Approaches towards Brexit among Polish researchers in the UK

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Executive summary

Polonium Foundation is an independent non-profit organisation which aims to connect Polish researchers around the world, including in the UK.

We ran a survey among Polish researchers based in the UK to understand the impact of Brexit on their career choices. Of the respondents, 82% said that Brexit impacted their professional life, while 77% felt the impact on their personal life.

More than half of the respondents signalled that they are considering leaving the UK, with over 70% of those being Early Career Researchers (PhD students, postdoctoral researchers or teaching fellows). The top three reasons behind the intention to leave the UK were Brexit, personal reasons and the quality of life in the UK. As the next potential destination, the majority indicated another country that is a member of the European Union, with 29% considering Poland.
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## Executive summary

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1/ Introduction

Helping understand the Polish research diaspora is an important part of Polonium Foundation’s work. Polonium was formed to connect Polish researchers around the world and help prevent “brain drain”, turning it into a more beneficial “brain circulation”. While the Foundation operates world-wide, including Switzerland, Germany or the United States, a large proportion of the Polish diaspora is based within the United Kingdom.

The announcement of and consequently proceeding with Brexit has therefore raised concerns and doubts in the community. At Polonium Foundation, we wanted to find out what influences Polish researchers in the UK - their career choices and the country they work and live in. We wanted to capture their views and present them more broadly.

In 2019, we worked together with other diaspora organisations (SRUK, PARSUK, AISUK) to organise a thematic workshop looking at various post-Brexit scenarios for science, and we published a short opinion piece as a result, summarising our joint voice [Pinto da Costa, et al. 2019]. The collaboration continues, and most of the other diaspora organisations have also produced surveys similar to this one [PARSUK, 2020; SRUK, 2021]

2/ Brexit and science

On 23 June 2016, the UK voted to leave the European Union, and since 31 January 2020, the UK is officially no longer part of the EU.

Science does not exist in a void - even when research considers itself apolitical (a contested claim in itself! [Howe, 2020]), researchers’ realities are affected by political decisions.

Access to European funding

The UK has been a leading country in securing European research and innovation funding over the last years. Approximately 14% of funds (~£2 billion per year) from the Horizon 2020 programme went to the UK, with three British universities (University of Cambridge, University of Oxford, and University College London) among the top ten recipients to date [Brien, 2020]. The funding from Horizon 2020 between 2014 and 2020 supported Junior and Senior Group Leaders/Academics (European Research Council, £2.1 billion), postdoctoral and PhD training (Marie Sklodowska-Curie actions, £1.0 billion) and youth training (Erasmus+,

During the transition period, an important question was raised about the impact of Brexit on UK science [Gibney, 2020]. Factors such as open borders (or lack thereof) are directly implicated when thinking of international collaborations, research mobility, diversity, the sharing of knowledge and technology.
Further initiatives supported through the EU included environmental funds: the LIFE programme (since 1992, €314 million) and the BEST initiative (2011-2017, €14.5 million) [Brien, 2020].

Following Brexit, the UK is now an associated country of the Euratom research programme and Copernicus Earth-observation satellite programme, giving the UK important access and contribution to research on nuclear energy and global satellites data. Nevertheless, the UK will miss out on participation in the EU’s Galileo satellite-navigation system and the Erasmus+ programme for the younger generation [Erasmus+, 2021]. Importantly, while the UK became an associated country to Horizon Europe, which allowed it to participate in the remaining Horizon 2020 programme calls, the future participation in Horizon Europe still needs to be confirmed [UKRI Horizon 2020 guidance]. While the UK’s participation in the programme has been slowly declining since 2016, the 2020 results of ERC programme showed that it still remains a key beneficiary: awarded 14% of Starting Grants, 15% of Consolidator Grants and 24% of Advanced Grants [ERC Europa 2020 Statistics]. In 2021, yet again the UK remained in the top 3 for ERC Starting Grant: awarded 46 projects. Interestingly, only 12 UK nationals were awarded the ERC Starting Grants, with the majority of awardees starting their independent research careers in the UK being of other European nationality.

Scientific advancements rely on great talents, but also access to scientific supplies, whether those are reagents, computers, databases or specialised machines. Prior to Brexit, many scientific labs started stockpiling on supplies, out of fear that after Brexit not only the costs will increase, but also delays in receiving the purchases will occur due to new custom rules, taxes and bureaucracy [Black & Samazan, 2019, Stokstad, 2019].

