ATTITUDES AND IDENTITIES ACROSS THE DONBAS FRONT LINE: WHAT HAS CHANGED FROM 2016 TO 2019?

Gwendolyn Sasse and Alice Lackner
Executive summary

This report examines changes in public opinion in the Donbas region of eastern Ukraine, including the government- and non-government-controlled areas. It follows on from the ZOiS Report 2 / 2017 ‘The Donbas: Two parts or still one?’ and draws on original cross-sectional survey data from 2016 and 2019. The focus is on three issues: identity (citizenship, ethnicity, and language); the status of the non-government-controlled territories and the Minsk II Agreement; and mobility and transnational linkages.

The key findings are as follows:

– While the inclusive civic identity ‘Ukrainian citizen’ dominated in the government-controlled Donbas in 2016, it had lost importance by 2019. The number of respondents choosing this category dropped from 53 per cent to 26 per cent. This significant weakening of identification with the Ukrainian state captures the disappointment of those living close to the front line and a sense of having been left behind by the central government.

– In 2019, the identity ‘ethnic Ukrainian’ was chosen by more residents in the government-controlled Donbas (29 per cent) than any other category. While there was thus an even spread between civic and ethnic Ukrainian identities in 2019 in this part of the Donbas, respondents also became three times
more likely to self-identify as ethnic Ukrainians. Despite — or because of — uncertainty about their position in the Ukrainian state, self-identification as ethnic Ukrainian offers one way to express distance from the war and Russia.

– The non-government-controlled territories offer a more diverse picture with regard to identity: 21 per cent self-identified as mixed ethnic Russian and Ukrainian. Regional identities are also more prominent in the self-proclaimed Donetsk and Luhansk People’s Republics (DNR/LNR) than in the government-controlled Donbas: 18 per cent in the DNR/LNR described themselves as people from the Donbas and about 12 per cent as residents of the DNR/LNR. About 13 per cent chose ‘Ukrainian citizen’ as their main identity — roughly the same as the share identifying as ‘ethnic Russian’ (12 per cent). These results guard against unsubstantiated claims about separatist and Russian identities in this part of the Donbas.

– Language identities, measured by self-reported native language, remained stable in both parts of the Donbas between 2016 and 2019. In both years, about half of the respondents in the government-controlled Donbas considered Russian their native language; around 16 per cent said their native tongue was Ukrainian, and about a third chose both.

– In the DNR/LNR, too, self-reported native languages did not change significantly from 2016 to 2019: about two-thirds considered Russian their native language, and about one-third opted for both Russian and Ukrainian. Bililingual identities remain an important characteristic of the Donbas populations on both sides of the front line.

– There has been no change in the majority view of respondents in the government-controlled Donbas on the future status of the DNR/LNR: in both years, around 65 per cent preferred these areas to be reintegrated into Ukraine’s Donetsk and Luhansk oblasts without any kind of autonomous status.

– In the DNR/LNR, about a third of the population in both years supported the idea that the non-government-controlled areas should have a special autonomous status in either Ukraine or Russia. Moreover, about 21 per cent of respondents in 2016 thought the DNR/LNR should return to Donetsk and Luhansk oblasts, as before the war; 24 per cent chose this option in 2019. This change is statistically significant, indicating that the idea of returning to the pre-war situation has gained in popularity. In both years, about 55 per cent of the DNR/LNR population expressed their preference for belonging to the Ukrainian state. This is an important corrective to Russia’s official rhetoric and public perceptions in the West.

– Respondents from the government-controlled Donbas remain roughly evenly spread on the likelihood of the implementation of the Minsk II Agreement. But in 2019, respondents in the government-controlled Donbas were 2.6 times more likely than in 2016 to say they knew nothing about the
agreement, and 55 per cent less likely to say they knew the agreement at least in part.

- About half of the respondents in the DNR/LNR said in 2016 that they knew the Minsk agreement partly, and around 24 per cent said they knew it very little. Only 12 per cent knew it in full, and 13 per cent knew nothing about it.

- Very few respondents from the Kyiv-controlled Donbas crossed the front line towards the DNR/LNR in either survey year. Mobility from the DNR/LNR has always been higher. There, the frequency of crossings increased significantly between 2016 and 2019, with monthly crossings much more frequent in 2019 than three years earlier. This reflects the reality of low-level fighting and a sense of normalisation on the part of the population amid the protracted war.

