

The Panel of Elected Representatives

2025, 12th Wave

Methodology report

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BACKGROUND

The Panel of Elected Representatives (PER) is part of The Digital Social Science Core Facility (DIGSSCORE) at the University of Bergen (UiB). The Panel of Elected Representatives is also affiliated with the Norwegian Citizen Panel (NCP) and the Norwegian Panel of Public Administrators (NFP). The University of Bergen is the owner and responsible for the Panel of Elected Representatives. ideas2evidence is in charge of survey implementation, recruiting participants, as well as conducting the data collection.

PER is an internet-based survey of elected representatives, on all political levels in Norway. The survey deals with matters that are important to society, representation and democracy. All elected politicians are invited to participate. This report describes the data collection in the 12th wave of The Panel of Elected Representatives and discusses technical aspects of the data collection as well as the representativity and continuity of the panel.

The panel was established and fielded for the first time in May 2018. The second wave was fielded in 2019, and there has been fielded one or two panels each year since (see previous reports for more details about each wave). The round in question in this report, wave twelve, was fielded in the early summer of 2025. Wave four, nine, and twelve were all part of coordinated online panels for research on democracy and governance in Norway (KODEM), which means that some of the questions fielded was the same across all of DIGSSCORE's panels.

TECHNICAL ASPECTS OF THE SURVEY

SOFTWARE

The web-based research software Confirmat (now part of the company Forsta) is used to administer the surveys and the panel. Confirmat is a "Software-as-a-Service" solution, where all software runs on Confirmat's continuously monitored servers, and where survey respondents and developers interact with the system through various web-based interfaces. The software provides very high data security and operational stability. The security measures are the most stringent in the industry, and Confirmat guarantees 99.7 percent uptime. ideas2evidence is responsible for the programming of the survey on behalf of The Panel of Elected Representatives.

PILOT AND OVERALL ASSESSMENT

Prior to data collection, the survey was tested extensively. First, during the development phase, it was thoroughly tested both by the ideas2evidence and the researchers involved in the project. Additionally, it underwent a small-N testing organized by DIGSSCORE. The pilot testing was regarded as successful, and no major technical revisions were deemed necessary.

The field period started by inviting a random sample of respondents (soft launch) to participate. Soft launch is used in order to minimize the consequences if the questionnaire contains technical errors. No such errors were located/reported, and the remaining panel members were therefore invited the day after.

RANDOMIZATION PROCEDURES

Each wave of PER has an extensive use of randomization procedures. The context of each randomization procedure may vary¹, but they all share some common characteristics that will be described in the following.

All randomization procedures are executed live in the questionnaire. This means that the randomization takes place while the respondent is filling in the questionnaire, as opposed to pre-defined randomizations.

Randomizations are mutually independent, unless the documentation states otherwise.

The randomization procedures are written in JavaScript. `Math.random()`² is a key function, in combination with `Math.floor()`³. These functions are used to achieve the following:

- Randomly select one value from a vector of values
- Randomly shuffle the contents of an array

The first procedure is typically used to determine a random sub-sample of respondents to i.e., a control group. Say, for example, that we wish to create two groups of respondents: group 1 and group 2. All respondents are randomly assigned the value 1 or 2, where each randomization is independent. When N is sufficiently large, the two groups will be of equal size (50/50).

Here is an example of the JavaScript code executed in Confrontit:

```
var form = f("x1");
if(!form.toBoolean()) // If no previous randomization on x1
{
  var precodes = x1.domainValues(); // Copies the length of x1
  var randomNumber : float = Math.random() * precodes.length;
  var randomIndex : int = Math.floor(randomNumber);
  var code = precodes[randomIndex];
  form.set(code);
}
```

The second procedure is typically used when defining the order of an answer list as random. This can be useful for example when asking for the respondent's party preference or in a list experiment. However, since i.e., a party cannot be listed twice, the procedure must take into account that the array of parties is reduced by 1 for each randomization.