Applying for UK funding as an EU citizen

While there is a general doubt about access to European funding, many European scientists in the UK also worry about their eligibility to apply for UK funding. Major UK funding agencies, such as Wellcome, UKRI or Royal Society, do not put barriers on applicant’s nationality but require that the researcher is hosted at an UK or Irish institution.

For students, one of the key sources of funding for covering tuition fees was access to the Tuition Fee Loan, which is now only available to EU students who have pre-settled or settled status, and not to newcomers to the UK [gov.uk, Student Finance]. Importantly, EU citizens with pre-settled or settled status are still eligible for home fees, while newcomers EU citizens are not [Department of Education, 2021] and need to pay overseas fees. The overseas fees are significantly higher than home fees, for example studying Biomedical Engineering at undergraduate level at Imperial College in 2021 costs £9,250 per academic year in home fees, while the overseas fee is £35,100 per academic year [Imperial College, 2021]. Recent analysis of UK university undergraduate admissions through UCAS showed a significant drop in European admissions between 2020 to 2021, with some universities observing drops of nearly 90% [Baker, 2022].
Applying for scientific jobs

Up till 30th June 2021, European citizens who were resident in the UK prior to 31st December 2020, could apply for pre-settled or settled status. So, generally speaking, unless they hold status under the EU Settlement Scheme, new European arrivals after 1st January 2021 need to apply for an appropriate visa to work or study in the UK. A point-based system for skilled workers visa, Graduate route visa and Global Talent visa were set up to encourage scientific recruits to the UK, as well as a Student visa for upcoming students. This system requires an accumulation of points based on salary, qualifications and education. Of note is the fact that the point-based system gives lower points for PhD degree in fields other than STEM [gov.uk, UK Visas and Immigration, 2021], potentially discouraging non-STEM researchers from applying for an academic or research position in the UK.

The Global Talent visa was set up to attract the biggest foreign talent that have received outstanding awards such as the Nobel prize. As reported in November 2021, not a single scientist applied to move and work in the UK using that route [Murugesu, 2021].

Among EU researchers, the key deterrents from moving to the UK to start a new position are reported to be the visa costs, which can be up to £14,500 for a family of 4. This has made it difficult for some universities to recruit for their senior positions [Grove, 2021]. Universities are not able to support the visa costs for academic’s families, and tend to pay only the visa costs of recruited academics. This raises a question whether the universities should also offer support to cover the family costs in order to recruit the top candidates. For example, Germany offers visa for researchers at no costs, with additional benefit to certain nationalities, like the British, where no visa is required for research stays for up to 3 months [German Missions in the UK, 2022]. At the same time Germany is the top grantees for ERC grants, showing how the immigration rules can facilitate influx of foreign researchers and strengthen national scientific infrastructure.

3/ Study population

International research communities

The UK academic community, both students and staff, is highly international. According to a report from the Royal Society, around 30% of academic staff in UK universities are non-UK nationals [The Royal Society, 2016]. In 2019, around 18% of academic staff in the UK were nationals from European Union countries, similar levels since 2017 [HESA, 2021]. However, in 2019 around 1,120 academics left the UK to move to other international universities,
a figure that is 70% higher than in 2015 [Baker, 2021]. This international landscape is even more pronounced for PhD students in the UK, where half are foreign nationals, 14% being EU nationals [The Royal Society, 2016]. On the other hand, UK-based researchers showed high mobility and need for open, international science for years: between 1996 and 2012, as many as 71.6% of UK-based researchers spent time at non-UK institutions [UK BIS, 2013].

Polish research communities

In the last 50 years Poland has faced a large number of highly skilled professionals emigrating in different waves (the so-called "brain drain"), often caused by the political and socio-economic situation in the country. The political emigration in the 1980s was later followed by drastic cuts of scientific jobs in the 1990s, with 24% of the staff moving to the US, Germany, France and the UK [Valavanidis, 2017].

Since joining the European Union in 2004, the relocation within Europe became easier, and attracted a lot of young people, although less information is available about the most recent migration wave. Poland's EU accession allowed for Polish scientists' mobility, with increased outflow of young scientists not planning to return to Poland [Patrzalek et al., 2015]. Over the years, the number of Polish undergraduate and postgraduate students in the UK institutions has been steadily increasing: in the 2014-2015 academic year, there were 5,300 Polish students in the UK, in the 2018-2019, 8,560, and most recently in 2020-2021 this number increased to 10,755 [HESA, 2022], suggesting a great interest in the UK as the country of choice for higher education, and raises a question whether it will remain so for years after Brexit.