**Introduction**

Five years after the onset of the war in eastern Ukraine, about 13,000 people have been killed, of which over 3,000 are civilian casualties, at least 1.4 million have been internally displaced, and about 1 million have fled as refugees to Russia. Access to information from the war zone remains scarce, including about the daily lives, perceptions, and identities of the remaining resident population. In particular the non-government-controlled territories — the self-proclaimed People's Republics of Donetsk and Luhansk (DNR and LNR) — tend to remain beyond the reach of policymakers and researchers.

More generally, attitudes of people living through a war remain poorly understood in the comparative study of war. Without a firmer empirical basis, we can assume neither that official state rhetoric sums up the perceptions of those directly affected by conflict nor that war has a polarising effect on identities. War is accompanied by severe disruptions of daily life. Such disruptions can, but do not have to, affect people’s political attitudes and identities. These are the issues at the heart of the ZOiS research on which this report is based.

This report follows on from the ZOiS Report 2/2017 ‘The Donbas: Two parts or still one?’ and examines changes between 2016 and 2019 in public agreement, and 55 per cent less likely to say they knew the agreement at least in part.


opinion in the Donbas region of eastern Ukraine. As before, our analysis focuses on three sets of issues: identity (citizenship, ethnicity, and language); the status of the non-government-controlled territories and the Minsk II Agreement; and mobility and transnational linkages.

Methodology

In our research, which was conducted in February–March 2019 in the run-up to the 2019 Ukrainian presidential election, we followed the same methodology as in 2016. ZOiS commissioned the agency R-Research to conduct face-to-face interviews with 1,200 people in the government-controlled Donbas, split evenly between Donetsk and Luhansk oblasts, and 1,200 telephone interviews in the non-government-controlled areas. The face-to-face interviews were based on a multi-stage quota sample, with the age, gender, and educational attainment quotas of the urban and rural populations taken from the latest available official statistics.

In the non-government-controlled territories, the same quotas were applied, as no reliable official data on the current resident population exist. Due to difficulties of access and potential security concerns on the part of the respondents, the interviews (again with 1,200 people) were conducted by telephone rather than face to face. Telephone interviews have advantages and disadvantages. From our first round of surveys in 2016, we know that respondents in the region most affected by the war value the higher degree of anonymity and personal control the method provides. Moreover, the results of the telephone survey in 2016 were much more diverse than the assumption of a fear of Russian oppression would have led us to expect. These results encouraged us to carry out a second survey in the non-government-controlled areas.

As before, the telephone questionnaire had to be shorter and simpler than the one used in the face-to-face interviews, and not all questions could be repeated from 2016 in the non-government-controlled areas. However, the key questions remained the same across both populations. This time, the more complex questions were asked in the telephone interviews as well, allowing for a more detailed comparison across both parts of the Donbas.

Instead of just reporting the 2019 survey results, this report compares the results from 2016 and 2019, while the analysis deals with cross-sectional rather than panel data. Thus, the report captures opinions from different sets of people at two points in time, rather than from the same group of people over time. The graphs in this report show the results of each poll, but a mere comparison of these descriptive statistics could lead to false conclusions: differences in the percentages between 2016 and 2019 may stem from the specific socio-demographic composition of the respective samples (e.g. gender, age, education). Therefore, this report includes the results of logistic regression models that control for the main socio-demographic effects and investigate the links between the two samples as well as factors accounting for the reported trends (see annex for more details). The graphs highlight any statistically significant changes between 2016 and 2019.
Identities: state, ethnicity, and language

Civic and ethnic identities in the government-controlled Donbas

First, respondents were asked a deliberately open question about their self-identification in view of the events in Ukraine since 2013. They could choose between the options ‘more Ukrainian’, ‘more Russian’, ‘more strongly both’, and ‘no change’ (or refuse to answer).

Figure 1 displays the results for this question in the government-controlled Donbas. In both 2016 and 2019, around 62 per cent of respondents said their sense of identity had not changed, while about 21 per cent felt more Ukrainian than before. In 2016, around 14 per cent said they felt more strongly both Russian and Ukrainian, while in 2019, 11 per cent chose this mixed identity category.

Only around 3 per cent in 2016 and 6 per cent in 2019 said they felt more Russian than before. While the percentages here were low, this was the only answer category that changed in terms of statistical significance: respondents in 2019 were more than 2.3 times more likely than in 2016 to say they felt more Russian than before.