Here is an example of the JavaScript code executed in Confrontit⁴:

```
Function shuffle(array) {
  var currentIndex = array.length, temporaryValue, randomIndex;
  // While there remain elements to shuffle ...
  while (0 != currentIndex) {
    // Pick a remaining element ...
    randomIndex = Math.floor(Math.random() * currentIndex);
    currentIndex -= 1;

    // And swap it with the current element.
    temporaryValue = array[currentIndex];
    array[currentIndex] = array[randomIndex];
    array[randomIndex] = temporaryValue;
  }
  return array;
}
```

¹ Some examples: randomly allocate treatment value in experiments, randomize order of an answer list/array, order a sequence of questions by random.

² Please see following resource (or other internet resources): https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Math/random

³ Please see following resource (or other internet resources): https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Math/floor

⁴ Code collected from Mike Bostocks visualization: <https://bost.ocks.org/mike/shuffle/>

PANEL RECRUITMENT

All elected representatives at all political levels in Norway – municipal councils, county councils, the Storting (parliament) and the Sami Parliament of Norway – are invited to participate in the Panel of Elected Representatives. The contact information is collected through Kommuneforlaget AS's registers, as well as public information from the websites of municipalities, counties, the Storting, and the Sami Parliament of Norway.

The representatives were originally recruited in wave one, from a population of representatives elected in the 2015 municipal and county council elections, as well as the 2017 Storting and Sami Parliament elections. For the representatives, continued eligibility for PER is contingent on being re-elected. Elections are held every four years, setting the panel population to change every other year. As such, following every election, newly elected representatives have to be invited to participate in PER, while representatives who were not re-elected, have to be excluded from further participation. Of the 4 321 representatives recruited in wave one, 2 247 were excluded after the 2019 municipal and county election. 2 074 representatives were re-elected and therefore continued members of the panel.

In wave one, three, seven, eight, and ten, panel members were initially invited by a postal letter and subsequent email reminders. First, letters are sent to all elected representatives. The letters contain the following information: a) a description of the project, b) the Panel of Elected Representatives' policy on privacy and measures taken to protect the anonymity of the participants, c) the time-frame of the project, d) the participants' rights to opt out of the panel at any time in the future, e) contact information for the people responsible for the project, f) a unique log-in id and the web address to the panel's web site, and g) the estimated time required to complete the survey.

In wave three, newly elected representatives from the 2019 election were recruited, following the procedure from wave one. Re-elected representatives who did not respond to the wave one recruitment effort were also invited once more to participate in wave three.

Wave five applied a different approach compared to previous waves. Invitations and reminders were exclusively distributed by email. Invitees included representatives who 1) were not already registered in the panel, and 2) did not purposefully abstain from participation in wave three. Note also that wave five recruitment used the same recruitment pool as wave three as there were no changes in the target population. Previous recruitment attempts have been in the wake of an election, altering the recruitment pool (as described above), and consequently renewed the population with representatives who might be inclined to participate. Therefore, it is reasonable to assume that wave five recruitment did not reproduce recruitment rates similar to past waves as the representatives most inclined to participate already were participants.

Wave seven recruited municipal and county representatives from the same pool as wave five, and the recruitment process exhibited the same features. Additionally, wave seven recruited newly elected parliamentary representatives and Sami parliamentary representatives, both by postal invitation and email reminders.

Wave eight recruited across all levels of governance and used postal and email as modes of contact. Postal for municipal and county representatives, and email for parliamentary and Sami parliamentary representatives for the initial contact.

Wave ten recruited newly elected representatives following the municipal election in the autumn of 2023. The recruitment approach was comparable to the strategy applied in wave eight, using postal and email as modes of contact. The majority of newly elected representatives received postal invitations, a postal reminder, and an email reminder. Those who were not registered with a home address received the invitation and all reminders by email. Elected representatives at the municipal and county level who did not respond to previous recruitment efforts were also invited once more to participate in wave ten.

Before wave eleven a small number (nine) of elected representatives who, for various reasons, were not part of the recruitment process in wave ten, reached out to be part of the panel. They received an invitation to be part of wave eleven similar to existing panel members. Seven new elected representatives became panel members and respondents in wave eleven.

