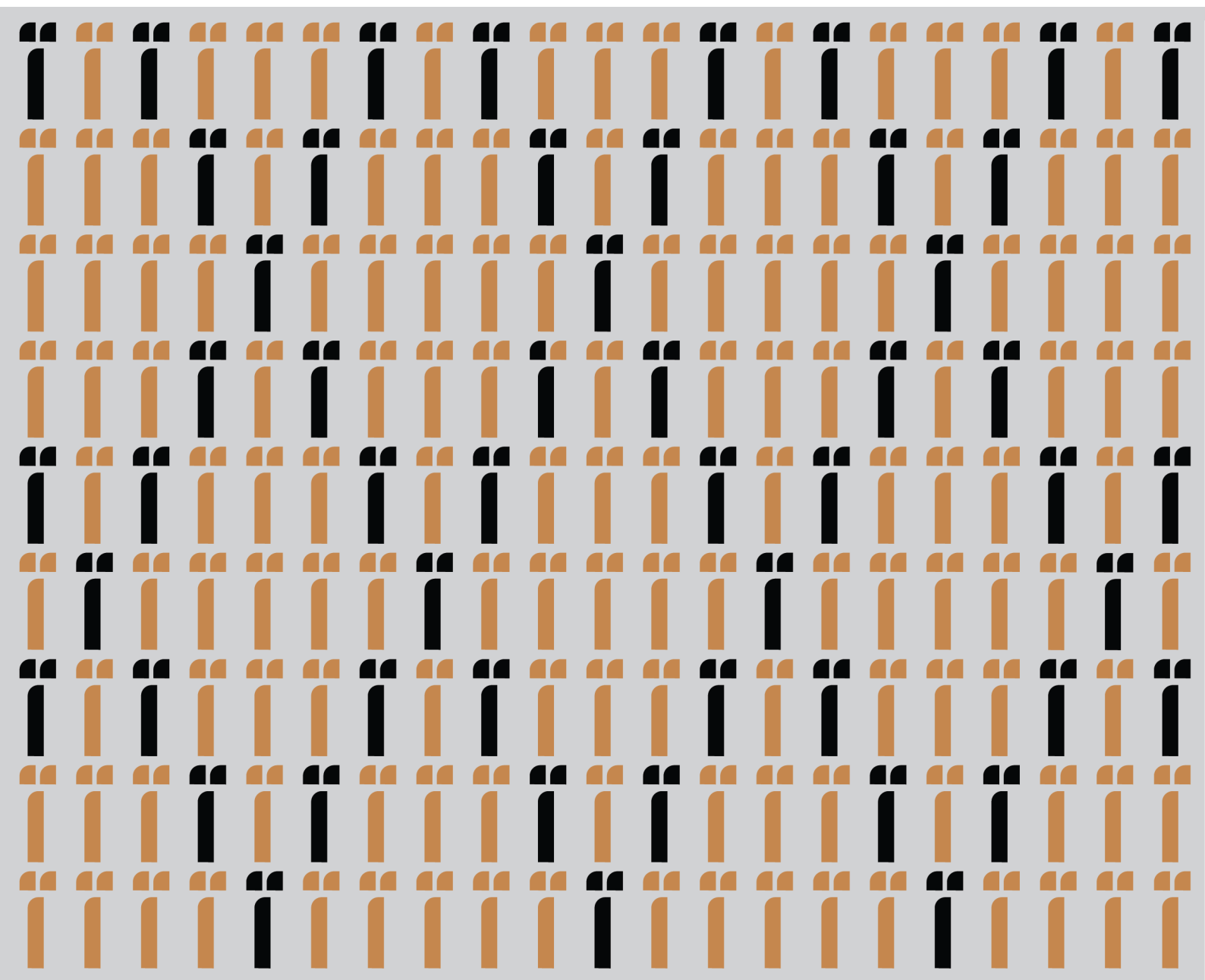




SCORE-INSPIRED HOLISTIC ASSESSMENT OF RESILIENCE OF POPULATION (SHARP):

Assessing Social Cohesion, Resistance, and People's Needs
in Ukraine Amid Russian Full-Scale Invasion – Wave 1 (2022)

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The views, conclusions, and recommendations presented in this document do not necessarily reflect the position of PFRU, USAID, UNDP, or their partners.

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ABOUT SHARP AND SCORE

The Partnership Fund for a Resilient Ukraine (PFRU), in cooperation with the Centre for Sustainable Peace and Democratic Development (SeeD), the USAID funded Democratic Governance East (DG East), USAID's Transformation Communications Activity (TCA), and the United Nations Development Programme (UNDP), designed and deployed the SCORE-inspired Holistic Assessment of Resilience of Population (SHARP). SHARP is an agile and responsive mobile surveying tool aimed at providing evidence for fostering Ukraine's resilience understood through the lenses of social cohesion, resistance, and people's needs. SHARP evidence can be used to support Ukrainian communities, actors, and national and local policymakers under duress during and in the aftermath of the Russian full-scale invasion of Ukraine. SHARP will be deployed in three waves to understand the trends and investigate causal relationships via a longitudinal study. SHARP is SCORE-inspired in its partnership, in its methodology (indicators and analytical toolkit), as well as in its sampling. Adopting indicators that are comparable to the SCORE 2021 survey as well as integrating the SCORE 2021 panel sample into its data collection, SHARP also tries to maintain a level of comparability and continuity. *It should be noted that direct comparison between SHARP and SCORE studies should be limited to only the panel sample due to differences in sampling and data collection techniques. However, comparisons on the level of patterns rather than absolute scores are still possible for the indicators that are overlapping.*

This analytical report is based on the SHARP Wave 1 data which consists of two samples: the national random sample of 4,327 respondents from the areas under Ukraine's control and the panel sample of 495 respondents. The panel sample included the same respondents who participated in the SCORE 2021 study. The data collection for the panel sample was conducted between September 23rd and October 5th, 2022. The data collection for the random sample was conducted from September 26th to November 5th, 2022. The data collection was conducted by the Kyiv International Institute of Sociology (KIIS) via a computer-assisted telephone interviewing technique. Please visit our online data platform for more details: <https://app.scoreforpeace.org>.

SHARP data, like SCORE data, is analysed and presented as indicators rather than individual survey questions. Indicators consist of one or more survey questions: they are often presented on a scale from 0 to 10, where 0 represents that the phenomenon the indicator is measuring does not exist in society, and 10 represents that it exists prevalently and strongly. [The definitions of all indicators included by SHARP are presented in the Glossary section at the end of this report. We also recommend reading the methodology section at the end in greater detail to better understand the make-up of different data sets used and the analysis methods deployed.](#)

SHARP is built upon the SCORE methodology and partnership. Social COhesion and REconciliation Index (SCORE) is a versatile methodology with an advanced analytical toolkit providing a solid evidence base for developing policies and programmes that strengthen national unity, social cohesion, and resilience, as well as for monitoring progress of their implementation. SCORE Ukraine is implemented on an annual basis and designed to improve the understanding of societal dynamics in Ukraine. It is a joint initiative funded by the United States Agency for International Development (USAID); Democratic Governance East Activity (DG East) and Transformation Communications Activity (TCA); and the United Nations Development Programme (UNDP), and implemented by the Centre for Sustainable Peace and Democratic Development (SeeD). SCORE's partnerships in Ukraine are wide and collaborative, and have included the European Union, the United Nations International Children's Emergency Fund, the International Organisation for Migration, and others in the past to design and implement different tailored assessment components and booster samples such as the SCORE adolescent study and Resilience in the Azov Sea Area (RASA). Following the 2022 full-scale invasion of Ukraine by the Russian Federation, the priorities of the SCORE partnership and research framework were refocussed to help build a roadmap for recovery and reconstruction, recalibrated on three-legged resilience: resilient governance, resilient livelihoods, and resilient citizenship where social cohesion and needs assessment are mainstreamed across all three legs.

EXECUTIVE SUMMARY

Research question 1. What is the state of social cohesion across Ukraine since the full-scale invasion by Russia for the selected elements of the concept?

Finding 1. The elements of social cohesion measured by SHARP are largely high across Ukraine.

SHARP measures 9 indicators (elements) organised under four dimensions that help our understanding of social cohesion. These elements and their national average scores out of 10 are presented below:

- **Identification:** *a Sense of Belonging to the Country (9.5) and Pluralistic Ukrainian Identity (8.2).*
- **Confidence in Political Institutions and Figures:** *Authorities Care (5.8), Trust in Central (5.6) and Local Institutions (6.3).*
- **Orientation for Common Good:** *a Sense of Civic Duty (7.6) and Social Tolerance (6.9).*
- **Actions for Common Good:** *Community Cooperation (5.5) and Civic Engagement (3.3).*

The evidence shows that Ukrainians have coalesced around these elements of social cohesion. This seems to be a phenomenon that indicates more than ‘rallying around the flag’ in the face of Russia’s full-scale aggression and an existential threat to the survival of the state and individuals. Ukrainians are unifying not only in their support for institutions but also as a society in their sense of belonging, values, and purpose. The results show a strong sense of identification with the country and nation as well as an orientation towards the common good. Confidence in public institutions and figures also exhibits the strongest boost among panel respondents compared to 2021. However, there is some room for improvement in terms of transforming the willingness to engage in civic and political life into actual participation.

Research question 2. How does displacement impact social cohesion? What are the critical needs of internally displaced?

Finding 2a. Massive displacement has not caused any significant rupture to societal fabric, but addressing new challenges is important for nurturing social cohesion. These challenges are seen differently by IDPs and host communities as well as by different macro-regions.

From competition over jobs, income, and public services to antisocial behaviour, draft evasion, and cultural differences, SHARP examined a range of potential sources of tension between host and internally displaced populations. Although people living in the west of Ukraine are more likely to report tensions between host communities and IDPs compared to the other oblasts, 80% of respondents on the national level strongly or somewhat disagree that there are tensions between IDPs and host communities. This percentage shows that the widespread collective trauma and the effect of full-scale Russian aggression and displacement did not rupture Ukrainian society's ability to show empathy and generosity. This finding also shows that a larger number of IDPs in a locality does not automatically translate into greater tension. Still, some challenges and tensions exist in certain western oblasts, and these should be monitored and constructively addressed to ensure that social cohesion is preserved and these do not evolve into bigger societal rifts. Furthermore, IDPs' and locals perceive sources of tensions differently. While IDPs emphasise accommodation, the latter report anti-social behaviour and male draft evasion frequently. There are also regional differences. While the severely affected, partly occupied, and liberated oblasts appear to be more concerned with practical and tangible issues (access to essential items, public services, and accommodation), relatively stable western oblasts seem to be more focussed on 'transcendent' issues such as political, cultural, and language differences and stereotypes; anti-social behaviour; and draft evasion. Central oblasts are rather in-between concerned with accommodation and anti-social behaviour.

Finding 2b. SHARP evidence shows that IDPs have been more exposed to war-related adversities and are more vulnerable. Their immediate needs may include affordable housing, livelihood support beyond welfare payments, and psychological support.

SHARP data shows that IDPs are more likely to have witnessed or heard fighting and shelling, have had their homes and property damaged, and/or experienced family separation. They are also more reliant on welfare payments, in need of affordable housing, and livelihood support that can provide more economic stability and support social integration beyond the welfare payments. As such, it is particularly important to address the psychosocial needs of the displaced, who are more vulnerable to war-related adversities than other groups.

Research question 3. What are the different forms of civic resistance

against the Russian invasion? What is the relationship between social cohesion and civic resistance?

Finding 3a. The overwhelming majority of SHARP respondents are active participants of various forms of civic resistance against the Russian full-scale invasion.

Analyses shows that donating money (77%), volunteering to help people in need (60%), and volunteering to help the Ukrainian Army (52%) are the most popular forms of civic resistance. Age and income level are the two main demographic differences that seem to have significant influence in someone's propensity to participate in civic resistance. Furthermore, SHARP analysis points to a particularly strong sense of civic duty among young respondents, which makes them valuable contributors to civic resistance as well as Ukraine's recovery and reconstruction efforts.

Finding 3b. A focus on the common good orientation nurtures cohesion and drives resistance, and resistance fosters focus on the common good and stronger connection with the state.

SHARP wave 1 found that orientations and actions for the common good (e.g., a sense of civic duty) contributed to unarmed forms of civic resistance, which enhances Ukraine's resilience towards the external threat. The civic resistance, in turn, contributes to the elements of social cohesion including a focus on the common good but also nurturing the connection between citizens and the state.

Research question 4. What is the level of trust in different state and non-state institutions? How has citizens' confidence in institutions changed since Russia's full-scale invasion?

Finding 4a. Compared to 2021, trust in all state institutions, both local and central, has increased. The state institutions responsible for national defence and safety enjoy the highest trust while local institutions are more trusted than the central ones except for the President. Despite high trust in the majority of state institutions, confidence in the justice system is still weak. Trust in NGOs is most strongly related to the belief that Authorities care, which could suggest that NGO efforts constructively complement the efforts of public institutions instead of undermining or competing with them.