Second, respondents were asked to choose the identity most important to them from a list of ten options, including ‘Ukrainian citizen’, ‘ethnic Ukrainian’, ‘ethnic Russian’, a number of mono- and bilingual language identities, and regional and social identities.

Figure 1
Donbas: As a result of the events 2013 – 16, do you feel...
In 2016, Ukrainian citizen — chosen by 53 per cent of the respondents in the government-controlled Donbas — was the most popular identity category. By 2019, only 26 per cent of the respondents selected this option. Our regression analysis confirms that this is a statistically significant change: in 2019 the population in the government-controlled part of the Donbas was 66 per cent less likely than the respondents in 2016 to name Ukrainian citizenship as their primary identity. These results go against the overarching trend identified by state-wide opinion polls (excluding in the DNR/LNR and Crimea) in which Ukrainian citizen emerged as the primary self-identification from 2017 to 2018.³

By 2019 the identity category of ethnic Ukrainian had become predominant in the government-controlled part of the Donbas, chosen by about 29 per cent of respondents. By comparison, this identity had been selected by only about 11 per cent in 2016. Our statistical analysis confirms that respondents in 2019 were more than three times as likely as those in 2016 to self-identify as ethnic Ukrainian, a result that suggests a conscious expression of their personal distance from the war.

Moreover, about 7 per cent of the respondents in 2016 said they felt both ethnic Ukrainian and Russian. This figure increased to 12 per cent by 2019.

Respondents in 2019 were twice as likely as those of three years earlier to say that they felt both Ukrainian and Russian.

In 2016, around 8 per cent of the respondents said they primarily felt like people from the Donbas, while around 13 per cent of the 2019 sample felt they belonged to this category. Respondents in 2019 were 53 per cent more likely than their 2016 counterparts to choose this regional identity as their main identity.

Civic and ethnic identities in the non-government-controlled areas

The results indicate that the severity of the war experience has an effect on identities.

The results indicate that the severity of the war experience has an effect on identities.

The differences in three of the answer categories were statistically significant: respondents in 2019 had a 57 per cent higher chance than in 2016 of saying they now identified more strongly with the mixed Russian-Ukrainian identity. Compared with the respondents in 2016, they also had a 2.3 higher chance of reporting feeling more Ukrainian. Overall, people in 2019 were significantly — about 45 per cent — less likely to say their feelings had not changed, indicating that the severity of the war experience has an effect on identities.
The 2019 survey in the non-government-controlled areas also asked the detailed question about self-identification. Here we do not have a comparative reference point from 2016, but the 2019 results show a more diverse picture than in the government-controlled Donbas that guards against empirically unsubstantiated assumptions about the population’s orientation: 21 per cent self-identified as mixed Russian-Ukrainian.

Regional identities were more prominent in the non-government-controlled than in the government-controlled Donbas: 18 per cent in the DNR/LNR described themselves as people from the Donbas, and about 12 per cent as residents of the DNR/LNR. Interestingly, about 13 per cent chose Ukrainian citizen as their main identity — roughly the same as the share of those identifying as ethnic Russian (12 per cent). Identities based on language — Russian speaker and bilingual Russian-Ukrainian — followed, with between 7 and 5 per cent.

### Language identities

Linguistic identities can differ from both citizenship and ethnic identities. In the Ukrainian context, language is a highly politicised issue, both from within and from outside. The co-existence of Ukrainian and Russian in the south-east of the country has often been misunderstood as a source of conflict.

### FIGURE 4

**DNR / LNR 2019: Identity first choice**

<table>
<thead>
<tr>
<th>Identity First Choice</th>
<th>Frequency</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic Ukrainian</td>
<td>50</td>
<td>4.5%</td>
</tr>
<tr>
<td>Ethnic Russian</td>
<td>137</td>
<td>12.2%</td>
</tr>
<tr>
<td>Mixed Ukrainian &amp; Russian</td>
<td>235</td>
<td>21.0%</td>
</tr>
<tr>
<td>Ukrainian citizen</td>
<td>141</td>
<td>12.6%</td>
</tr>
<tr>
<td>Russian citizen</td>
<td>30</td>
<td>2.7%</td>
</tr>
<tr>
<td>Citizen of Ukraine and Russia</td>
<td>16</td>
<td>1.4%</td>
</tr>
<tr>
<td>Donbas resident</td>
<td>200</td>
<td>17.9%</td>
</tr>
<tr>
<td>Resident of DNR/LNR</td>
<td>129</td>
<td>11.5%</td>
</tr>
<tr>
<td>European</td>
<td>7</td>
<td>0.6%</td>
</tr>
<tr>
<td>Ukrainian speaker</td>
<td>1</td>
<td>0.1%</td>
</tr>
<tr>
<td>Russian speaker</td>
<td>77</td>
<td>6.9%</td>
</tr>
<tr>
<td>Bilingual Ukrainian-Russian</td>
<td>58</td>
<td>5.2%</td>
</tr>
<tr>
<td>Occupation/social class</td>
<td>77</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