The biggest to-date resource that captured a snapshot of Polish researchers across the world is Polonium Foundation's Report "Beyond recognition: Polish scientific diaspora as a source of social capital" [Polonium Foundation, 2018]. This work examined 464 Polish scientists working abroad in 31 countries, at all career stages, recent and long-term migrants. Even though you can find Polish academics in many countries across the world, the biggest concentration of people seems to be found in the United Kingdom, the USA and Germany. Most of the respondents had a Life Science background, around 30% were PhD students, 20% postdocs and 35% group leaders. Most of the researchers who lived abroad also completed their degrees abroad (50% obtained their PhDs abroad, about 20% obtained both PhD and Masters degrees or Bachelors abroad, while nearly 35% completed all their education in Poland).

Many respondents were interested in contributing to the Polish community despite no clear intentions of returning to their homeland. Therefore, following the report, Polonium Foundation established Polonium Network, an online platform for communication, collaboration and exchange of opportunities by the Polish research community abroad, researchers in Poland, and the broader international research community interested in collaboration with Polish researchers and institutions. Currently, Polonium Network has more than 500 active users and is growing.
Polonium Foundation’s Research & Policy Team designed a survey and invited Polish PhD students and academics based in the UK to participate. This was done through the newsletter, social media channels (Twitter/Facebook/LinkedIn) and emails to UK institutions between November 2020 and March 2021.

The questionnaire asked about the impact of Brexit on both professional and personal life, and took into account the position held, years lived in the UK, and immigration status. Collected data was further analysed by the Research and Policy Team.

Basic descriptions

The Polonium Foundation Brexit study has collected data from 74 respondents. Of those, 61 were eligible for further analysis (exclusions: not being of Polish nationality, not currently living in the UK or incomplete answers). Of the respondents, 55.7% were women and 44.3% men, aged between 21 - 68 (average age 36). Respondents were primarily from natural and medical sciences background (82%), some also worked in social sciences and humanities (27.9%) or engineering (16.4%) (multiple choice allowed, Figure 1).

About one third (34.4%) of the respondents held a lecturer/professor/group leader position, or were a postdoctoral researcher/research associate/research fellow (32.8%), 26.2% were PhD students, followed by research assistant, core facility scientists and scientists in industry (6.6%) (Figure 1). The majority were UK-funded (57.4%), followed by EU funding (18%) and industry or other (10%). More than 85% of respondents lived in the UK for more than 3 years, 64% more than 5 years, and 39% for more than 10 years.

We divided our respondents into Early Career Researchers (ECRs) including PhD students and postdoctoral researchers, and Senior Researchers (SRs) including lecturers, professors, group leaders, and industry scientists. On average, the ECRs lived in the UK for nearly 7 years (6.86), while the SR lived in the UK for nearly 16 years (15.92). There was a correlation between years spent in the UK and years from PhD ($r = 0.84$).
5/ Analysis

Impact of Brexit on the professional landscape

When asked to assess the impact of Brexit on their professional life, 82% of the respondents said it affected them (21% “considerably” and 61% “somehow”), while 18% said it did not affect them. We further analysed whether the response was different depending on the number of years spent living in the UK or the number of years since PhD award (Figure 2).

Surprisingly, we observed an increase in the “It affects me considerably” response among the respondents who either spent more than 13 years in the UK or obtained their PhD more than 10 years ago (30% respondents, compared to 11% - 22% in other groups, Figure 2). This was also observed when comparing responses between Early Career (ECRs) and Senior...
Researchers (SRs): more SRs felt that Brexit had impacted / will impact their professional life "considerably" (32%, compared to 14% among the ECRs), while more ECRs felt it will impact them "somehow" (67%, compared to 52% in the other group).

Our survey showed that 77% of the respondents felt that Brexit has affected / will affect their personal life to some extent (23% "considerably", 54% "somehow"), with 23% of the respondents not feeling affected in the personal sphere. When looking closely at the impact of Brexit on personal life, we observed that the longer the respondents have lived in the UK (or the longer since their PhD), the more likely they were to say that Brexit did not affect them personally.