Table 1: Recruitment response across all waves with recruitment

	Year	Invitations	Mode	Contacts	Responses	Recruitment rate (%) ⁵
Wave 11	2024	9	Email	4	7	77.8 %
Wave 10	2024	8 723	Postal/email	3	1 430	16.5 %
Wave 8	2022	3 575	Postal/email	4	218	6.9 %
Wave 7	2022	4 034	Postal/email	4	353	8.9 %
Wave 5	2021	4 388	Email	4	407	9.3 %
Wave 3	2020	7 668	Postal/email	5	2 557	33.3 %
Wave 1	2018	11 334	Postal/email	5	4 321	38.2 %

DATA COLLECTION

A total of 4 281 representatives were invited to participate in wave twelve. All of them were already members of the panel, having been recruited in one of the previous waves of recruitment.

The survey was closed on the 2nd of July 2025. For various reasons, 69 representatives actively opted out. 42.2 percent (1 776) of the remaining invitees logged on and accessed the survey. 1 387 individuals completed the questionnaire, and 389 exited the questionnaire before completion. 54 of the incomplete responses (13.9 percent) have been kept as a part of the survey data, while the remaining incomplete responses are excluded from the survey due to lack of data. A total of 1 441 representatives are accepted as wave twelve respondents, leaving the overall response rate at 34.2 percent.

Table 2: Number of responses from panel members, by number of contacts

	Date	Responses	Cumulative Responses	Response rate	Cumulative response rate
Invitation	June 5 th /6 th	510	510	12.1 %	12.1 %
Reminder 1	June 11 th	312	822	7.4 %	19.5 %
Reminder 2	June 17 th	229	1 051	5.4 %	25 %
Reminder 3 (email)	June 23 rd	304	1 355	7.2 %	32.2 %
Reminder 3 (SMS)	June 23 rd	86	1 441	2 %	34.2 %

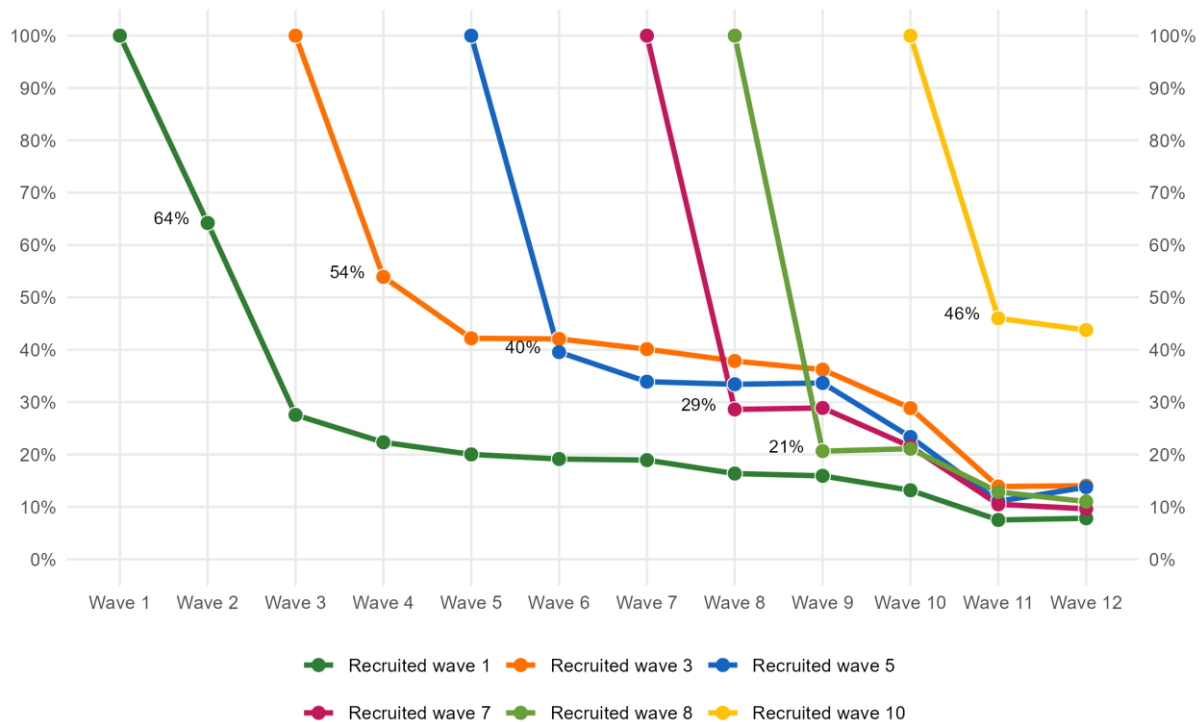
Respondents who were registered with a phone number received both a text and email reminder as part of reminder 3. The effect of the SMS reminder, although to greater effect when compared to the SMS reminder used in wave 9, is low when compared to email reminders.