n=1,120 Source: ZOiS
The ZOiS survey asked about the more symbolic category of native language, rather than language practice. It allowed respondents to choose between ‘Ukrainian’, ‘Russian’, ‘both Ukrainian and Russian’, ‘Crimean Tatar’, and ‘other’. In both years, about half of the respondents in the government-controlled Donbas considered Russian their native language, around 16 per cent said their native tongue was Ukrainian, and about a third opted for both. No statistically significant change was found between 2016 and 2019.

The continued importance of bilingual identities remains noteworthy.

The issue of autonomy — or, in the language of the Minsk II Agreement, which aims to alleviate the war in eastern Ukraine, ‘special status’ — is highly sensitive in Ukraine. It is closely connected to the idea of a threat to state sovereignty. Russian calls for the federalisation of Ukraine have narrowed the space for the discussion of autonomy even further. Nevertheless, variations of this concept are typical elements of peace agreements, and
they continue to matter in the population’s perceptions of the future of the region.

The ZOiS surveys asked respondents to choose one of nine institutional templates for the territories not currently under Kyiv’s control. The categories included options ranging from ‘give the occupied territories the same status as before the war’ to ‘give up on the occupied territories and let them be officially or unofficially administered by Russia’.

*FIGURE 6* shows that most respondents in the government-controlled Donbas — around 65 per cent in both years — wished for the DNR/LNR to return to being parts of Donetsk and Luhansk oblasts, without any autonomous status. For this answer, there was no statistically significant change between 2016 and 2019.

In 2016, 27 per cent of the respondents favoured a special autonomous status for the DNR/LNR within Ukraine. Three years later, about 31 per cent preferred this option, but this difference is not statistically significant.

Furthermore, in 2016, 5 per cent of the respondents in the government-controlled Donbas wanted the DNR/LNR to become a part of Russia without an autonomous status, whereas in 2019 only around 2 per cent supported this idea. This drop was significant: people in 2019 were 54 per cent less likely than three years earlier to say that the DNR/LNR should be fully integrated into Russia.

Giving the territories a special autonomous status within Russia was equally unpopular in both years, at around 2 per cent.

---

**FIGURE 6**

**Donbas: In your view, what should the status of the DNR/LNR be?**

<table>
<thead>
<tr>
<th>Status of the DNR/LNR</th>
<th>2016 (n=1,157)</th>
<th>2019 (n=906)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special autonomy status within Ukraine</td>
<td>26.7%</td>
<td>30.7%</td>
</tr>
<tr>
<td>Like before, parts of Donetsk and Luhansk oblast without autonomy</td>
<td>65.7%</td>
<td>64.7%</td>
</tr>
<tr>
<td>Part of the Russian Federation without a special autonomy status</td>
<td>5.0%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Special autonomy status within the Russian Federation</td>
<td>2.6%</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

*Source: ZOiS*
FIGURE 7
DNR / LNR: In your view, what should the status of the DNR/LNR be?

<table>
<thead>
<tr>
<th>Status in 2016</th>
<th>Status in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special autonomy status within Ukraine</td>
<td>35.0%</td>
</tr>
<tr>
<td>Like before, parts of Donetsk and Luhansk oblast respectively without autonomy</td>
<td>20.6%</td>
</tr>
<tr>
<td>Part of the Russian Federation without a special autonomy status</td>
<td>11.4%</td>
</tr>
<tr>
<td>Special autonomy status within the Russian Federation</td>
<td>33.1%</td>
</tr>
</tbody>
</table>

Source: ZOiS

In 2016 and 2019, 11 and 18 per cent respectively said that the DNR/LNR should be a part of Russia with no special autonomous status, but this was not a statistically significant change when taking into account the sociodemographic differences (age, income, religion) between the 2018 and 2019 samples.

