Mobility of researchers
Results from the MORE2 study

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Continued data collection and analysis concerning mobility patterns and career paths of researchers

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Consortium

- IDEA Consult (Belgium)
- WIFO (Austria)
- iFQ (Germany)
- CHEPS (University of Twente, the Netherlands)
- LaSapienza (UniRoma, Italy)
- CFA (Aarhus University, Denmark)

And subcontractors:
- University of Wolverhamton
- Loft33
- CheckMarket
- Interago
Contribution of the study

- Conceptual refinement and more precise measurement of mobility
- Global perspective
- Accuracy at EU27 and country level
- Focus on early stage working conditions
- Insight into the real decision making factors (stated choice experiment)
- Topics and data on new/updated issues
## Scope and deliverables

<table>
<thead>
<tr>
<th>Work package</th>
<th>Data</th>
<th>Analysis method</th>
<th>Results</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>10,547 individual researchers currently working in the EU</td>
<td>Statistical descriptive analysis including a calibration and weighting procedure</td>
<td>Indicators representative at EU27 and country level¹ and with subindicators for fields of science, gender and career stage</td>
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<tr>
<td>2</td>
<td>4,090 individual researchers working outside the EU</td>
<td>Statistical descriptive analysis</td>
<td>Indicators for (non-representative) subgroups of the sample:</td>
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<tr>
<td></td>
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<td></td>
<td>- EU researchers currently working abroad</td>
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<td>- Non-EU researchers who have been to the EU in the past</td>
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<td>- Non-EU researchers who have never been to the EU but who have been to non-EU countries</td>
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<td>- Non-mobile non-EU researchers</td>
</tr>
<tr>
<td>3</td>
<td>47 country fiches with detailed qualitative information²</td>
<td>Cluster analysis and cross-country comparison</td>
<td>Indicators and cross-country comparison</td>
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<td></td>
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<td>First collection of large-scale and detailed information per career stage</td>
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<tr>
<td>4</td>
<td>46 country fiches with detailed quantitative and qualitative information</td>
<td>Cluster analysis and cross-country comparison</td>
<td>Indicators and cross-country comparison; validated by country delegates of the SGHRM³</td>
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<td>Indications of cross-sector factors and job choice factors</td>
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<tr>
<td>5</td>
<td>Existing databases and indicators from other work packages</td>
<td>Descriptive quantitative analysis</td>
<td>Set of Key Researcher Indicators</td>
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</tbody>
</table>

¹ According to DEWI study 2009, 2010

² Additional qualitative information

³ EUR 82516, C5, 2009

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1. The survey includes all 27 EU Member States plus Associated Countries (Switzerland, Norway, Iceland) and Candidate Countries (Turkey, Macedonia (FYROM) and Croatia).
2. Country experts in India, Malta and Slovakia did not provide fiches; the Liechtenstein expert only provided the working conditions fiche.
3. ERA Steering Group on Human Resources and Mobility.
Selection of results

Mobility: the figures
Mobility profile and the impact of “virtual” tools
Effects of mobility
Conditions for mobility
### Mobility: the figures

<table>
<thead>
<tr>
<th>Mobility Type</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>PhD degree mobility</td>
<td>14% of current or recent doctoral researchers</td>
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<tr>
<td>&gt;3 month mobility during PhD</td>
<td>18% of current or recent doctoral researchers</td>
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<tr>
<td>Post-PhD &gt;3 month mobility in the last ten years</td>
<td>30% of researchers</td>
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<tr>
<td>Employer mobility</td>
<td>12% of all researchers</td>
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<tr>
<td>Post-PhD &lt;3 month mobility in the last ten years</td>
<td>41% of researchers</td>
</tr>
<tr>
<td>Never international mobile</td>
<td>31% of EU HEI researchers</td>
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</tbody>
</table>

**Highest rates of mobility**
- Highest in Natural Sciences and Engineering & Technology
- Highest in Natural Sciences, E&T, Humanities, Agricultural Sciences