RESPONSE OF PANEL MEMBERS OVER TIME

We will now examine panel retention; the rate at which the panel members continue responding to survey waves after the initial wave in which they were recruited. When recruited, the representatives become panel members and are invited to the following wave. For every wave, panel members can choose to opt out of their membership.

⁵ Some invitations never reach the respondents due to having opted out of receiving invitations in a previous wave. This is accounted for when calculating the response rates.

Figure 1: Current retention rate of PER respondents grouped by recruitment wave



As shown by figure 1, the retention rate is at its lowest in the respondent's second wave before retention flattens out. 64 percent of the respondents recruited in wave 1, also participated in wave 2. Correspondingly, 54 percent of the respondents recruited in wave 3, also participated in wave 4. In subsequent waves, the retention rate increases when compared to the first drop-off. For instance, among those recruited in wave 3 who also responded in wave 4, 78 percent are respondents in wave 5. Among representatives recruited in wave 1, 8 percent of them participated in wave 12.

Retention after first wave among respondents who were recruited in wave 7 and 8 is low when compared to the retention rate for respondents recruited in wave 1, wave 3, and wave 5. As noted previously, recruitment in these waves occurred in special circumstances considering that the pool of representatives available changed very little, despite the small addition of new parliamentary and Sami parliamentary representatives in wave 7.

The retention of respondents recruited in wave 10 is slightly less than wave 3, which is the former local election from 2019, but still greater than wave 5 which was the previous parliamentary election, with 44% retention rate for wave 12.

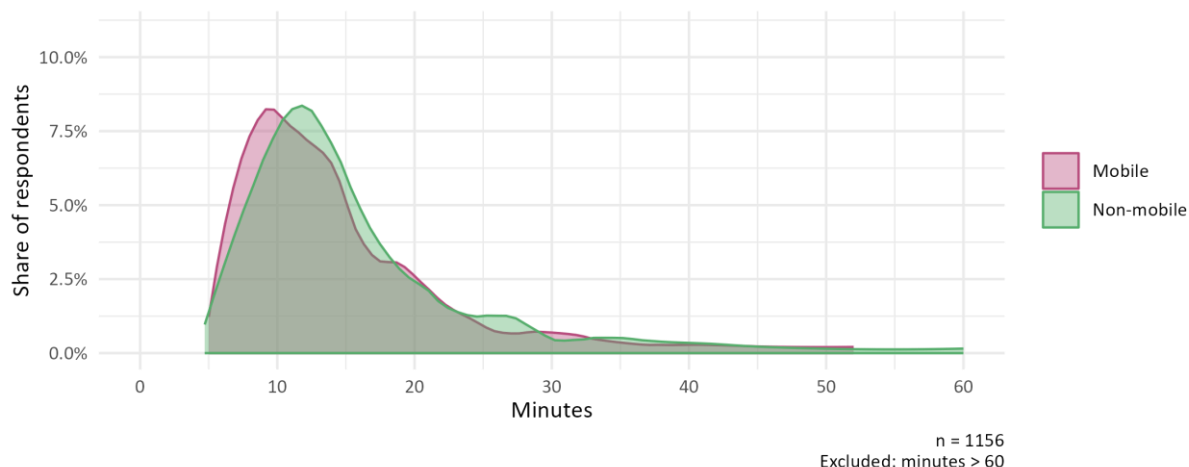
PLATFORMS

The questionnaire was prepared for data input via mobile devices. 36.3 percent of survey respondents that opened the questionnaire used a mobile device. 6.7 percent of the mobile users did not complete to such an extent that they were classified as respondents. To compare, 25.8 percent of the non-mobile users left the questionnaire without being included as respondents.

