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The development of diversity statistics for Norwegian research and higher education

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Introduction
The Norwegian Ministry of Education and Research appointed the first Committee for Gender Balance in Research (KIF) in 2004, and in 2014, their mandate was extended to diversity. The KIF-Committee has been pushing for the development of detailed gender statistics in research and higher education. A study stating that “Being an immigrant is no advantage” was issued (Maximova-Mentzoni et al 2016), and NIFU and Statistics Norway were given the task to develop regular statistics on diversity in Norwegian research and higher education institutions. This resulted in the working paper “Diversity statistics: Statistics on immigrants and descendants of immigrants in Norwegian research and higher education” (Gunnes et al 2016), which is the basis for this poster.

The poster will present the main results from the diversity statistics in Norway. It also addresses some methodological issues related to the definition of diversity. For an international audience, the study is of interest in the discussion of developing mobility indicators.

Method
The diversity statistics is compiled by merging NIFU’s Register of Research personnel for the years 2007, 2010 and 2014 with Statistics Norway’s population statistics and employment statistics.

The Register of research personnel is a database covering all higher education institutions in Norway, as well as research institutes and personnel that participate in R&D at university hospitals and other health trusts. The register contains data on individual level and covers researchers and academic staff, as well as supporting staff with higher education. The register, however, does not contain information about citizenship or immigrant status, so this information is obtained from Statistic Norway’s population statistics.

The Kif-committee initially wanted information about ethnicity and diversity in Norwegian higher education and research. Ethnicity is a somewhat problematic term, which is hard to measure, unless it is linked to regions/geography. We considered using citizenship, but as this

1 This work was funded by the Norwegian Ministry of Research and Education
2 Variables present in the register is gender, age, position and work place affiliation (university, faculty, department and field of science), education on ISCED 7 level and PhD. The register goes back to 1961 and is mainly used for statistical purposes. It is a part of the Norwegian R&D statistic’s infrastructure.
can be changed, we decided to use the classification of immigrant status, used by Statistics Norway in their official statistics:

A. Norwegian-born with two Norwegian parents  
B. Immigrants  
C. Norwegian-born with immigrant parents  
E. Non-Norwegian-born with one Norwegian parent  
F. Norwegian-born with one Norwegian parent  
G. Non-Norwegian-born with two Norwegian-born parents

The diversity statistics utilizes category B and C. We also mapped the regional background of the immigrants and descendants of immigrants, i.e. their country of origin.

While compiling the data, we decided that we needed to make a two-fold approach in order to answer to the needs of the Kif-komitee and the Ministry of Education and Research: One approach was mapping international mobility among staff in research and higher education, and follow those who come to Norway with a PhD, or to study for a PhD. The other approach was following immigrants, and descendants of immigrants, among academic staff, who have obtained their entire higher education in Norway. These are two distinct populations of researchers with quite different career patterns.

**Main findings**

Immigrants and descendants of immigrants accounted for 25 per cent of the researchers at Norwegian higher education institutions, research institutes and health trusts in 2014. This is higher than in the total population, among the work force with higher education and the students, see figure 1. The share of immigrants and descendants of immigrants among researchers has increased from 17 per cent in 2007, which is a somewhat higher increase than for the total Norwegian population (10 to 16 per cent).

![Figure 1 Share of immigrants and descendants of immigrants in Norway in 2014.](image)

**Source:** NIFU/Statistics Norway

Approximately 85 per cent of the immigrants in Norwegian research and higher education institutions in 2014 had their ISCED 7 level education from abroad. These are classified as internationally mobile researchers.
The post doctor position had the highest share of immigrants and descendants of immigrants in 2014, 49 per cent, followed by research fellows with 40 per cent. Among full professors, the immigrants and descendants of immigrant accounted for 23 per cent, and for associate professors, the share was 20 per cent. Natural sciences and engineering and technology had the highest share of immigrants and descendants of immigrants among researchers and academic staff in 2014. The lowest share was found within social sciences.

Table 1 shows that 29 per cent of the full professors with immigrant background were women in 2014, while 26 per cent of the other full professors were female. For all other selected positions, the share of women was lower among the immigrants and descendants of immigrants than among the other researchers.

<table>
<thead>
<tr>
<th></th>
<th>Immigrants and descendants of immigrants</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full professor</td>
<td>29 %</td>
<td>26 %</td>
</tr>
<tr>
<td>Associate professor</td>
<td>42 %</td>
<td>46 %</td>
</tr>
<tr>
<td>Post doc</td>
<td>41 %</td>
<td>56 %</td>
</tr>
<tr>
<td>Research fellow</td>
<td>47 %</td>
<td>60 %</td>
</tr>
<tr>
<td>Researcher in institute sector</td>
<td>38 %</td>
<td>40 %</td>
</tr>
</tbody>
</table>

Source: NIFU/Statistics Norway

Of the female full professors, 25 per cent had immigrant background in 2014, the same applied to 23 percent of the male full professors, see figure 2. Nearly half of the female postdoctoral fellows in 2014 did not have an immigrant background, while 37 percent came from EU, USA, Canada or Oceania and 15 percent from the rest of the world. Among the male postdoctoral fellows, 40 percent came from EU, USA, Canada or Oceania, while 25 per cent came from Asia, Africa or Latin-America, and 35 per cent were not classified as immigrants.

Figure 2 Women and men in selected positions in 2014 by gender and region.
Conclusion
The two-fold approach to the diversity statistics showed that the majority of the immigrants were internationally mobile researchers. Only 15 per cent of the immigrants and descendants of immigrants had obtained their education in Norway. There is a need to develop the diversity statistics further, in order to identify challenges or obstacles in their career paths.

The share of international mobile researchers in Norway is increasing. This is partly due to a more international labor market in academia. We also see that some institutions have strategically recruited female full professors from abroad.

References