The Ukrainian Army, the State Emergency Service, and the President boast trust scores as high as 9.6, 8.6, and 7.9 respectively across the country. When it comes to local institutions, trust is still relatively high at 6.3. Although citizens are rallying around their institutions, and their expectations with regards to performance may be lower under the conditions of war and martial law, SHARP data shows that trust is still associated with service provision and human security. This shows that institutional performance is still important for sustaining trust. Further, there is a spill-over effect of institutional trust.

In other words, respondents can be sceptical towards all institutions or confident towards all, especially within their own 'eco-systems' of central institutions: Cabinet of Ministers, Verkhovna Rada, Prosecutor General's Office, and courts; local institutions: Oblast State (Military) Administration, Town/Village Administration, and Head of Town/Village; and justice system: Courts, Police, and Prosecutor's Office. This highlights that change in trust triggered by a scandal or success of one institution can spill over to another. It is notable however that courts receive the lowest trust among SHARP respondents at 4.2 out of 10, and the prosecutor's office is just above average at 5.1. These findings highlight the urgency to invest in the justice system and law enforcement, as the role of these institutions in post-war transition and in forging a healthy social contract cannot be overstated. Further, while there are no big variations across oblasts when it comes to trust in central institutions, trust in local institutions is lower in Zaporizhzhia, Poltava, Chernivtsi, and Zakarpattia oblasts compared to the national average and to other oblasts. The finding that trust in NGOs and citizens' perception that authorities care for them is in a strong positive relation is certainly a desirable finding especially during full-scale war as it would strengthen resilience. However, a strong positive relation between trust in NGOs and citizens' perception that authorities care for them should not become too strong that it could indicate 'blind trust' and 'civic society having become co-opted' by state institutions. As such, given the important role that NGOs in particular, and civil society in general plays for providing oversight, checks and balances over public institutions in democracies, it's important to make sure this relationship remains constructive and healthy especially in the post-war period.

Research question 5. What is the state of service delivery and the availability of necessities across Ukraine? Which demographic groups and regions need which services and basic necessities?

Finding 5a. Older age groups, low income groups, and those living in rural areas are more vulnerable when it comes to access to services, access to basic necessities, and to health security. While air raid shelters are a relatively bigger concern for frontline oblasts like Mykolaiv, Kharkiv, and Zaporizhzhia as well as in rural areas, and among low-income and older age groups, access to clean water is the biggest concern in Dnipropetrovsk and Mykolaiv oblasts as well as for low-income respondents. Access to specialised medical care is a relatively lower for rural residents, while the affordability of medicine is lower among older age and low-income groups, undermining their health security.

Finding 5b. Access to communication and information, especially to digital channels, is high. This creates more room for strategic communication as well as information dissemination when it comes to civic resistance and humanitarian efforts.

The SHARP respondents are most satisfied with the access to means of communication and to information outlets (8.1). This creates an opportunity for strategic communications and information provision about security and humanitarian efforts. Older age groups can benefit from better digital literacy skills as the access to digital means of information consumption and communication is higher than the traditional ones during wartime.

Finding 5c. Despite all the adversities caused by Russia's full-scale invasion, school attendance across all regions continues to be high.

SHARP analysis shows that regardless of the extent to which macro-regions of Ukraine are affected by Russian full-scale military aggression, children are continuing to attend schools. However, while we do not know the regularity of attendance, the mode of education also varies across macro-regions with offline and blended learning being the most popular in the west, while the online mode being more prevalent in severely affected and partly occupied oblasts. Continued school attendance is particularly important for Ukraine's future human capital and for recovery efforts.

Research question 6. What is the future vision of Ukraine in terms of its geopolitical orientation?

Finding 6. Differences about Ukraine's membership in the EU and NATO has significantly decreased compared to 2021. Ukrainians from all demographic groups and macro-regions are expressing strong support for both EU and NATO accession.

There were significant differences between macro-regions, age, and income groups in 2021 regarding Ukraine's EU and NATO membership. In 2022, support for the EU is as high as 92% and for NATO is 88% nationally. Moreover, the SHARP study clearly demonstrates that there is now a much stronger unity across income and age groups as well as across macro-regions. This unity can be partly explained by increased trust in institutions and hence in the direction they are driving the country, as well as security motives and security alliances perceived as existential for Ukraine's victory and national security. The adverse experiences related to Russian full-scale military aggression further reinforce the desire for NATO especially among those who were previously sceptical.

Other findings: SHARP analysis did not reveal any meaningful gender differences across different indicators measured which is why data has not been disaggregated by gender in the report.

INTRODUCTION

Social cohesion in its simplest form is defined as the glue that holds a society together. It refers to the degree of connectedness and unity within a society, where individuals and groups have a shared sense of identity, purpose, and belonging. As such, understanding social cohesion requires us to understand certain civic attitudes and norms, the sense of belonging, and trust among other things. For social cohesion to be intelligible and operational, it needs to be contextually sensitive and calibrated. In other words, the indicators we need to measure to understand social cohesion in Ukraine are likely to be different than those in Moldova or France.

Social cohesion has been proposed as a source of systemic resilience against conflict and other shocks, potentially safeguarding communal and individual wellbeing in the face of stressors and crises.¹ Recognising also social cohesion's intimate relationship for forging resilient social contracts, and its importance to Ukraine's democratisation and reform journey, different studies including the SCORE have been investigating social cohesion, its components and drivers in Ukraine over the years.

The main aim of SHARP is to design an agile and responsive research instrument that can create a robust longitudinal evidence base to investigate and track elements of social cohesion in Ukraine. By doing so, SHARP aims to understand **how Russia's full-scale invasion impacts social cohesion, and how it can contribute to Ukraine's resistance and resilience**. SHARP does not claim to measure social cohesion in its entirety as it can be a large, contested, and broad concept. It borrows elements of social cohesion indicators calibrated to the Ukrainian context by the SCORE Ukraine methodology and revises it to reflect the current contextual dynamics.²

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1. A. Lordos and D. Hyslop, 'The Assessment of Multisystemic Resilience in Conflict-Affected Populations', in M. Ungar (ed.), *Multisystemic Resilience: Adaptation and Transformation in Contexts of Change*, Oxford University Press, 2021.
 2. Alexander Guest and Orestis Panayiotou, 'Social Cohesion in Ukraine. Part I: Defining and Measuring Social Cohesion Using the SCORE', SeeD, 2021, https://api.scoreforpeace.org/storage/pdfs/PUB_SCOREUkr21_Social_Cohesion_Volume1.pdf.

In social cohesion literature, armed conflict often harms social cohesion and deepens the existing chasms. However, these studies are based largely on case studies that experience intra-state and inter-ethnic armed conflicts.³ SHARP study shows that the escalation of Russian aggression against Ukraine, started previously in 2014, to a full-scale invasion in 2022 had a positive influence on social cohesion. Unlike intra-state and inter-ethnic conflicts, in Ukraine the common external threat to the existence of the country and physical existence of an individual sharpened the feeling of solidarity, enhanced the connection between citizens and the state, as well as making people cooperate more closely to survive and fight back. It is imperative to sustain and leverage this increased social cohesion to foster Ukraine's resilience to ensure that it does not disintegrate and undermine Ukraine's resistance and post-war transition. As such, the SHARP study with its three waves will provide a robust evidence source for national and international actors towards this outcome.

In addition to social cohesion, this paper also touches upon issues around resistance, and resilience as well as service provision, availability of basic necessities, and human security. The overarching research question, which can be dissected into smaller research questions, is: **How can social cohesion contribute to Ukraine's resilience against the existential threat from Russia?** The chapters of this analytical report focus on the following research questions:

1. What is the state of social cohesion across Ukraine since the full-scale invasion by Russia for the selected elements of the concept?
2. How does displacement impact social cohesion? What are the critical needs of internally displaced people?
3. What is the relationship between social cohesion and civic resistance?
4. What is the state of trust in different state and non-state institutions? How has citizens' confidence in institutions changed since the full-scale invasion?
5. What is the state of service delivery across Ukraine? Which demographic groups and regions are in need of which services and basic necessities?
6. What is the future vision of Ukraine in terms of its external relations and future direction?

3. Charlotte Fiedler and Christopher Rohles, 'Social Cohesion After Armed Conflict: A Literature Review,' Discussion Paper, No. 7/2021, ISBN 978-3-96021-144-0, Deutsches Institut für Entwicklungspolitik (DIE), Bonn, <https://doi.org/10.23661/dp7.2021.v1.1>.

1. MEASURING ELEMENTS OF SOCIAL COHESION WITH SHARP

Quick read:

This chapter asks, ‘What is the state of social cohesion across Ukraine since the full-scale invasion by Russia for the selected elements of the concept?’ and presents the SHARP approach to measuring social cohesion. **The key message of the chapter is that the elements of social cohesion measured by SHARP are largely high across Ukraine.** Evidence indicates that this is more than ‘rallying around the flag’. Ukrainians are unifying not only in their support for institutions but also as a society in their sense of belonging, values, and purpose. The results show a strong sense of identification with the state and nation as well as an orientation towards the common good. Confidence in public institutions and figures also exhibits the strongest boost among panel respondents compared to 2021. However, there is some room for improvement in terms of transforming an orientation for the common good into concrete action which is equivalent to ensuring that the strong sense of civic duty and social tolerance translates into community cooperation and civic engagement.

The notion of social cohesion is a topic of great interest to both scholars and policymakers. Despite the abundance of perspectives, there is significant overlap. Schiefer and van der Noll have identified six common dimensions, including social relations (relational dimension), identification, orientation towards the common good, shared values (ideational dimensions), quality of life, and (in)equality (distributive dimensions).⁴ Not all these dimensions should be considered as constitutive parts of social cohesion, as some of them serve as conditions, factors, and values that promote social cohesion. For instance, the distributive dimension is a vital factor in fostering social cohesion, according to Chan, To, and Chan⁵ and Schiefer and van der Noll.⁶ Furthermore, some indicators, such as economic affluence, human development, life satisfaction, or post-materialist values, are outcomes or effects of social cohesion.⁷

4. David Schiefer and Jolanda van der Noll, ‘The Essentials of Social Cohesion: A Literature Review,’ *Social Indicators Research* 132 (2017): 579–603, <https://doi.org/10.1007/s11205-016-1314-5>.

5. Chan, To, and Chan, p. 289.

6. Schiefer and van der Noll, p. 592-594.

7. Georgi Dragolov, Zsófia S. Ignácz, Jan Lorenz, Jan Delhey, Klaus Boehnke, and Kai Unzicker, *Social Cohesion in the Western World What Holds Societies Together: Insights from the Social Cohesion Radar* (Springer, 2016), 59–77.

Taking this approach, Chan, To, and Chan define social cohesion as a 'state of affairs concerning both the vertical and the horizontal interactions among members of society as characterised by a set of attitudes and norms that includes trust, a sense of belonging, and the willingness to participate and help, as well as their behavioural manifestations.'⁸ In contrast, the concept proposed by Dragolov et al. does not distinguish between attitudes and behaviours as well as horizontal/vertical and socio-cultural and political domains.⁹ The authors propose the content-driven separation:

- '**social relations** create social cohesion through a network of **horizontal relationships** between individuals and societal groups of all kinds, which is characterised by trust and allows for diversity.'
- '**connectedness** promotes cohesion through **positive identification with the country**, a high level of **confidence in its institutions**, and a perception that social conditions are fair.'
- **focus on the common good** is a distinct aspect of this concept which 'promotes cohesion **through actions and attitudes** that help the weak, are in keeping with society's rules, and allow for a collaborative approach to the organisation of society.'¹⁰

Given these and other studies, SeeD has defined social cohesion in Ukraine as 'a network phenomenon characterised by the interconnectivity of actors in a society, and by the characteristics and qualities of these relationships. Social cohesion thus refers to the state of harmonious, mutually beneficial relations, and reciprocity between actors. Actors in such a social network can be citizens or institutions (including state authorities and non-state organisations)'.¹¹

Taking into account the constraints imposed by martial law, changes in the context and relevant literature, as well as the tool's agile and nimble nature, which is designed for quick and exploratory assessment of the **elements of social cohesion** in a society defending itself against external invasion, the SHARP tool has adopted the following nine indicators inspired by the SCORE metrics:

1. *Sense of Belonging to the Country,*
2. *Pluralistic Ukrainian Identity,*
3. *Sense of Civic Duty,*

8. Chan, To, and Chan, p. 290.

9. Dragolov et al., pp. 6-8.

10. Ibid.

11. Alexander Guest and Orestis Panayiotou, 'Social Cohesion in Ukraine. Part I: Defining and Measuring Social Cohesion Using the SCORE,' SeeD, 2021, https://api.scoreforpeace.org/storage/pdfs/PUB_SCOREUkr21_Social_Cohesion_Volume1.pdf.

4. *Social Tolerance*,¹²
5. *Ukrainian Authorities Care*,
6. *Trust in Central Institutions*,
7. *Trust in Local Institutions*,
8. *Community Cooperation*, and
9. *Civic Engagement*.