TIME USAGE

In the survey invitation, an estimated duration of the survey is included. For wave 12, the estimate was approximately 15 minutes. The actual time spent by the respondents filling out the questionnaire is visualized below, split between mobile and non-mobile users, with a mean of 14.8 minutes across both platforms.

Figure 2: Time usage of survey respondents



Measuring average time usage poses a challenge as respondents may leave the questionnaire open in order to complete the survey later. This idle time causes an artificially high average for completing the survey. In an attempt to reduce this effect, respondents using more than 60 minutes are excluded from the calculation. In this subsample, the average response time is 14.8 minutes as can be seen in table 3. On average, mobile respondents use slightly less time than respondents using non-mobile devices.

Table 3: Average time spent on questionnaire in minutes

	Mean	Median
All users	14.8	13
Non-mobile users	15.2	13
Mobile users	14.3	13

The survey is comprised of several question types, and it is assumed that time spent on a question is dependent on question type which can range from single questions to grids with multiple questions. Although not analyzed for the Panel of Elected Representatives, the documentation report from wave 20 of the Norwegian Citizen Panel show that respondents spend significantly less time completing single questions compared to grid and open-ended questions. This is in line with expectations, as there is less information to consider for the respondent. There is little variance between mobile and non-mobile users for single and grid questions, with quite a lot of platform variance for open-ended questions. On average, mobile users write fewer characters on open-ended questions when compared to desktop-users.

REPRESENTATIVITY

All respondents of the panel are representatives elected to office at different levels of administration. Norway's four levels of administration are municipalities, counties, the Sami parliament and the national parliament. In this section, we examine how well different demographics are represented in the panel, compared to their representation in the panel population. We check for biases by gender, age, level of education, county of

representation and party affiliation. Analyses are executed using registry data from Statistics Norway as well as data from the current wave.

As the number of representatives on each level varies widely, the different levels of administration are examined separately. Data access and anonymity both pose challenges to the analyses. Some numbers are therefore reported only on county and municipal levels, and the Sami parliament is left out altogether.

REPRESENTATIVITY OF THE PANEL OF ELECTED REPRESENTATIVES

Figure 3: Representativity of gender

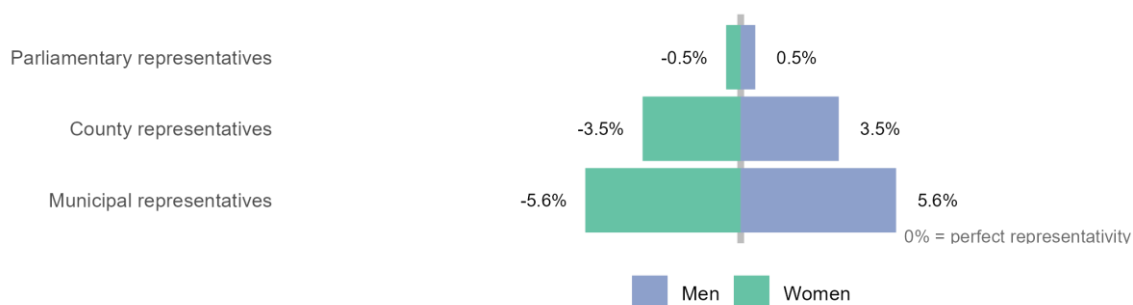
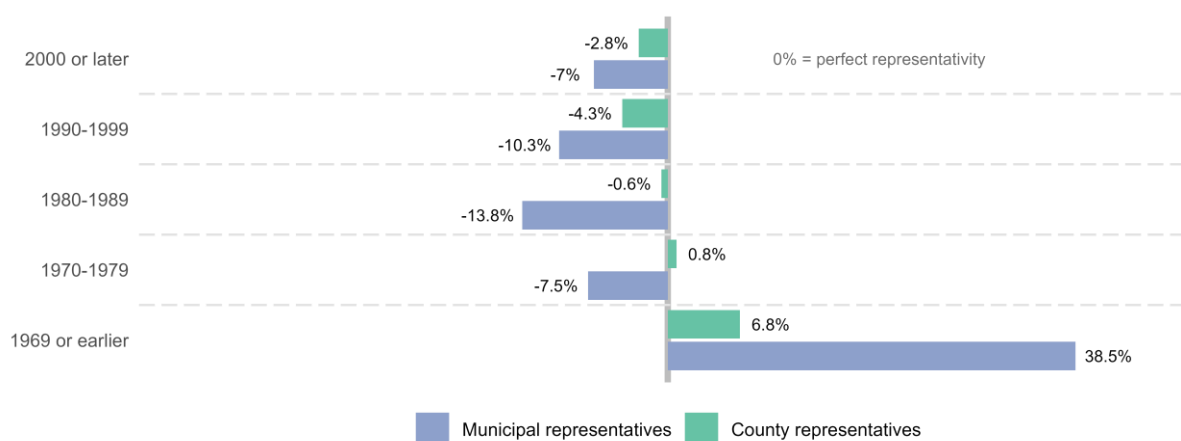