As many as 72% of respondents who have not yet been awarded PhD answered that they were affected "somehow", which dropped to 52% and 40% in the groups with PhD held for less than 10 years or 10 and more years, respectively. At the same time, the "affects me considerably" response increased from 11% (PhD not awarded, or 0 years) to 30% (10 years and more). Conversely, the "it does not affect me" response was also most popular among respondents living in the UK for 13 years or more, or those 10 years or more after their PhD (30%, compared with 13-26% in other groups).

Senior researchers more often felt that Brexit will impact their personal life "considerably" (32%, compared to 17% among the ECRs), while more early career researchers feel it will impact them "somehow" (61%, compared to 44% in the other group).
Figure 3. Impact of Brexit on personal life depending on the number of years living in the UK, years since PhD award and professional status (Early Career Researchers vs Senior Researchers). Question: Assess the impact that the result of the EU referendum and the recent UK exit from the EU has had/will have on your personal life.

**Immigration status and support during transition period**

We further assessed how the immigration status of the respondents affected their view on Brexit’s impact on their professional and personal life. The majority of the respondents (97%) already had some form of a legal status to work and live in the UK, with only 3% still awaiting the outcome of their pre-settled or settled status applications. Most of the respondents had settled status (51%), followed by pre-settled status (28%) and British citizenship (18%).

<table>
<thead>
<tr>
<th>Immigration Status</th>
<th>ECRs</th>
<th>SRs</th>
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<tbody>
<tr>
<td>Settled</td>
<td>50%</td>
<td>52%</td>
</tr>
<tr>
<td>Pre-settled</td>
<td>39%</td>
<td>12%</td>
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<tr>
<td>British citizenship</td>
<td>18%</td>
<td>36%</td>
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We further observed that ECRs had either settled (50%) or pre-settled status (39%), while SRs had primarily either settled status (52%) or British citizenship (36%), and pre-settled status (12%) (Figure 4).

Holding pre-settled status (available after less than 5 years’ continuous residence) suggests that the respondents, especially ECRs, moved to the UK around or after the time of the Brexit vote in 2016, indicating that it did not deter them from choosing to develop their career in the United Kingdom.
Figure 4. Immigration status of the respondents depending on their professional status (Early Career Researchers vs Senior Researchers). Question: What is your status in the UK?

We further looked at what support the research community received from their institutions, employers, embassy or other sources, during the Brexit transition period. The main source of information on Brexit were newspapers and TV news (77%) followed by social media (44%) and the British government (41%). About 1 in 4 (26%) of the respondents listed their employer as the main source of information.

Additionally, 62% of the respondents felt supported or knew they could receive support from their employer, 20% stated that they did not need any support from their employer, and 10% felt they needed support but had not received it from their employer, or the support they received was not enough. None of the respondents selected the Polish Embassy as the main source of Brexit information, with 5% of respondents indicating that they received or could get support from Polish Institutions (such as the Embassy). Most of the respondents (61%) stated they did not need any support from Polish institutions and 5% reported needing help but not receiving it.

**Leaving the UK after Brexit**

We next analysed the interest within the scientific community in leaving the UK following Brexit (Figure 5). Slightly more than half (56%) of respondents indicated they were considering leaving the UK, with 41% indicating that they were considering leaving in the near future (1-2 years). Out of those: 72% were ECRs: research assistants, PhD students or postdocs; and 58% have already taken steps to leave the UK e.g. look for a job abroad.

About 15% of respondents indicated they were considering leaving the UK but not in the near future - again, mainly ECRs (78% of those). On the other hand, of the 44% that indicated that they were not considering leaving the UK - majority (60%) were SRs.
Figure 5. Consideration to leave the UK following Brexit, depending on the professional status (Early Career Researchers vs Senior Researchers) of respondents. Question: Are you considering leaving the UK in the near future (1-2 years)? Available answers: Yes, No, Yes but not in the near future.

When those considering leaving the UK were asked if Brexit influenced their decision to leave the UK, 77% selected “yes”. Those respondents were then asked to identify three key reasons for leaving the UK. Brexit was one of the top three for 47% of respondents, together with personal reasons (47%), and quality of life in the UK (38%) (Figure 6).

As the next destination, most respondents would choose another country in the EU (88%), followed by non-EU countries (32%), with 29% of the respondents considering Poland.

