elite mobile vs. non-mobile researchers
- Biased self-reporting?
- **Mobility expectations not grounded in evidence of improved performance**