Figure 3 shows how the proportion of men and women in the panel compares to the proportion in the target population. Men are overrepresented among all levels of representatives, but only barely so at the parliamentary level. It should be noted that the total number of participating county and parliamentary representatives are comparatively low to the number of participating municipal representatives and over- or underrepresentation is more subject to fluctuation between waves.

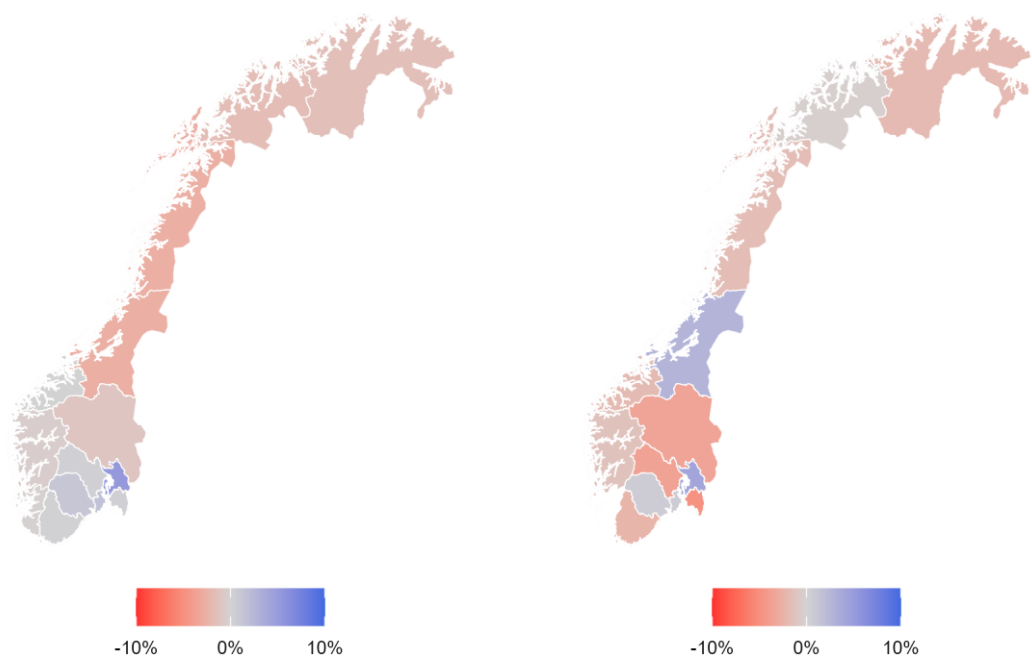
Figure 4: Representativity of age groups



The oldest representatives are overrepresented in the panel. While the bias is directionally similar for county and municipal levels across all groupings apart from the second oldest, the panel is overrepresented by the older age group in general, county representatives are less over- and underrepresented across all age groups.