Thus, overall, a clear majority — about 55 per cent — of the DNR/LNR respondents across both years preferred for their territories to remain parts of the Ukrainian state. This is an important corrective to Russia’s official rhetoric as well as public perceptions in the West and parts of Ukraine, according to which the populations of the DNR/LNR orient themselves towards Russia.
The Minsk II Agreement of February 2015, negotiated by the Normandy Four — Ukraine, Russia, Germany, and France — is still the main baseline in attempts to end the war in the Donbas. The ZOiS surveys asked respondents how well they knew the agreement, and whether they expected it to be implemented.

Interestingly, more respondents in the government-controlled Donbas in 2016 than in 2019 said they knew something about the accord: while in 2016, around 38 per cent said they knew the agreement in part, only 23 per cent said so in 2019. Respondents in 2019 were 55 per cent less likely than those in 2016 to give this answer. **FIGURE 8**

Even more tellingly, around 19 per cent said in 2016 that they knew nothing about the Minsk II Agreement, compared with almost 40 per cent three years later. This shift was statistically significant: respondents in 2019 were 2.6 times more likely to say they knew nothing about the agreement. The other two answer categories did not display significant changes over time.

The results reflect the passing of time and the absence of tangible results of the Minsk II Agreement, apart from the initial containment of the fighting. The agreement appears to be less talked about on the ground, and a sense of frustration or helplessness is bound to be captured by the results as well.

Despite a decreasing familiarity with the Minsk II Agreement, the respondents remain roughly evenly split on the prospects for its implementation, which is probably best understood as a shorthand for achieving peace. The discrepancy
between the 58 per cent of respondents in the government-controlled Donbas in 2019 and the 49 per cent in 2016 who expected the agreement to be implemented is not a statistically significant change. ►FIGURE 9

The 2016 survey also asked respondents in the DNR/LNR how well they knew the main principles of the Minsk II Agreement. ►FIGURE 10 displays the results. About half of the respondents said they knew the agreement in part, and around 24 per cent said they knew only very little about it. Only 12 per cent were confident that they knew it in full, while 13 per cent said they knew nothing about it.

In the DNR/LNR, respondents were almost evenly split in both years about the implementation of the agreement: just over half in both years thought it would be implemented, while just under half believed it would not.

Contact across the front line

The continuation or disruption of personal ties across the front line between the government- and non-government-controlled areas is an important indicator of whether the two parts of the Donbas are drifting apart. Tapping into the everyday reality in the war zone, we first asked how often respondents crossed the border between the DNR/LNR and the government-controlled territories. ►FIGURE 11

With regard to the government-controlled Donbas, there were no significant changes over time: large majorities — 92 per cent in 2016 and 93 per cent in 2019 — said they had never crossed the front line. Only around 4 per cent in both years crossed the front line once a year, and just 3 per cent in 2016 (and 2 per cent in 2019) once in six months.

Because of pension payments and other necessary supplies that residents of the non-government-controlled Donbas need to collect from
In three of those answers, a significant change could be observed from 2016 to 2019. Respondents were almost three times more likely in 2019 than in 2016 to say they crossed the border once a month. This reflects a certain sense of normalisation amid a protracted war and risk calculations based on a stable but low level of fighting. Conversely, respondents’ likelihood of crossing the front line once a year and never fell by 31 per cent and 34 per cent, respectively.

A second question asked respondents whether they had relatives or friends on the other side of the front line. In the Donbas, 38 per cent said in 2016 that they had friends or family in the DNR/LNR; this figure dropped to 32 per cent in 2019. In 2016, 62 per cent had no personal ties across the front line, while in 2019, 68 per cent reported the same.

This difference was significant: in 2019, the chances of respondents saying they had relatives in the DNR/LNR were about 25 per cent lower than in 2016. Thus, deep personal ties across the front line are decreasing, most likely through displacement, despite an increase in crossings from the DNR/LNR. Simply crossing the line does not require personal links and is mostly motivated by socio-economic needs, such as claiming pensions and benefits.
A higher share of respondents in the DNR/LNR have personal connections across the front line. There, more than half of the respondents reported having relatives or friends living in the Kyiv-controlled Donbas (57 per cent in 2016; 54 per cent in 2019). Around 44 and 46 per cent in 2016 and 2019 respectively had no such ties. None of these small differences was statistically significant. ►FIGURE 14

Conclusion

The most striking result of the repeat surveys in the Donbas is the change in the self-reported identities of the resident populations. While in 2016 the more inclusive civic category of Ukrainian citizenship was by far the most popular identity in the government-controlled Donbas, it had become significantly less important by 2019. Respondents in 2019 self-identified in roughly equal measure as ethnic Ukrainian or Ukrainian citizen, with the likelihood of identifying as ethnic Ukrainian now significantly increased. This result goes against the overarching trend identified in country-wide polls (without the DNR/LNR and Crimea) that found a significant increase in respondents' self-identification as Ukrainian citizens.