These indicators are selected from the SHARP study as they constitute **elements of social cohesion underpinned by scholarly literature as well as previous longitudinal social cohesion studies run in Ukraine by SCORE**. This allows for a comprehensive assessment of attitudinal and behavioural, vertical and horizontal manifestations of social cohesion, and align with the focus on the common good domain in the literature. This approach allows SHARP to remain close to SCORE for continuity and comparability, while also being adaptable and responsive to the context. It allows for a more flexible and open-ended exploration of the various factors that contribute to social cohesion in the context of uncertainty due to the full-scale war as a big game-changing event, without being too prescriptive.

We conducted exploratory factoring among different SHARP indicators that represent the elements of social cohesion to understand how they would group under different domains of social cohesion. The *Social Tolerance* indicator was expected to factor separately as part of the social relations element as it measures the attitudes towards various groups and links to horizontal trust. However, empirical analysis placed it under orientation to the common good as it also shows readiness to personally interact with minority groups such as immigrants, Roma, LGBTQI+, and drug addicts; thus, it may also imply the propensity to help. As such, the exploratory factor analysis distinguished four dimensions¹³:

- **Identification:** *Sense of Belonging to the Country and Pluralistic Ukrainian Identity.*
- **Orientation for Common Good:** *Sense of Civic Duty and Social Tolerance.*
- **Confidence in Political Institutions and Figures:** *Authorities Care, Trust in Central (president, parliament, government, courts) and Local (oblast state/military administration; the village/town administration; head of village, town, or military civic administration) Institutions.*

12. Social tolerance throughout this study measures the feelings about immigrants, Muslims, Jews, Roma, LGBTQI+, people with different colour of skin, and drug addicts in terms of personal interaction and/or acceptance in the community. This overall indicator does not include feelings about people from other regions, Russian-speaking and Ukrainian-speaking Ukrainians to keep its comparability to SCORE 2021. Thus, this indicators is comparable to 2021.

13. To identify the number of dimensions of social cohesion, an exploratory factor analysis was performed using principal component analysis, varimax rotation with Kaiser normalisation on the predefined indicators. The number of factors was determined based on Eigenvalues greater than or equal to 1, and loadings of 0.6 or greater were considered for factor interpretation.

• **Actions for Common Good:** *Community Cooperation and Civic Engagement.*

The common good is a cross-sectional domain encompassing both vertical (between citizens and state) and horizontal (between citizens) attitudes and behaviours. Together, this paper refers to them as ‘Focus on common good’.

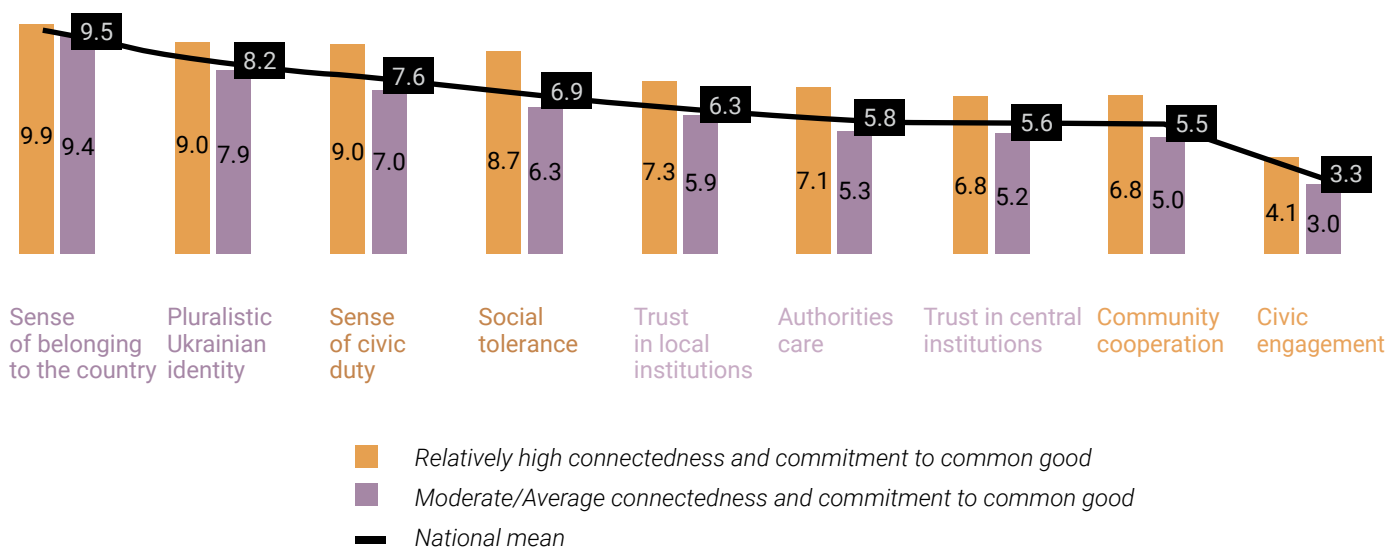
A cluster analysis (a.k.a. population segmentation) was conducted using the above-mentioned elements of social cohesion (Figure 1 below). The analysis¹⁴ unpacks different groups based on how they scored on the elements of social cohesion and revealed two clusters:

- Cluster 1 corresponds to 73% of respondents and their experience of social cohesion is around the national mean and can be considered moderate to high.
- Cluster 2 corresponds to 27% of respondents and their experience of social cohesion is significantly above the national mean.

Cluster 2 is of younger and higher income than cluster 1. While 34% of cluster 2 are between 18–35 and 18% have money for expensive goods, this is 25% and 11% respectively for cluster 1. Yet, the most compelling finding in this analysis is that there is no third cluster with low scores across social cohesion elements, or a fourth one where, just to provide an example, some, such as *Trust in Authorities*, are very low and some, such as *Sense of Belonging*, very high. This shows strong cohesion and unity across all parts of Ukraine and across different demographic groups, and highlights a strong resilience capacity.

Figure 1

GROUPS ON ELEMENTS OF SOCIAL COHESION (SHARP 2022, RANDOM SAMPLE, N=4,327)



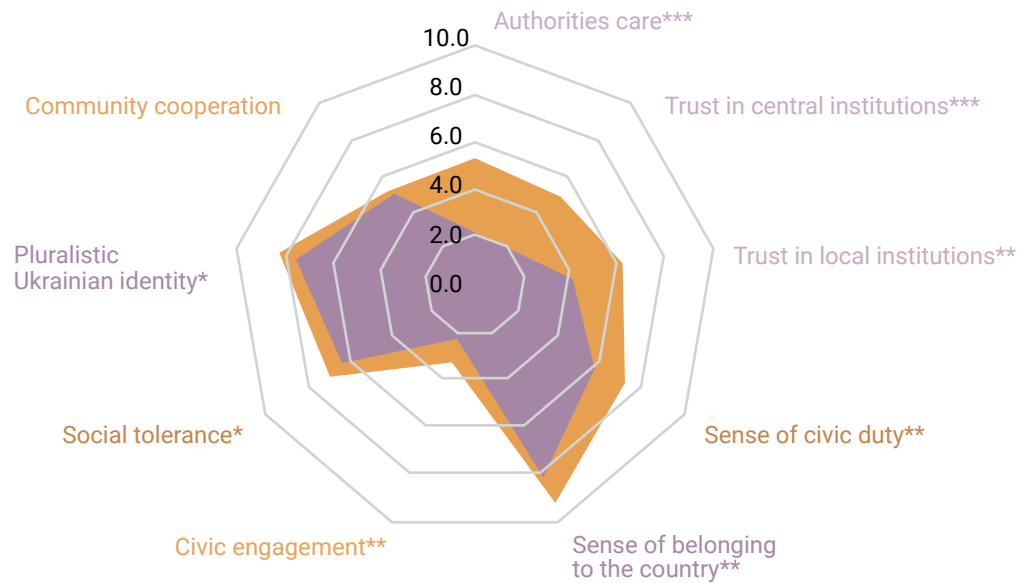
14. A hierarchical cluster algorithm was used, and a two-cluster solution was selected based on the majority rule for cluster selection. This combination was found to have the best Dunn Index (0.07), Silhouette (0.44), and Connectivity measures (56.9). The cluster solution proposed by the clustering algorithm was compared to a range of 2 to 8 clusters using several algorithms, including hierarchical, k-means, PAM, or AGNES. Based on the results, the two-cluster solution was chosen as the most suitable for this study.

The spider diagram below illustrates the change in elements of social cohesion between 2021 and 2022 for the SHARP panel respondents. Temporal change decreases clockwise from *Authorities Care* to *Community Cooperation*. In other words, while *Authorities Care* experienced the largest increase in scores between 2021 and 2022 followed by *Trust in Central Institutions*, *Community Cooperation* experienced the smallest increase.

Figure 2

CHANGE OF ELEMENT OF SOCIAL COHESION (PANEL SAMPLE, N=495)

■ 2022
■ 2021



*** Large statistically significant change (Cohen's $d > 1.0$, p -value=0.000),

** Moderate statistically significant change (Cohen's $d > .4$, p -value=0.000),

* Small statistically significant change (Cohen's $d > .15$, p -value = 0.000),

' No statistically significant change (p -value $> .05$, ANOVA)

Looking at both the representative sample scores as well as the panel sample scores presented in figures 1 and 2 above, we observe that the ranking of social cohesion elements in terms of their scores remained the same across time and across clusters:

- **Identification** with the country and political community measured by the *Sense of Belonging to the Country* and the *Pluralistic Ukrainian Identity* indicators received the highest scores, suggesting a strong sense of unity around the fundamental dimension of national identity that is currently under direct attack from Russia.¹⁵

15. Verkhovna Rada of Ukraine, Про вчинення Російською Федерацією геноциду в Україні [On Genocide Committed by Russia in Ukraine], Statement, adopted April 14, 2022, <https://zakon.rada.gov.ua/laws/show/2188-20#Text>. Yonah Diamond et al., 'An Independent Legal Analysis of the Russian Federation's Breaches of the Genocide Convention in Ukraine and the Duty to Protect,' New Lines Institute and the Raoul Wallenberg Centre for Human Rights, May 2022, <https://newlinesinstitute.org/an-independent-legal-analysis-of-the-russian-federations-breaches-of-the-genocide-convention-in-ukraine-and-the-duty-to-prevent/>.

- Identification is followed by the *Sense of Civic Duty* and *Social Tolerance*, which constitute **Orientation for Common Good**, creating a strong resistance potential to work collectively with a common purpose when dealing with the existential threats to the Ukrainian state and identity.
- High levels of **Confidence in State Institutions as well as decision makers**, as measured by *Trust in Local and Central Institutions* and *Authorities Care* indicators, reflect a shared vision and unity between citizens and the state. This creates strong connectedness, enabling citizens and officials to work together towards a common goal. Notably, these indicators also showed the highest increase among panel respondents.
- Of all the domains of social cohesion, the **Actions for Common Good**, as measured by *Community Cooperation* and *Civic Engagement*, received the lowest scores. This, combined with higher scores on Orientation for Common Good, suggests that there is an uncultivated potential, where attitudes and orientations have not yet translated into behaviours. Investments on this front can help transform attitudes towards the common good into actions, which could improve overall levels of social cohesion in the long run. This finding is supported by the panel sample (Figure 2), which showed no statistically significant change in *Community Cooperation* and, although a moderate increase, but still the lowest values in *Civic Engagement* (from 2.1 in 2021 to 3.1 in 2022).

2. DISPLACEMENT AND SOCIAL COHESION

Quick read:

This chapter investigates the impact of large-scale displacement on social cohesion and tries to diagnose the critical needs of the internally displaced (IDPs). At its core, large-scale displacement has not caused any significant rupture to societal fabric, but addressing new challenges that come with displacement, especially in the long run, is important for nurturing social cohesion. 80% of respondents on the national level strongly or somewhat disagree that there are tensions between IDPs and host communities. Although a larger number of IDPs in a locality does not automatically translate into greater tension, people living in the west of Ukraine are more likely to report tensions between host communities and IDPs compared to the other oblasts. These tensions should be monitored and constructively addressed to ensure that these do not evolve into bigger societal rifts. Policy interventions should be tailored to the particular challenges of the target population as IDPs and host communities as well as respondents of different macro-regions emphasise different things. While the severely affected and liberated oblasts appear to be more concerned with practical and tangible issues (access to essential items, public services, and accommodation), relatively stable western oblasts seem to be more focussed on 'transcendent' issues such as stereotypes, anti-social behaviour, and draft evasion. Central oblasts are rather in-between concerned with accommodation and anti-social behaviour. **Compared to other groups, the SHARP evidence shows that IDPs have been more exposed to adversities such as witnessing fighting and shelling, having their homes and property damaged, or experiencing family separation. They are also economically more vulnerable, more reliant on welfare payments, and face challenges with safe accommodation.** Addressing IDPs' challenges and immediate needs including psycho-social support would help contribute to efforts that are fostering social cohesion.

2.1. THE IMPACT OF DISPLACEMENT ON SOCIAL COHESION

23% of the respondents in the SHARP 2022 random sample are internally displaced, while 11% have already returned to their homes. The majority of those who have returned came from liberated areas, primarily from Kyiv city and oblast.