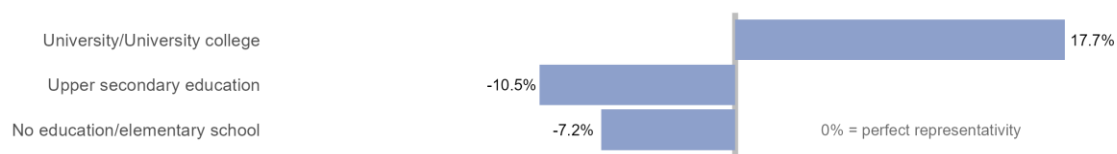
The most pronounced bias can be found among those born in 1969 or earlier. These respondents are overrepresented by 38.5 percent at the municipal level, and by 6.8 percent at the county level.

Figure 5: Representativity of municipal (left) and county (right) representatives – by 2024 counties



A comparison of wave 12 respondents to the target population is shown in figure 5, based on county where the representative is elected.⁶ Biases are rather small on the municipal level, and more pronounced on the county level. An important explanation for this is that the number of eligible respondents is much lower on the county level, and consequently more sensitive to variation. At the municipal level, there is a clear north-south bias dimension, although not severe. Under- and overrepresentation exhibit less of a pattern at the county level. There are no representatives participating from the county of Rogaland.

Figure 6: Representativity of levels of education. Calculated for municipal representatives only.

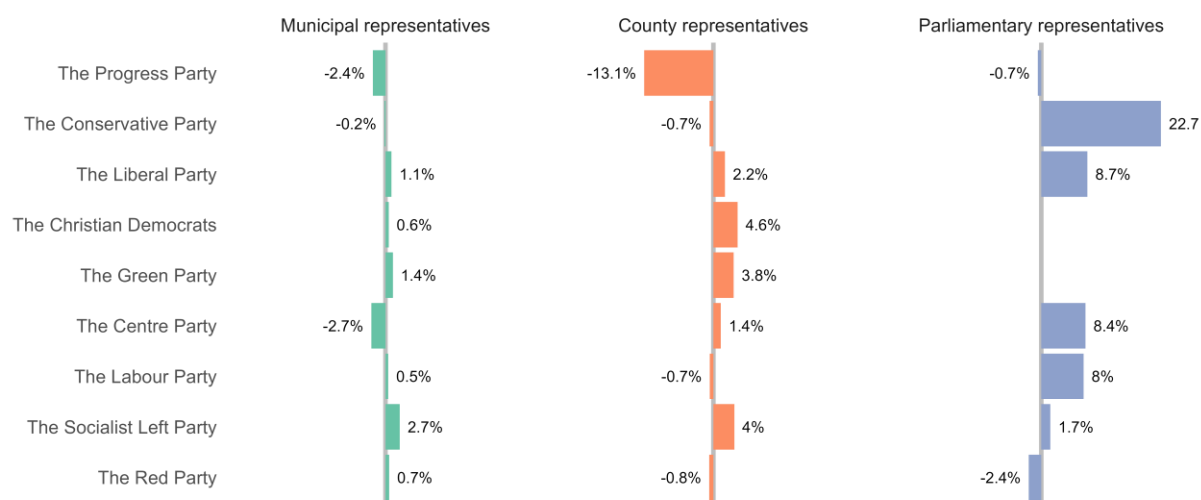


Similar to what is observed in the Norwegian Citizen Panel, and in earlier waves of PER, representatives having completed higher levels of education are highly overrepresented among the panel members on the municipal level, as can be seen in figure 6.

Lastly, party affiliation bias is examined. The calculation is done by head count and does not take into account how the council seats are allocated in the different municipalities and counties. Note also that smaller parties are excluded from reporting, and that figure 7 only displays results for major parties represented in the national parliament. When a party has fewer than five representatives on a given level of administration, as is the case for The Green Party and The Christian Democrats, no result is displayed.

⁶ The distribution is calculated by head counts. It does not take into account that the municipal councils vary in size and form .

Figure 7: Representativity of parties from left on party axis (bottom) to right (top)



Most notably, most parties are not systematically under- or overrepresented across levels. For parties that do exhibit some systematic over- or underrepresentation it is in most cases not extreme. We do not observe biases along the classic left-right party axis.

The bias is stronger and more fluctuant at the county and parliamentary level. A low number of observations is an important contributor, rendering the results more sensitive to variation. The strongest bias is observed for parliamentary representatives from the Conservative Party.