**Lowest rates of mobility**
- Lowest for both in Medical Sciences
Mobility per country: post-PhD

>3 month international mobility in post-PhD career stages per country

**German:** 44.7% in the last ten years + 14.0% more than ten years ago

**EU:** 31.0% in the last ten years + 17.4% more than ten years ago

Source: MORE2 Higher Education Survey (2012)

Note: Percentage of R2 (post-doctoral or equivalent), R3 (established) or R4 (leading) researchers who have worked abroad for 3 months or more at least once per panel country. (n=8,357)
Mobility: destinations and flows

Main destinations are USA and within EU: UK, France, Germany

- For >3 month post-PhD mobility by EU27 citizens
  - 18% to USA, 11% to UK, 11% to Germany, 8% to France
- For mobility of non-EU researchers

Post-PhD flows:

- Economic crisis (Greece, Spain, Italy)
- Linguistic and cultural links
Flows of researchers FROM Germany
Flows of researchers FROM Germany
Flows of researchers TO Germany
Flows of researchers TO Germany
The mobile researcher

The researcher who was mobile for $>3$ months at least once

- Is more often also short term ($<3$ month) mobile
- Is more often also involved in international collaboration, with both academic and non-academic partners
- And international collaboration is often the result of a mobility experience
The mobile researcher

Virtual mobility

- Partly substitutes mobility, but mainly short term mobility (50% versus 9% for long term mobility)

- **Cannot fully replace physical mobility and the mobility experience**

- But growth sector? Adds a new dimension to international research mobility for those who cannot be mobile (cf. barriers)
Effects of the entire mobility experience on the researcher’s career (EU27)

Source: MORE2 Higher Education Survey (2012)

Note: - Share of mobile researchers who indicate that the effect of the entire mobility experience on a specific aspect of her career to be a (strong) increase, (strong, decrease or unchanged. (n=1,660)
- With ‘mobility’ defined as having worked abroad for more than three months at least once in the last ten years.
- Only for R2 (post-doctoral or equivalent), R3 (established) or R4 (leading) researchers.
Effects of mobility

Overall positive effects for the majority of researchers in EU HEI

- Main effects are output effects (+60%)
- Advancement of research skills (80%)
- Development of international contacts and networks (74%)

Highly mobile researchers report more positive effects of their mobility experience

- International research mobility has a positive effect on research outputs, skills and networks
- Virtual mobility cannot fully replace the experience of a long term stay
- Points at the ‘value added’ of international mobility
Effects of the entire mobility experience on the researcher’s career (EU27)

Source: MORE2 Higher Education Survey (2012)

Note: - Share of mobile researchers who indicate that the effect of the entire mobility experience on a specific aspect of her career to be a (strong) increase, (strong, decrease or unchanged. (n=1,660)
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Effects of mobility

But significant minority experiences negative effects

- Job options, remuneration progress, recognition and ability to obtain international funding decrease for over 40%
- Career progression (31%)
- Output effects (between 15 and 25%)
- International network (19%)

- 'forced' mobility?
- Importance of mobility conditions
Conditions for mobility

Main motive is career progression

Main barrier for the mobile was to obtain funding, followed by finding a suitable position

Main barrier for the non-mobile was idem + personal/family reasons

Barriers for the intra-EU movements are language, obtaining a visa or work permit and finding accommodation

Different priorities across career stages:

- R2 and R3 primarily seek availability of funds and positions
- R2 put also more emphasis on career progression and remuneration
- R4 put more emphasis on research autonomy, personal or family reasons, quality of training and culture

Different barriers across career stages:

- R3 EU HEI researchers perceive less barriers
- R4 put more emphasis on funding for research
Conditions for mobility: a number of propositions

It is worthwhile to encourage international mobility (cf. virtual mobility and effects)

But needs depend on the profile and situation of the mobile researcher:

- Long term mobility is correlated with participation in other forms of mobility and the highly mobile researchers experience more positive effects
- But, potentially when mobility is ‘forced’, the effects are not necessarily positive
- The availability of positions and research funding are crucial elements in the inter-EU mobility decision, obtaining a visa or work permit in the non-EU mobility decision
- Differences exist between fields of science
Results from the MORE2 study

Reports and data:
http://ec.europa.eu/euraxess/index.cfm/services/researchPolicies

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