The figure below illustrates the flow of IDPs and shows that the highest number of displaced individuals are from partly occupied oblasts, with Donetsk and Luhansk oblasts being the main sources in the sample. Dnipropetrovsk oblast is the most popular destination, followed by Kyiv city, Kyiv and Lviv oblasts that host more IDPs than other oblasts, and thus need to be prioritised in terms of investments aimed at addressing the needs of IDPs and host communities.

Figure 3

DISPLACED PERSONS BY OBLAST OF ORIGIN AND DESTINATION (SHARP 2022, RANDOM SAMPLE, N=981)

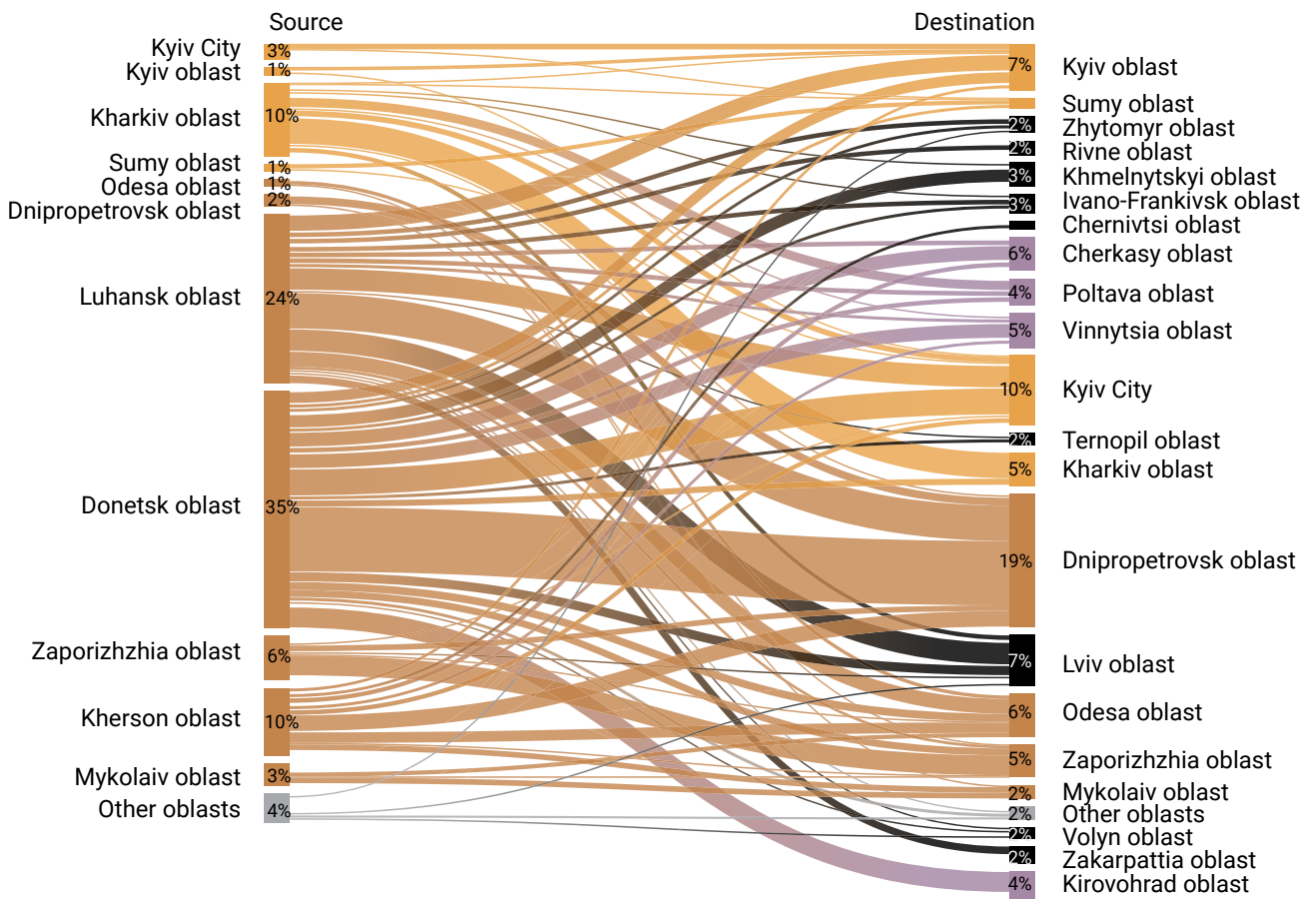
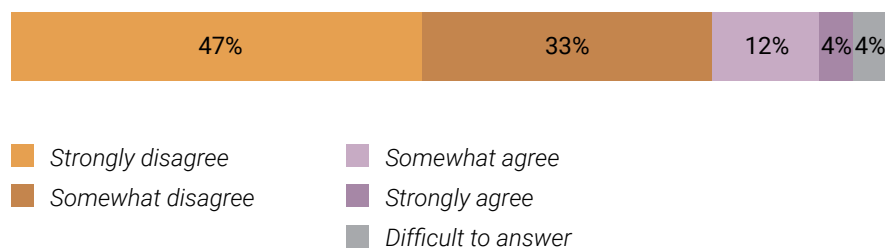


Figure 4

THERE IS A FEELING OF TENSIONS BETWEEN IDPS AND HOST COMMUNITIES (SHAPR 2022, RANDOM SAMPLE, N=4,327)

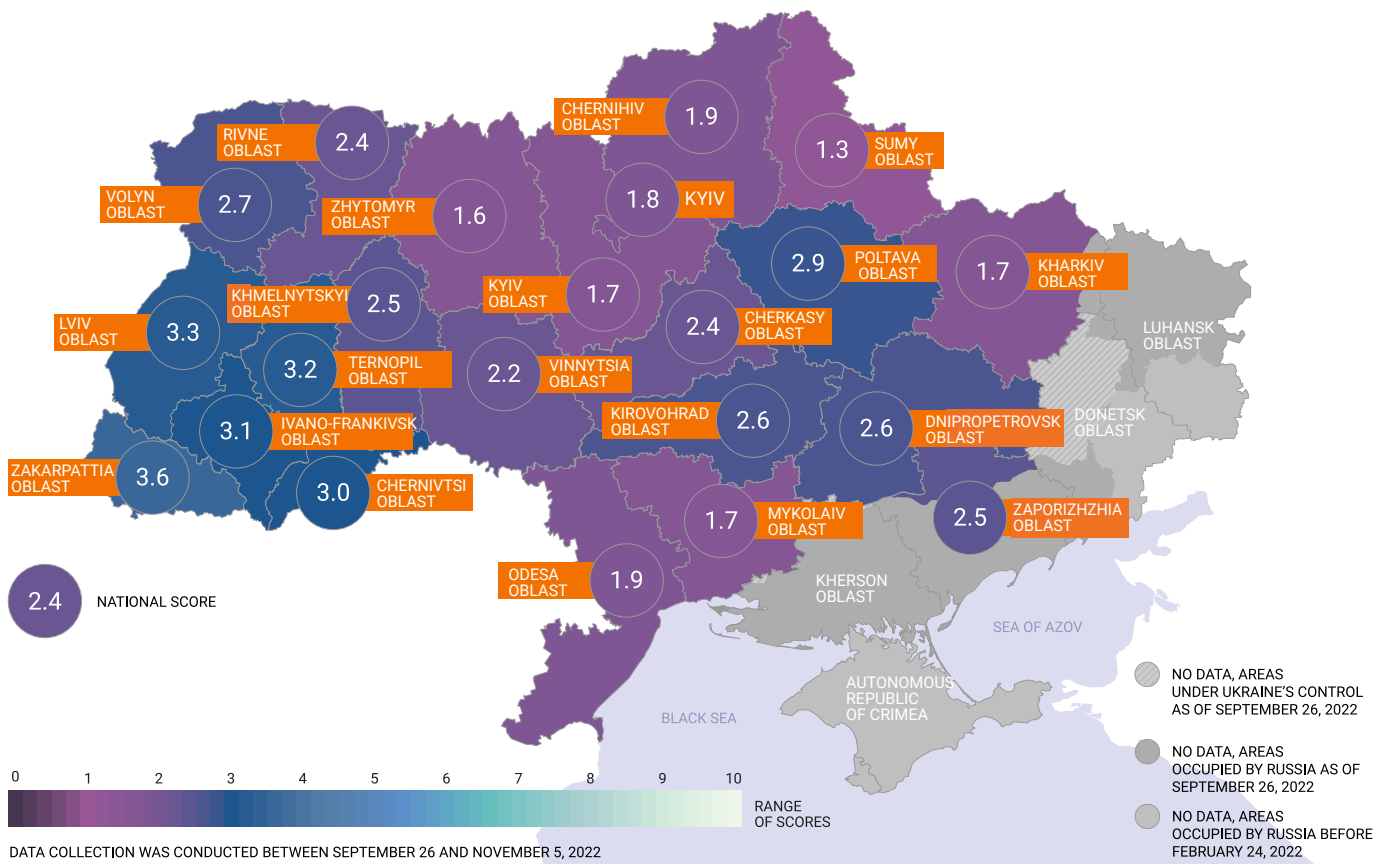


The SHARP survey asked respondents about their feelings of tensions. Only 4% of the SHARP 2022 random sample respondents strongly agree with the statement that there are tensions between displaced persons and host communities, while 12% somewhat agreed (Figure 4).

Although the percentage of people who report tensions is not very high, there are some regional differences that are worth noting. Figure 5 below illustrates that western oblasts are reporting higher tension scores compared to the other oblasts.

Figure 5

FEELING OF TENSIONS BETWEEN IDPS AND HOST COMMUNITIES (SHARP 2022, RANDOM SAMPLE, N=4,327)



16% of respondents in the SHARP random sample, who reported feeling any tension at all, were subsequently asked about the sources of these tensions. Analysis revealed that sources of tensions are perceived to be different by the host communities versus IDPs. While the host communities express greater concern about male draft evasion and anti-social behaviour, IDPs report accommodation issues and the scarcity of housing as the main sources of tensions Table1.

Table 1

SOURCES OF TENSIONS AMONG THOSE WHO FEEL THEM BY DISPLACEMENT STATUS (SHARP 2022, RANDOM SAMPLE, N=624, 14% OF SAMPLE)¹⁶

		Displaced persons, who somewhat or strongly agree that there is a feeling of tensions, N=199, 4.6% of sample; 20.6% of all the IDPs	Stayers, who somewhat or strongly agree that there is a feeling of tensions, N=425, 9.8% of sample; 15.5% of all the stayers
Access to essential items, jobs, and income	Yes	63%	51%
	No	37%	49%
Stress on overstretched public services	Yes	59%	43%
	No	41%	57%
Accommodation and over-crowdedness	Yes	70%	43%
	No	30%	57%
Anti-social or criminal behaviour	Yes	39%	64%
	No	61%	36%
Political, cultural or language differences and stereotypes	Yes	44%	55%
	No	56%	45%
Draft evasion by men	Yes	24%	65%
	No	76%	35%

In addition to the differences between host communities and IDPs, when it comes to perceptions about sources of tensions, there are also macro-regional differences. The table below shows that respondents from severely affected and liberated oblasts, which have been in close proximity to the frontline at various times, appear to be more concerned with practical and tangible issues such as access to essential items, public services, and accommodation. In contrast, those from western oblasts seem to be more focussed on 'transcendent' issues. While central oblasts are rather in-between being concerned with the practical issue of accommodation and the 'transcendent' issue of anti-social behaviour. These differences are important for tailoring programmes and efforts regionally (Table 2):

- Difficulties in accessing essential items, jobs, income, and accommodation are more common in severely affected and partially occupied oblasts.
- In liberated areas, difficulties in accessing essential items, jobs, income, and stress on overstretched public services are more frequently reported.
- In central oblasts, issues related to anti-social behaviour and difficulties with accommodation are more prevalent.
- In the west, tensions can be associated with men's challenges related to conscription, such as difficulties in finding work, housing, or mobility.

16. While there is 16% of those who reported the feeling of tensions, Table 1 demonstrated 14% since the returnees are not included.

Additionally, tensions are also related to anti-social behaviour, political, cultural, or linguistic differences and stereotypes that affect the integration of IDPs into host communities.