The ZOiS Donbas survey tracks how identities remain in flux during war. The regional weakening of a Ukrainian state identity suggests a sense of being left behind by the centre, while the relative strengthening of an ethnic Ukrainian identity suggests an attempt by the population in the government-controlled areas to distance itself from the war.

In the DNR/LNR, a mixed ethnic Russian-Ukrainian identity and different expressions of a regional identity were the most prevalent categories in 2019 (the question was not asked in 2016).

Language identities, preferences with regard to the future status of the DNR/LNR (as parts of Donetsk and Luhansk oblasts without a special status), and expectations of the implementation of the Minsk II Agreement did not significantly change among the Donbas population between 2016 and 2019. As for the peace agreement, the most noteworthy change is a drop in self-reported knowledge of the accord, an indication of the lack of tangible results in the peace negotiations. Most importantly, clear majorities in both parts of the Donbas continue to favour the non-government-controlled areas staying part of the Ukrainian state.

Mobility across the front line continues to be, by and large, unidirectional. The vast majority of the population of the government-controlled Donbas has not crossed the line. Movement from the DNR/LNR is higher, as expected. There, monthly crossings increased significantly from 2016 to 2019, reflecting people’s need to travel for socio-economic reasons and perhaps a sense of normalisation amid a continued low level of fighting.

Overall, the repeated ZOiS surveys offer a rare source of data for tracking changes and continuities in the identities and attitudes of the people most directly affected by the war in the Donbas. Such direct insights into the effects of war remain scarce in the study of conflict more generally.
Appendix: Further methodological notes

Regression models predict the outcome of one variable in the presence of another. Additional variables (e.g. age or gender) can be introduced to control for their effects. Significance tests are conducted to rule out the possibility that observed differences occurred by chance due to sampling variability. Statistical significance thus indicates a higher degree of certainty that observed differences in the data also hold for the overall population.

Some variables were reduced to dummy variables and introduced as dependent variables in our regression analysis. For example, the variable measuring native language asked respondents what they considered their native language. They could choose between ‘Ukrainian’, ‘Russian’, ‘both’, and ‘other’. The category ‘Ukrainian’ was recoded to 1, and all others were recoded to 0. The same procedure was followed with the answer categories ‘Russian’ and ‘both’.

The same procedure of dummy coding was applied to the following variables:

- a variable asking about people’s change in ethnicity, giving answer categories such as ‘more Ukrainian’ and ‘more Russian’;
- a variable on self-reported identity choices such as ‘Ukrainian citizen’, ‘ethnic Ukrainian’, ‘mixed’, etc.;
- a variable containing different statements on the status of the non-government-controlled Donbas;
- variables about respondents’ knowledge of the Minsk II Agreement and their expectations of its implementation;
- variables about respondents’ mobility across the front line; and
- variables about respondents’ international linkages and remittances.

The main independent variable in our regressions measured the difference between the 2016 and 2019 samples; to do so, a dummy variable was introduced (2016 = 0, 2019 = 1).

Gender and whether the respondents lived in an urban or rural area were measured by a dummy (female = 0, male = 1; rural = 0, urban = 1). Income was introduced as a continuous variable, as was age, measured in years, starting from age 18.

A simplified variable indicating the respondents’ educational level was introduced, reducing an eight-point scale — from ‘basic’ (fewer than seven grades) to ‘complete higher education’ — to a dummy variable: the levels ‘vocational secondary’ (technical school, etc.), ‘incomplete higher education’ (at least three years), and ‘complete higher education’ were combined under the value 1, while all lower educational levels were coded as 0.

Religion was derived from a variable with ten answer categories; the most dominant ones, ‘Orthodox — Kyiv’, ‘Orthodox — Moscow’, and ‘atheist’, were transformed into dummy variables, with 1 for the respective category.