Figure 6. Reasons to leave the UK following Brexit (multiple-choice allowed, percentage). Question: Choose up to 3 reasons why you are considering leaving the UK.
Changing the job sector

We looked at whether Brexit and economic uncertainty had any influence on career choices of the Polish research community. Thirty eight percent of respondents considered changing the job sector - leaving academia or leaving research - but none had yet done it at the time of the survey. Those considering changing their job sector are mainly driven by wanting to do something different (52%), followed by lack of professional opportunities (39%), loss of interest in an academic career (30%) and to a lesser extent, Brexit (22%) (Figure 7, multiple choices allowed).

![Figure 7. Reasons to change the job sector following Brexit (multiple-choice allowed, percentage). Question: Was the consideration of changing your job sector driven by (choose all that apply.)](image)

6/ Discussion and conclusions

Our survey showed that the respondents who have longer professional experience (more years after PhD award), are more established (senior scientific positions), or more “settled” (living in the UK longer) are more likely to feel that Brexit will impact both their professional and personal lives considerably. On the other hand, the majority of early career researchers, those (yet) without a PhD award, with few years of post-PhD experience, or with less time spent in the UK, mainly feel that they will be affected by Brexit somehow, but not considerably. Interestingly, it is predominantly the early career researchers who are the ones considering leaving the UK in the near (in less than 2 years) or more distant future. This could
suggest that the senior and more settled researchers are more concerned about the impact of Brexit as they plan to stay to live and work in the UK, while early career researchers find Brexit to have some impact on their professional or personal life, but they also might have more flexibility as they seem more open to the possibility of leaving to work somewhere else. The majority identified another European country as a destination, with only one third of respondents considering returning to Poland.

If this trend continues, one can imagine a scenario in which the senior researchers remain in the UK, but there is an unmet need for international talent in more junior positions. The key challenge that we identified in our survey as something to be faced by British science is therefore to encourage more junior scientists to stay in the UK following Brexit. However, with the ongoing economic crisis, reduction in stable academic positions and increased challenges in attracting European students, the new generations might well be more eager to establish their careers in a country without those limitations. One can only imagine that this disparity will deepen with time, with less and less incoming new researchers and students. Our own experience speaks to this anecdotally: during a "Career Café" event Polonium organised in November 2021, dedicated to the prospect of PhD studies abroad (outside of Poland), the UK-themed breakout group attracted none of the 60+ attendees. Admittedly, this is just a snapshot of the bigger picture, and only time will tell whether Brexit’s effect will revert the influx of talent that the UK was attracting before.

Speaking of challenges, it is of note that only a third of the respondents explicitly consider Poland as a destination country for their next career step. How can Poland become the "place to be" for scientific minds? Even with multiple programmes offered by governmental organisations (like NAWA, the Polish National Agency for Academic Exchange) promoting the return of researchers to Poland to become project leaders or establish their independent laboratories there, the UK-based ECRs are still hesitant. As this study did not ask the respondents for motivations behind their destination preferences, one can only hypothesise why other countries are still perceived as more attractive. Previous research conducted by the Polonium Foundation suggests that those who do not consider returning to Poland are discouraged mainly by discrepancies in salaries and standards of life as well as socio-political differences between Poland and their current places of residence [Polonium Foundation, 2018]. Whether this is also the case for Polish researchers in the UK following Brexit remains unclear.

The Polonium Foundation has made it its mission to engage with researchers in Poland and abroad, and to facilitate international collaborations and exchange of ideas to maximise the potential of the Polish diaspora. Further international promotion of the research opportunities in Poland, whether through our newsletter, social media channels, or job adverts on the Polonium Network platform, and more efforts of becoming internationally competitive, would benefit turning the brain drain into brain circulation, attracting both returning Polish as well as international talent.
Additionally, more collaborations between Polish researchers working at international institutions with Polish research institutions could be established, through grants for student or postdoctoral exchange, collaborative projects, sharing of reagents or resources, honorary scientific or lecturer/professor positions or secondments and sabbaticals.

While it is clear that Brexit has presented obstacles to Polish (and EU) researchers in the UK, and may have affected their attitudes and intentions regarding life and work in the UK, only time will tell what the long-term consequences will be for British and European science. Maintaining contact with the diaspora and performing such surveys every few years will allow us not only to verify to what extent their intentions led people to actually move countries or change career paths, but also to identify what challenges remain in the post-Brexit academia in the UK.
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