Table 2 SOURCES OF TENSIONS BY MACRO-REGIONS AMONG THOSE WHO FEEL TENSIONS BETWEEN IDPS AND HOST COMMUNITIES, % (SHARP 2022, N=687 OR 16% OF RANDOM SAMPLE)

		Severely affected & partly occupied	Liberated/ de-occupied	Relative stability – centre	Relative stability – west
		N=167, or 4% of sample, 15% of the macro-region	N=94, or 2% of sample, 9% of the macro-region	N=116, or 3% of sample, 17% of the macro-region	N=310, or 7% of sample, 23% of the macro-region
Access to essential items, jobs, and income	Yes	70%	73%	53%	40%
	No	30%	27%	47%	60%
Stress on overstretched public services	Yes	54%	59%	50%	39%
	No	46%	41%	50%	61%
Accommodation and over-crowdedness	Yes	60%	36%	58%	49%
	No	40%	64%	42%	51%
Anti-social or criminal behaviour	Yes	45%	41%	61%	66%
	No	55%	59%	39%	34%
Political, cultural or language differences and stereotypes	Yes	29%	43%	45%	70%
	No	71%	57%	55%	30%
Draft evasion by men	Yes	34%	43%	56%	63%
	No	66%	57%	44%	37%

Although the heatmap above showed that the national average scores for tensions are not particularly high at 2.4, they increase as high as 3.0 in Chernivtsi, 3.1 in Ivano-Frankivsk, 3.2 in Ternopil, 3.3 in Lviv, and 3.6 in Zakarpattia oblasts. As western oblasts report higher tensions and those which report higher tensions link it to political, cultural, or language differences and stereotypes, among other things, it is worth unpacking and understanding these societal dynamics more accurately. Although the SHARP analysis shows that *Social Tolerance towards Russian-speaking Ukrainians* is high among the local residents (i.e. stayers) of western oblasts at 7.7. However, when compared to IDPs who moved to the west (9.4), stayers' tolerance to Russian-speaking Ukrainians is relatively low-er. The same is valid when compared to stayers in other macro-regions. *Social Tolerance to Russian-speaking Ukrainians* among current residents

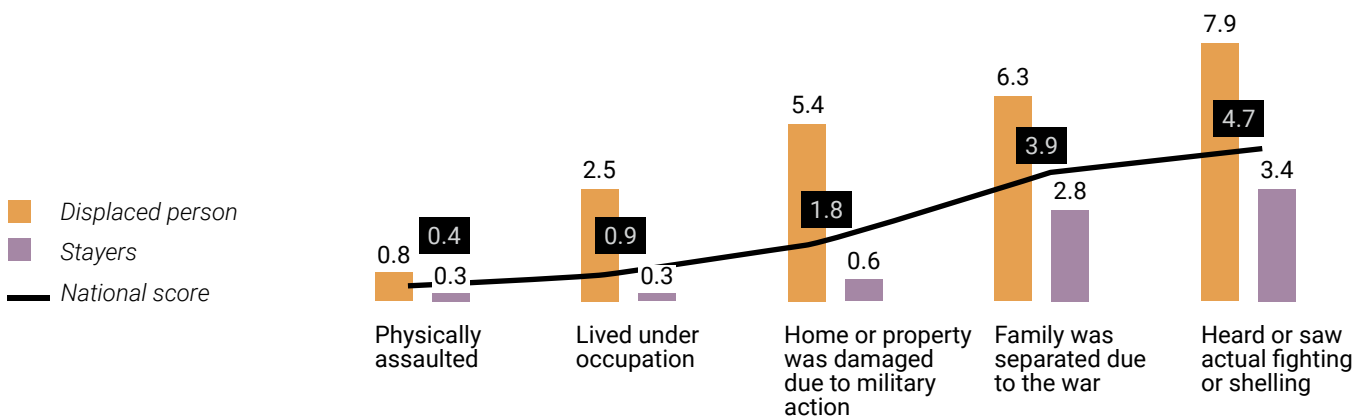
of the Severely affected and partly occupied macro-region is as high as 9.5; in the Liberated/de-occupied macro-region it is 9.3; and in the Relative stability – centre macro-region it is 8.9. As such, it is imperative to monitor and tackle these tensions especially at the oblast level. Preventing them from escalating into severe social divisions that could undermine solidarity is crucial to maintaining social cohesion and resilience.

2.2. WHAT ARE THE CRITICAL NEEDS OF INTERNALLY DISPLACED ?

In addition to looking at inter-group tensions between IDPs and host communities, the SHARP study investigated the vulnerabilities and needs of IDPs in greater detail. The most commonly reported adversities related to the Russian full-scale invasion include witnessing fighting or shelling, family separation, and home or property damage. The displaced population appears to have been particularly vulnerable to these adversities, as evidenced by Figure 6.¹⁷ This suggests that property damage or witnessing fighting or shelling may be significant factors contributing to their displacement. Therefore, interventions aimed at repairing damaged property, assisting in acquiring new property or housing, and providing psychological support may encourage return when the conditions are safe.

Figure 6

EXPOSURE TO ADVERSITIES CAUSED BY FULL-SCALE WAR (SHARP 2022, RANDOM SAMPLE, N=4,327)



It is important to note that adversities frequently interconnect, and people are often exposed to more than one. Individuals whose home or property has been damaged are more likely to have heard or seen actual fighting or shelling.¹⁸ Given the large-scale displacement, this illustrates the gravity of the collective and individual trauma and the necessity of psychological support to IDPs.

17. The differences between the displaced persons and stayers are statistically significant (p-value = 0.000) of at least a large size (Cohen's $d > 0.75$) for all the adversities but 'Physically assaulted.'

18. The experience of having home or property damaged is correlated with having heard or seen actual fighting or shelling (Cramer's $V=0.41$, $df=1$, $p\text{-value} < 0.001$), separation of family (Cramer's $V=0.24$, $df=1$, $p\text{-value} < 0.001$), and having lived under occupation (Cramer's $V=0.20$, $df=1$, $p\text{-value} < 0.001$).

When considering the impact of displacement, it is important to recognise the unique challenges that arise for individuals who have been forced to relocate due to the Russian full-scale invasion. Table 3 reveals that displaced persons rely more heavily on welfare payments and may face challenges in finding housing to rent or purchase, compared to the stayers. Consequently, they may benefit from livelihood support beyond welfare payments, such as acquiring new skills or finding employment, and improving access to affordable housing. Moreover, displaced individuals are more likely to utilise administrative services and report higher levels of satisfaction with them.

Table 3 PROVISION OF SERVICES AND AVAILABILITY OF NECESSITIES BY DISPLACEMENT STATUS (SHARP 2022, RANDOM SAMPLE, N=4,327)

	Displaced persons	Returnees	Stayers
Usage of administrative services	3.3	2.4	1.9
Usage of welfare payments	5.6	2.6	2.1
Provision of administrative services	7.7	7.2	6.9
Provision of welfare payments	7.6	7.1	7.2
Availability of housing	5.9	6.9	6.6

Note: The differences between the displaced and stayers is of at least moderate effect size (Cohen's $d > 0.40$, p -value = 0.000, ANOVA). The small effect size is for Provision of welfare payments. 43% of returnees in the nationwide sample are from Kyiv city or oblast.

3. THE RELATIONSHIP BETWEEN CIVIC RESISTANCE AND SOCIAL COHESION

Quick read:

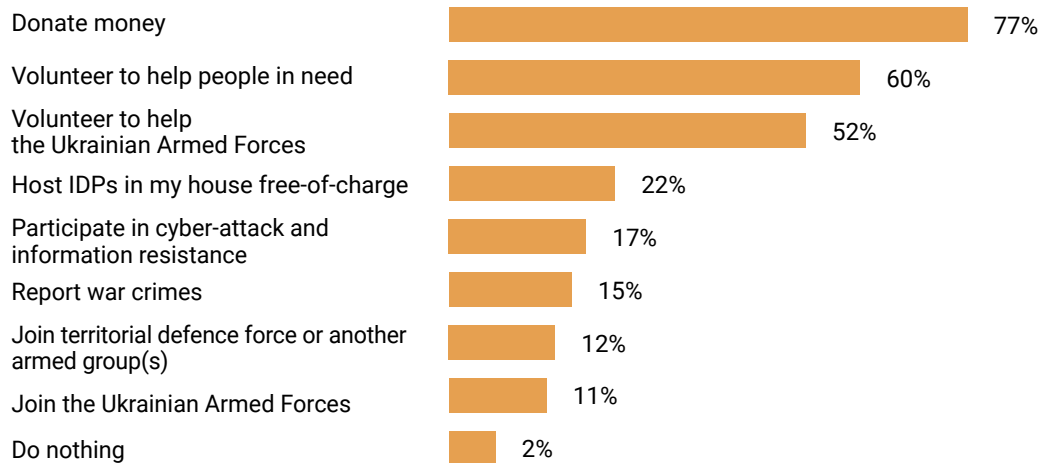
This chapter investigates the relationship between social cohesion and civic resistance, and presents evidence that shows that social cohesion and civic resistance reinforce each other. The SHARP study finds that focus on the common good orientation nurtures cohesion and drives resistance, and resistance fosters focus on the common good and a stronger connection with the state. The overwhelming majority of the SHARP respondents are active participants of various forms of civic resistance against the Russian full-scale invasion. Analyses shows donating money, volunteering to help people in need, and volunteering to help the Ukrainian Army are the most popular forms of civic resistance. The SHARP wave 1 found that orientations and actions for the common good contributed to unarmed forms of civic resistance, which enhances Ukraine's resilience towards the external threat. The civic resistance, in turn, can contribute to the elements of social cohesion including the focus on the common good but also nurturing the connection between citizens and the state. Further, the SHARP analysis points to a particularly strong sense of civic duty among young respondents, which makes them valuable contributors to civic resistance as well as Ukraine's recovery and reconstruction efforts.

3.1. DIFFERENT FORMS OF RESISTANCE

Resistance is undoubtedly playing a crucial role in Ukraine's resilience in the face of Russia's full-scale invasion. Focussing primarily on the areas controlled by Ukraine, SHARP measures participation in both armed and unarmed forms of resistance. The data shows that an overwhelming majority of respondents are engaged in some form of resistance as the option of 'doing nothing' is selected only by 2% of respondents. In other words, a large majority respondents actively participate in various forms of resistance. Yet, participation is dependent on ability in terms of skills (e.g. countering cyber-attacks) and opportunity in terms of circumstances (hosting IDPs). As such, the most popular forms of resistance are charitable donations (77%), volunteering to help those in need (60%), volunteering to help the Ukrainian army (52%).

Figure 7

CIVIC RESISTANCE (SHARP 2022, RANDOM SAMPLE, N=4,327)



Age and income level are the two main demographic differences that seem to have significant positive influence in someone’s propensity to participate in some forms of civic resistance. According to the analysis, 86% of younger individuals between 18–35 make charitable donations compared to the national average of 77%, and 31% are engaged in cyber-attack and information resistance compared to the national average of 17%. In contrast, 69% of older individuals above the age of 60 make charitable donations and 9% engage in cyber-attacks and information resistance.

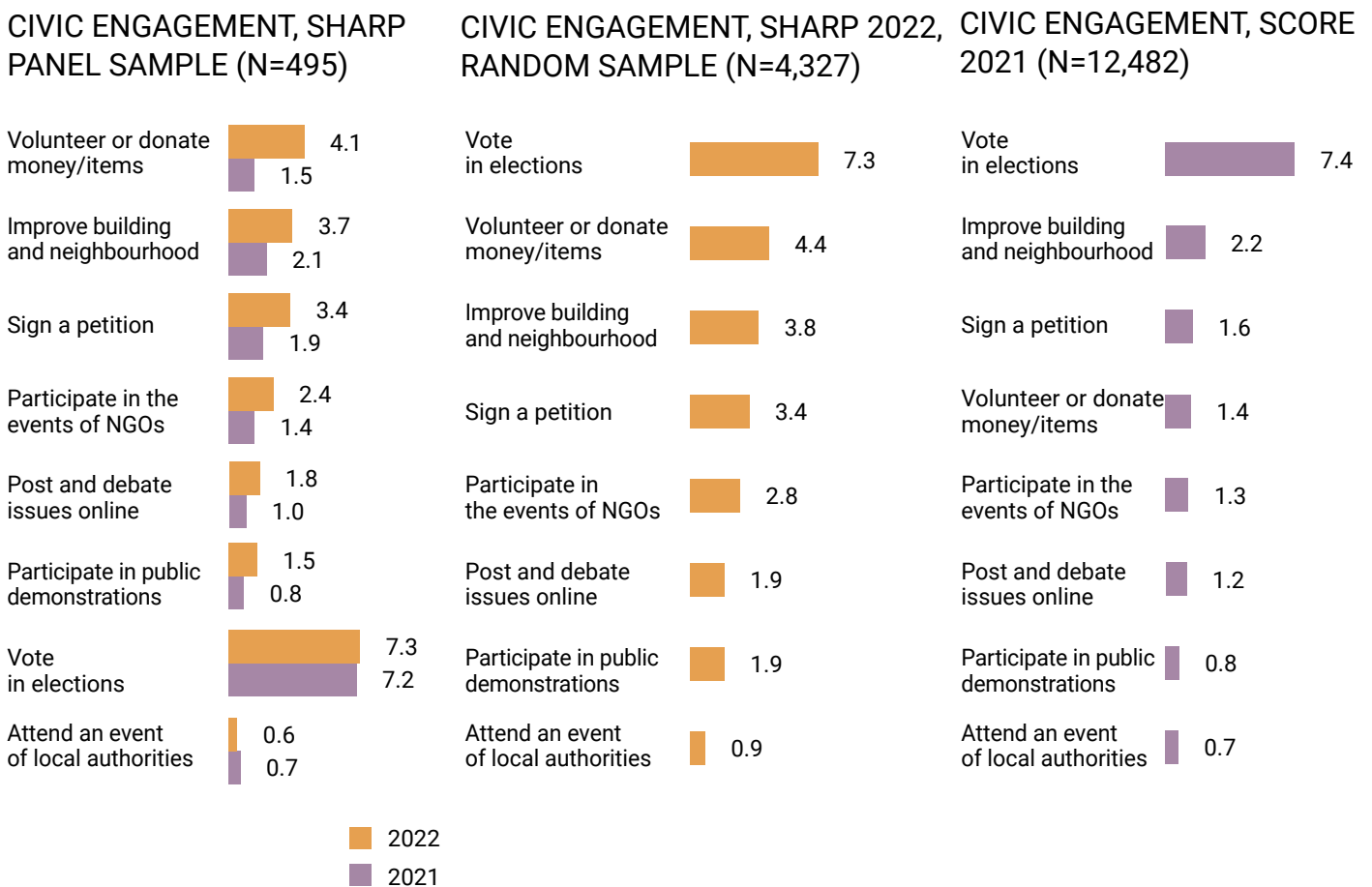
On the other hand, 90% of top income groups make charitable donations and 32% engage in cyber-attack and information resistance. 66% of high-income groups help people in need, and 59% help Ukrainian armed forces. In contrast, low-income groups are less engaged across all forms of civic resistance indicators, most significant of which are charitable donations (61%), cyber-attack and information resistance (12%), helping people in need (50%), and helping the Ukrainian armed forces (42%). Displaced people are also less engaged in armed and unarmed civic resistance across the board. Although Ukrainians across the country have mobilised themselves to resist the Russian invasion relentlessly and creatively, it is important to recognise and address vulnerabilities related to age, income, and displacement to ensure civic resistance can be inclusive and sustained in the long run.

It is worth noting that volunteering, donating money, clothes, and other items for a good cause are also part of the *Civic Engagement* indicator, which measures frequency of engaging in such actions.¹⁹ The figure below lists different items measured under the *Civic Engagement* indicator. Looking at the SHARP 2022 panel respondents and comparing the data to SCORE

19. It should be noted that beyond the items Volunteer or Donate there is no other overlap between *Civic Engagement* and *Resistance* questions and indicators. Therefore, *Civic Engagement* measures a general and usual social practice of various forms of civic participation without specific time restrictions, while *Resistance* questions focus specifically on actions to resist Russia’s full-scale invasion.

2021 (Figure 8), we see that volunteering and donating money/items have received the highest boost, increasing from a score of 1.5 to 4.1 out of 10 among the panel respondents. In SCORE 2021, the second most popular *Civic Engagement* item after voting was participating in efforts aimed at improving buildings and neighbourhood, followed by signing a petition, which came before volunteering and donating money/items. In SHARP 2022 however, the ranking of popular forms of civic engagement shifted, and volunteering and donating money/items have become the second most popular for both panel respondents and for the random sample (Figure 9 & 10). This highlights that horizontal social networks and cooperation underpinned by collective action for civic resistance can serve as a resilience capacity as they both support the armed forces and humanitarian efforts.

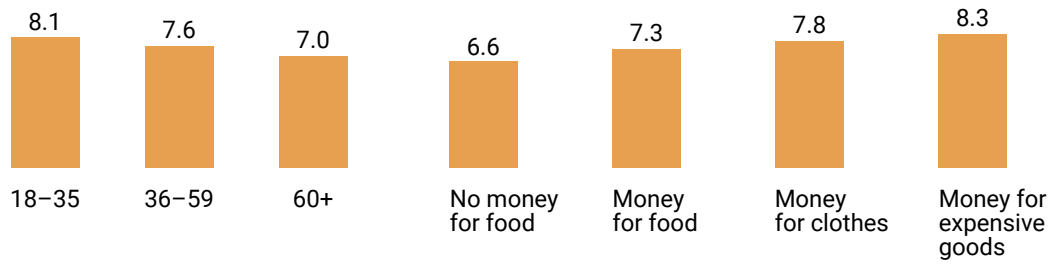
Figure 8–10



Young respondents have a high *Sense of Civic Duty* (Figure 11). *Sense of Civic Duty* is measured as an element of social cohesion, but it is also closely linked to civic resistance and civic engagement. Young people believe that ordinary people can change things in their communities and are eager to contribute to politics. Besides, *Sense of Civic Duty* is positively correlated to higher *Social Tolerance* and the level of education. Young people are also more likely to have a higher income which partly explains the higher *Civic Duty* among higher income groups. Thus, young people between 18–35 years are well equipped and in a good position to contribute to recovery and rebuilding, and become change makers in their communities.

Figure 11

**SENSE OF CIVIC DUTY BY AGE AND INCOME
(SHARP 2022, RANDOM SAMPLE, N=4,327)**



Note: The differences are statistically significant (p -value = 0.000, ANOVA) with at least moderate effect size between at least two groups (Cohen's $d > 0.40$).

3.2. CIVIC RESISTANCE AND SOCIAL COHESION ARE MUTUALLY REINFORCING

Participation in various forms of civic resistance is expected to foster social cohesion by bringing together diverse individuals and creating a sense of shared purpose between citizens and the state in the face of a full-scale invasion by Russia. At the same time, strong social cohesion is likely to motivate people to engage in civic resistance. To test this hypothesis, we started with an investigation of the effect of participation in resistance on social cohesion: we conducted treatment effect analysis on the SHARP panel sample, considering participants as the treatment group and non-participants as the control group. We compared the change in social cohesion scores between 2021 and 2022 for both groups and determined the counterfactual value for the treatment group, which refers to the expected outcome if participants had not taken part in civic resistance. We report differences between observed and counterfactual values for social cohesion elements in 2022 in Table 4.

The table below looks at the synthesis of the treatment effect analysis. Some of the analysis presented in the table is also illustrated by graphs below (Figures 12–14) to add further clarity to the interpretation of this type of analysis. The effect size presented in the table is the difference between their actual score and the counterfactual score. It shows that those people who donated money have experienced a greater increase in their perceptions that authorities care for all parts of Ukraine and represent their views, greater increase in their trust in Verkhovna Rada, and a greater increase in all the indicators that relate to a focus on the common good dimension of social cohesion (i.e. *Sense of Civic Duty, Social Tolerance, and Community Cooperation*) compared to those who did not donate. Furthermore, we observe that people who volunteer also experience a boost in multiple elements of social cohesion compared to those who did not (i.e. *Authorities Care, Sense of Civic Duty, and Social Tolerance*). On the other hand, the act of hosting internally displaced persons free-of-charge has a positive effect on the perception of *Community Cooperation*.

Table 4

EFFECTS OF CIVIC RESISTANCE ON SOCIAL COHESION INDICATORS COMPARED TO COUNTERFACTUAL VALUES (SHARP 2022, PANEL SAMPLE, N=495)

	Donate money	Volunteer to help people in need	Volunteer to help the Ukrainian Armed Forces	Host IDPs in my house free-of-charge	Participate in cyber-attack and information resistance	Report war crimes	Join territorial defence force or another armed group(s)
Identification							
Sense of belonging to the country					+0.7		
Confidence in political institutions and figures							
Authorities care	+1.0	+0.8	+0.6				
Trust in central institutions						-0.7	-0.9
Trust in Verkhovna Rada	+0.6						
Trust in local institutions					-0.8		
Trust in police					-1.1	-1.2	
Focus on common good (attitudes & behaviours)							
Sense of civic duty	+0.8	+0.7			+0.9		
Social tolerance	+1.4	+1.0			+0.9		
Community cooperation	+1.1			+1.1			

Note: The differences between the observed and counterfactual scores on the indicators in rows in 2022 are shown. There is increase since 2021 for all observed indicators in rows.

Counterfactual value refers to the outcome that would have been observed if the respondents who participated in the civic resistance had not participated in civic resistance.

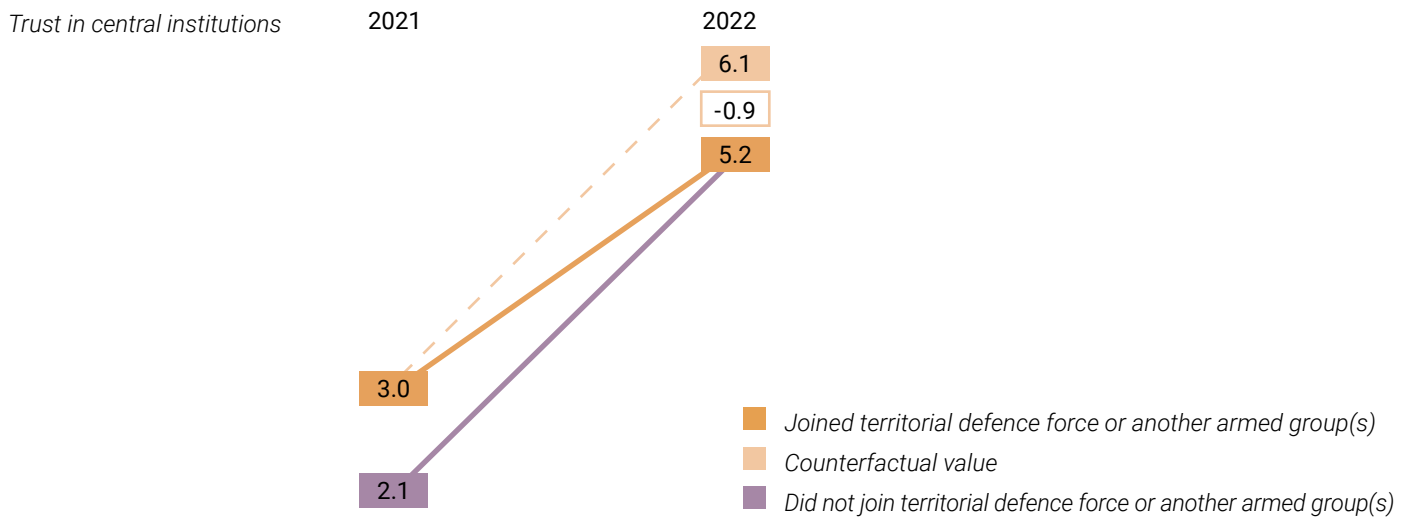
All interaction effects between the civic resistance forms and time are statistically significant (p -value < 0.05).

According to the analysis, respondents who joined the territorial defence forces as a form of armed resistance exhibit greater *Trust in Central Authorities* in 2022 (5.2) than in 2021 (3.0). However, the increase in trust is lower than expected (lower than the counterfactual score). This means that had they not joined the territorial defence forces, their *Trust in Central Authorities* would be as steep as the control group, reaching 6.1. The violet line represents the trust levels of those people in 2021 and in 2022 in the panel sample who did not join the territorial defence forces, while the orange line represents those who did and their trust scores in 2021 and 2022. The dash counterfactual line traces what would have been if the trust levels of those

who joined territorial defence forces increased as steeply as those who did not (i.e., if the orange line was as steep as the violet). This finding may suggest that members of the territorial defence force rely more on themselves and their comrades for protection and security than the central authorities, compared to those who are less involved in armed resistance. It could also suggest that their sense of trust is not increasing as steeply due to the extreme conditions they are facing.

Figure 12

EFFECT OF JOINING TERRITORIAL DEFENCE FORCE ON TRUST IN CENTRAL INSTITUTIONS (SHARP 2022, PANEL SAMPLE, N=495)



Similarly, reporting war crimes leads to a lower than expected increase in *Trust in the Police* and *Trust in Central Institutions*. This means that had they not reported war crimes their trust in the police would be as high as 6.7 but it is 5.5 instead. This indicates that justice and law enforcement institutions need to engage, consult, and deliver for the people who witnessed war crimes in particular to improve or reverse this relationship.

Figure 13

EFFECT OF REPORTING WAR CRIMES ON TRUST IN POLICE (SHARP 2022, PANEL SAMPLE, N=495)

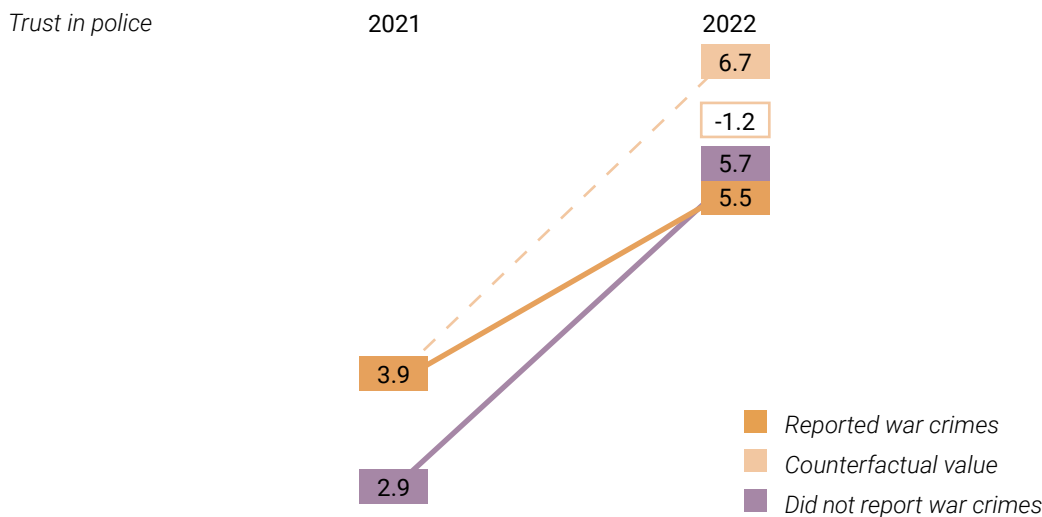
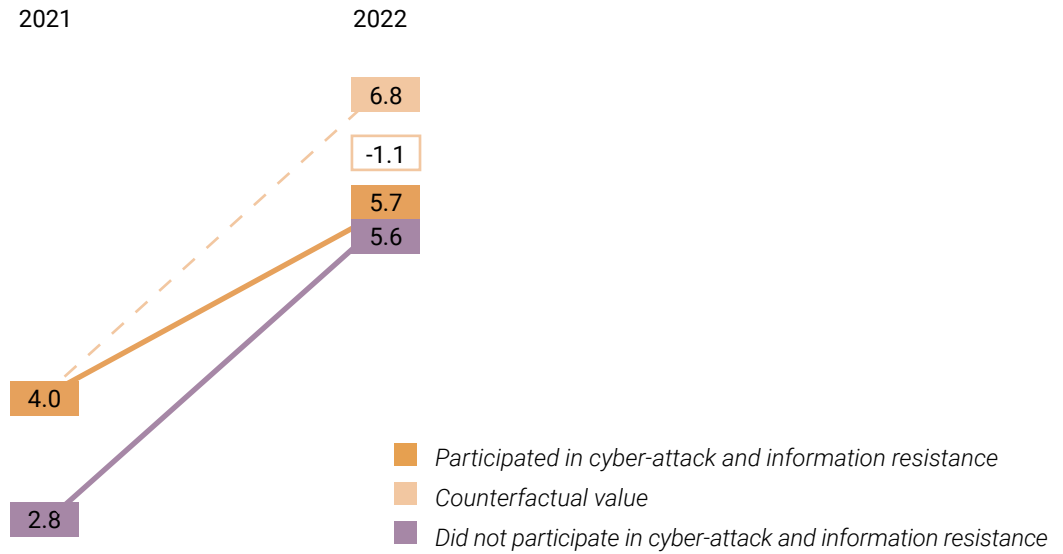


Figure 14

EFFECT OF PARTICIPATION IN CYBER-ATTACKS AND INFORMATION RESISTANCE ON TRUST IN POLICE (SHARP 2022, PANEL SAMPLE, N=495)

Trust in police



On the other hand, participating in cyber-attacks and information resistance presents a mixed bag of effects. It leads to a lower than expected increase in *Trust in the Police* and lower than expected increase in *Trust in Local Authorities* but higher than expected trust in *Sense of Belonging*, *Social Tolerance*, and *Sense of Civic Duty*. This is likely due to the fact that there is a particular profile of people who participate in cyber-attacks. While hosting IDPs or donating money are forms of resistance that are more possible for people of different age groups and education, participating in cyber-attacks is a niche form of civic resistance that requires a particular profile that is often younger and digitally savvy. The findings indicate the need to unpack and improve the way local authorities and the cyber departments of the police conduct cyber-attacks and information resistance, and how they engage citizens in these.

These findings confirm that many forms of civic resistance have multiple positive effects on different elements of social cohesion, especially reinforcing focus on the common good but also contributing to the connectedness of citizens with their country.

To further investigate this relationship between resistance and social cohesion, we also examined the SHARP 2022 random sample to establish if there is a reinforcing relationship in the other direction (i.e., social cohesion improving prospects of civic resistance). We report the results of the regression model in Table 5. The higher the beta coefficient, the stronger the effect of a driver on unarmed civic resistance. Beta coefficients can be positive or negative. Positive beta coefficients indicate that for every unit of increase in the driver variable, the outcome variable – unarmed civic resistance – will also increase by the beta coefficient value. Conversely, negative beta

coefficients suggest that for every unit of increase in the driver variable, the outcome variable will decrease by the beta coefficient value. For example, the beta coefficient of 0.08 between *Community Cooperation* as a driver and *Unarmed Civic Resistance* as the outcome of interest. In this case, if an individual experiences an increase of 1.0 point in their perception of *Community Cooperation*, all else remaining the same, their *Unarmed Civic Resistance* will increase by 0.08 points.

Regression analysis presented below confirms that elements of social cohesion that relate to the common good dimension (i.e. *Community Cooperation*, *Social Tolerance*, and *Sense of Civic Duty*) have a positive influence on unarmed resistance, thus establishing that the two mutually reinforce each other. The same cannot be said for armed resistance where elements of social cohesion had a very weak influence, thus this regression model is not presented.²⁰ Unarmed civic resistance has a positive effect on social cohesion, and social cohesion can drive unarmed civic resistance.

The regression analysis also revealed that *Participation in Events Organised by NGOs* is a main predictor for all forms of unarmed resistance,²¹ indicating that unarmed resistance efforts such as donations and volunteering are often coordinated by NGOs, reflecting its grassroots nature. The model also shows that participation in unarmed civic resistance increases with income and decreases with age, which is not surprising as higher income groups and younger people are more able to donate and volunteer. Displaced people and women are less likely to participate, possibly due to their vulnerabilities and heightened caretaking duties. Lastly, *Support for NATO Membership* encourages respondents' tendency to participate while *Support for EEU* discourages it.

20. The R-squared for the model where elements of social cohesion explain unarmed civic resistance is 20% while where they explain armed resistance, it is 8%. For logistic regressions used in the model for armed resistance we report McFadden pseudo-R square while for linear regression used to model unarmed resistance, adjusted R square.

21. We have conducted logistic regression for each form of unarmed resistance separately. Participation in events organised by NGOs is the strongest predictor in all the models.

Table 5

ELEMENTS OF SOCIAL COHESION AS DRIVERS OF UNARMED CIVIC RESISTANCE (SHARP 2022, RANDOM SAMPLE, N=4,327)

	Standardised Coefficients – Beta ²²	Statistical significance ²³
Participation in NGOs' events	0.25	0.000
Community cooperation	0.08	0.000
Sense of civic duty	0.07	0.000
Income level	0.07	0.000
Support for NATO membership	0.06	0.000
Social tolerance (Comparable to 2021)	0.04	0.012
Support for EEU membership	-0.07	0.000
Displacement	-0.09	0.000
Gender (being a woman)	-0.09	0.000
Age	-0.12	0.000

Linear regression model was applied. The R² of the model is 20%.

22. Standardised beta coefficients were used to allow for easier comparison of the effects of different drivers on the outcome (unarmed civic resistance), where bigger coefficients indicate a bigger magnitude of the predictor compared to others. Standardised coefficient (beta) represents the amount of change in the outcome (unarmed civic resistance) that is associated with a one standard deviation change in the driver in the row, while controlling for the effects of all other drivers in the model. The positive sign indicates the driver increases unarmed civic resistance while the negative sign indicates that it decreases the unarmed civic resistance.

The model controls for age, income, gender, and displacement. Settlement type and education are dropped as they are not statistically significant. Only statistically significant indicators are kept. Only the indicators with beta $\geq |0.04|$ are reported. The p-values (statistical significance) help determine whether the relationships that we observe in the sample also exist in the larger population. The Breusch Pagan Test showed homoscedasticity of the residuals (p-value < 0.001). The VIF was not greater than 1.2, indicating that there was no significant multicollinearity between the predictor variables. Cook's distance was examined to detect any influential outliers in the data, but none were found.

23. The statistical significance (or p-values) helps determine whether the relationships that we observe in the sample also exist in the larger population, such that the smaller the p-value, the stronger the evidence is. The threshold used in this paper is below 0.05.

4. TRUST IN STATE AND CIVIL SOCIETY INSTITUTIONS

Quick read:

The chapter investigates the levels of trust in different state and non-state institutions and looks at how citizens' confidence in institutions has changed since Russia's full-scale invasion. Trust in local and central institutions make up two of the elements of social cohesion that we call 'confidence in political institutions and figures.' The analysis clearly shows that **trust in all state institutions, local and central, has increased compared to 2021.** The state institutions responsible for national security and defence as well as emergency response enjoy the highest level of trust while local institutions are more trusted than the central ones except for the President. However, despite high trust in most of the state institutions, **confidence in the justice system is still weak**, which highlights the need to invest in justice and law enforcement, as the role of these institutions in post-war transition and in forging a healthy social contract cannot be overstated. Although citizens' expectations with regards to performance may be lower under the conditions of war and martial law; the SHARP analysis shows that trust is still associated with service provision and human security. In other words, institutional performance is still important for sustaining trust. Further, while there are no big variations across oblasts when it comes to trust in central institutions, trust in local institutions is lower in Zaporizhzhia, Poltava, Chernivtsi, and Zakarpattia oblasts compared to other oblasts. Trust in NGOs is most strongly related to the belief that authorities care, which could suggest that the efforts of NGOs constructively complement those of public institutions instead of undermining or competing with them. This finding is certainly a desirable finding during full-scale war, as it would strengthen resilience. However, a strong positive interaction between trust in NGOs and citizens' perception that authorities care for them should not become so strong that it could indicate 'blind trust' and that 'civic society has been co-opted' by state institutions. As such, given the important role that NGOs and civil society play in providing checks and balances in democratic societies, it is important to ensure a constructive and healthy relationship between NGOs and public institutions, especially for post-war recovery.

Trust in Central and Local Institutions along with the *Authorities Care* indicator make up the confidence in institutions' dimensions of social cohesion. The institutions responsible for national defence and emergency enjoy the highest trust among the SHARP 2022 random sample. In particular, trust in the Ukrainian Army (99%), State Emergency Service (97%), and the President (88%) is very high (Figure 15).

Figure 15

TRUST IN INSTITUTIONS (SHARP 2022, RANDOM SAMPLE, N=4,327)



All institutions, central, local, and non-state, have experienced a boost in trust between 2021 and 2022. The Army and the President²⁴ experienced the highest boost of trust among panel respondents, compared to the 2021 results (Figure 16). Like in SCORE 2021, *Trust in Local Institutions* continues to be higher than *Trust in Central Institutions* except for the President (Figure 16). Traditionally, *Trust in Courts* had been the lowest among all institutions, and remained the lowest in 2022 as well. This highlights the urgent need for judicial reform in Ukraine (Figure 15–16). Improving the judicial system will not only strengthen public trust and hence nurture social cohesion but will also bring Ukraine closer to EU membership, because justice reform is one of the necessary conditions for the European Council to continue the enlargement process.²⁵

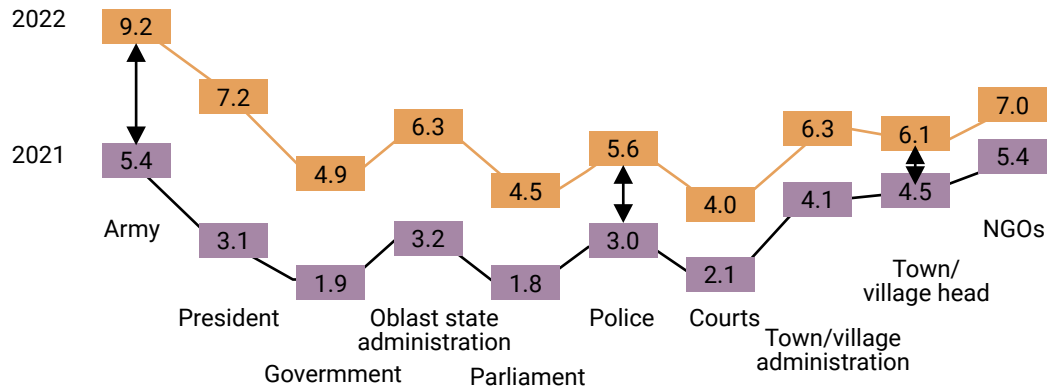
24. SCORE 2021 did not measure trust in the State Emergency Service and the Prosecutor General's Office.

25. European Commission, Commission Opinion on Ukraine's Application for Membership of the European Union, Communication from the Commission to the Commission, the European Parliament, the European Council, and the Council, COM(2022) 407 final. June 17, 2022 <https://neighbourhood-enlargement.ec.europa.eu/system/files/2022-06/Ukraine%20Opinion%20and%20Annex.pdf>.

European Council, Conclusion, European Council meeting, June 23 and 24, 2022, <https://www.consilium.europa.eu/media/57442/2022-06-2324-euco-conclusions-en.pdf>.

Figure 16

CHANGE OF TRUST IN INSTITUTIONS (SHARP 2022, PANEL SAMPLE, N=495)

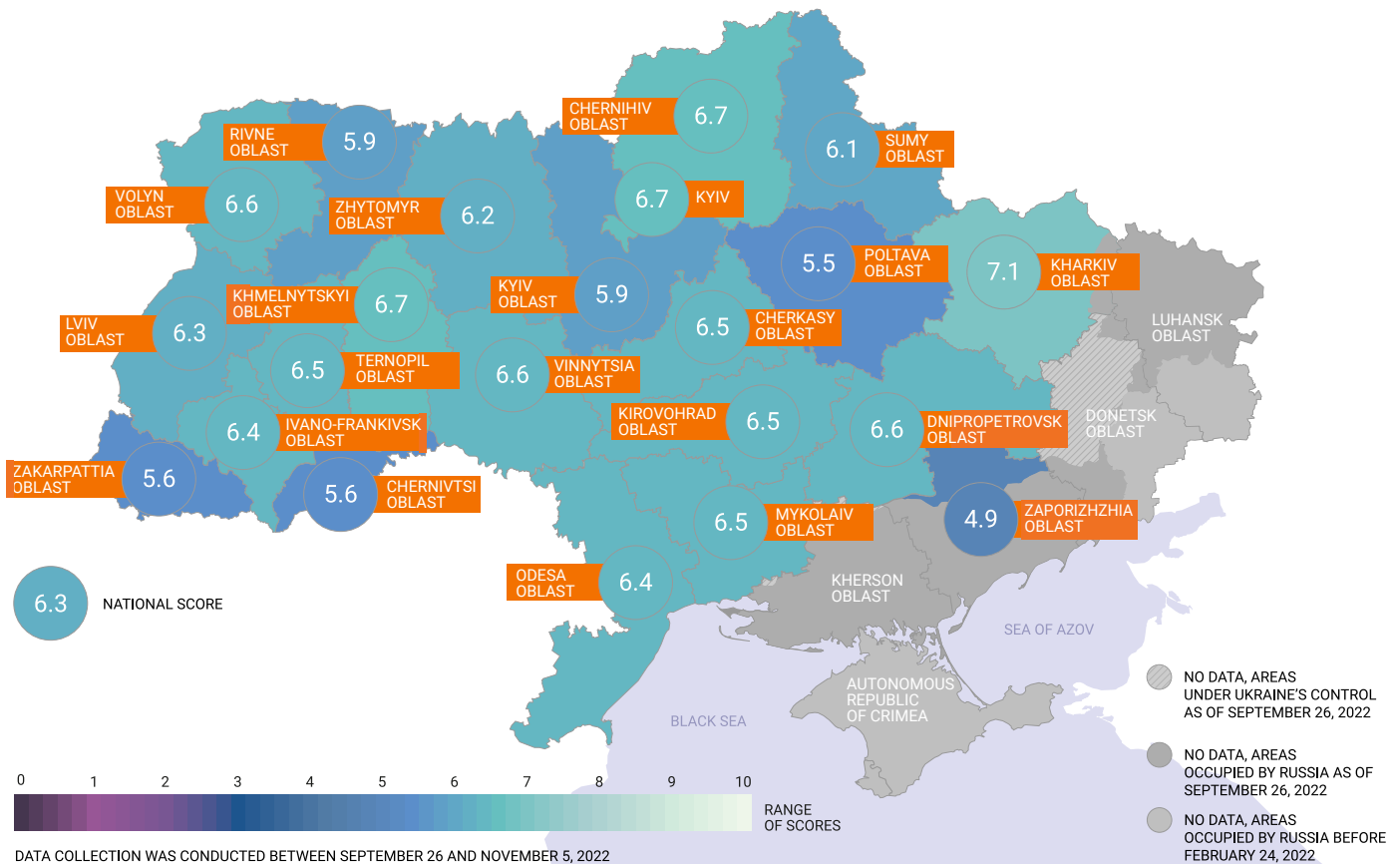


Although there are no substantial differences in *Trust in Central Institutions* across oblasts, noticeable geographic disparities exist for *Trust in Local Institutions*.²⁶ The national mean score for *Trust in Local Institutions* stands

Figure 17

TRUST IN LOCAL INSTITUTIONS BY OBLASTS (SHARP 2022, RANDOM SAMPLE, N=4,327)

Trust in local institutions



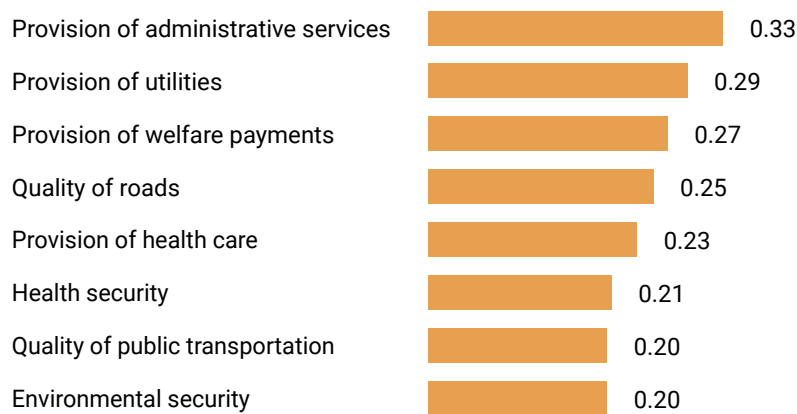
26. The highest value of the Cohen's d between two oblasts on trust in central institutions is 0.40 (small) while it is 0.94 (large) for trust in local institutions.

at 6.3, yet some regions such as Zaporizhzhia (4.9), Poltava (5.5), Chernivtsi (5.6), and Zakarpattia (5.6) oblasts exhibit relatively lower trust levels. Hence, targeted policy interventions could be directed towards these regions to help enhance trust in local institutions and foster social cohesion.

To help identify ways that *Trust in Local Authorities* can be enhanced, we looked at all the correlations between *Trust in Local Institutions* and other SHARP 2022 indicators. Figure 18 below presents the statistically significant correlations. Analysis suggests that *Trust in Local Institutions* is most closely correlated with the provision of public services. This correlation²⁷ supports the performance hypothesis, which suggests that better services can contribute to greater trust.²⁸

Figure 18

CORRELATES OF TRUST IN LOCAL INSTITUTIONS (SHARP 2022, RANDOM SAMPLE, N=4,327)



Displaced persons participating in the SHARP panel sample experienced a stronger increase in trust in the head of their settlements in their new places compared to the expected value if they had not been displaced (see Figure 19). Looking at the random sample, we see that displaced persons originally from Severely Affected/Partly Occupied areas also expressed higher *Trust in Town/Village Administration and Town/Village Head* compared to those who stayed in these areas.²⁹ In other words, IDPs have a generally more positive view of local authorities in their new settlements. This could mean that they feel welcomed and supported by the local authorities.

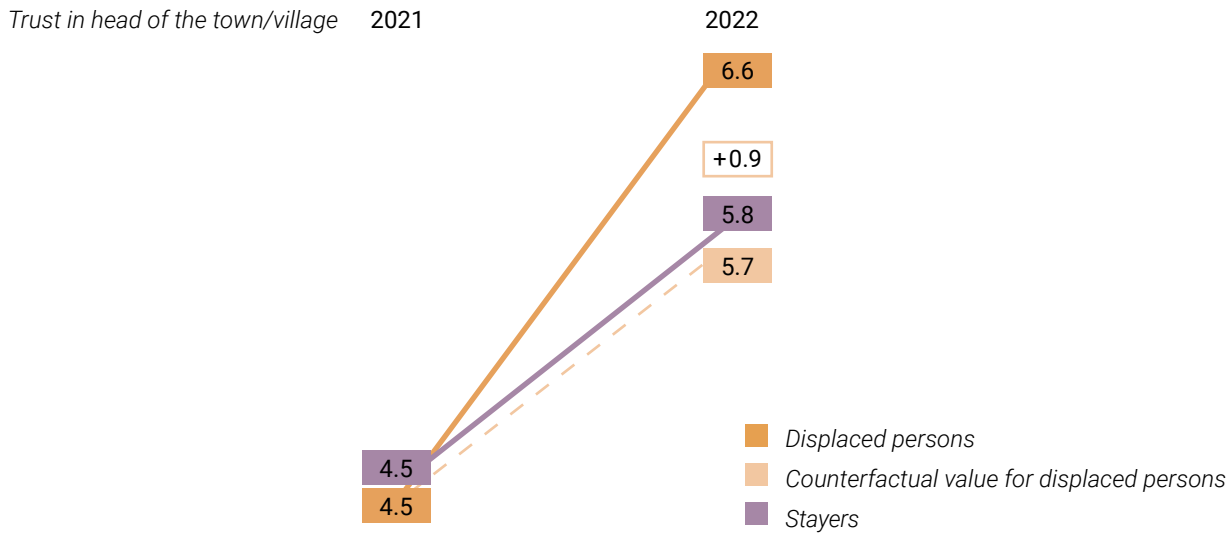
27. Correlation is a measure of how two concepts are related. A correlation of 0 means there is no relationship between the two concepts. A correlation of 1 (or -1) indicates a perfect positive (or negative) relationship between the concepts, which means that as one concept goes up, the other concept also goes up (or down) at precisely the same rate. The closer the coefficient value to 1, the stronger the correlation.

28. Geert Bouckaert and Steven Van de Walle, 'Government Performance and Trust in Government,' paper for the Permanent Study Group on Productivity and Quality in the Public Sector at the EGPA Annual Conference, Vaasa, Finland, 2001: Trust Building Networks – how the government meets citizen in the post bureaucratic era: Citizen directed government through Quality, Satisfaction and Trust in Government, p. 35.

29. Respondents from the random sample who stayed or returned to the Severely Affected/Partly Occupied macro-region (where respondents lived before February 24, 2022) demonstrated lower *Trust in Town/Village Administration* (5.9 – returnees and stayers, 6.7 – displaced persons) compared to displaced persons from the same macro-region.

Figure 19

CHANGE IN TRUST IN HEAD OF VILLAGE/TOWN (SHARP 2022, PANEL SAMPLE, N=495)



Combined with a high *Sense of Civic Duty* (7.5), the displaced could potentially become drivers of change upon their return in the future as they may actively require better performance of local institutions after their experience of displacement and better services. However, there is a risk that they may become disillusioned with local authorities and turn into sceptics or spoilers. To avoid this scenario, local authorities may inter alia improve their performance, become more responsive, and demonstrate integrity.

The correlations between trust in different institutions, as displayed in Figure 20 illustrate the spill-over effect, whereby attitudes towards one institution can have an impact on others. This effect is particularly pronounced among central institutions, such as parliament, government, courts, police, and the prosecutor general’s office, with a high degree of correlation, where the correlation coefficient is higher than 0.40. This means that people who trust (distrust) one institution are highly likely to trust (distrust) others. Correlation coefficients range between -1 and +1. While a coefficient of 0 means no correlation, 1 and -1 means a perfect correlation. Thus, the strength of the correlation increases the closer the coefficient value gets to one or minus one.

Similar patterns are observed for local institutions, including town/village administration, head of town/village, and oblast state administration, with a correlation coefficient exceeding 0.45. Furthermore, the spill-over effect is pronounced for law enforcement and justice institutions, such as the police, courts, and the prosecutor general’s office, with a Pearson’s *r* correlation coefficient exceeding 0.50. These findings tell us that people’s trust or mistrust in institutions is interconnected. In other words, trust or mistrust in one spills over to the other especially within groups of different institutions, namely local, central, and law enforcement and justice. Notably, we do not see any negative correlations, i.e. that trust in one institution is associated

with distrust in another, which shows that institutions do not undermine or work against each other at the central or local level. The findings also underscore the importance of enhancing coordination and communication among various state institutions and improving their engagement with citizens to leverage the spill-over effect and foster confidence in institutions across the board.

Figure 20

SPILL-OVER OF TRUST (SHARP 2022, RANDOM SAMPLE, N=4,327)

	Oblast state administration	Town or village administration	Head of the town/village	Verkhovna Rada	Cabinet of Ministers	Police	Courts	Prosecutor General's Office	Non-governmental organisations	State Emergency Service of Ukraine	President
Ukrainian Armed Forces	0.22	0.17	0.16	0.18	0.23	0.17	0.07	0.15	0.22	0.37	0.33
President	0.29	0.21	0.2	0.42	0.49	0.25	0.25	0.37	0.24	0.31	
State Emergency Service of Ukraine	0.32	0.25	0.22	0.25	0.28	0.26	0.2	0.25	0.38		
Non-governmental organisations	0.32	0.28	0.24	0.31	0.32	0.29	0.23	0.29			
Prosecutor General's Office	0.44	0.36	0.31	0.51	0.54	0.55	0.62				
Courts	0.37	0.32	0.3	0.5	0.48	0.52					
Police	0.42	0.38	0.31	0.43	0.44						
Cabinet of Ministers	0.43	0.33	0.3	0.77							
Verkhovna Rada	0.39	0.32	0.28								
Head of the town/village	0.46	0.76									
Town or village administration	0.53										

Trust in Non-Governmental Organisations (NGOs) traditionally ranks among the highest compared to state institutions (Figure 15). We applied linear regression to model to understand what influences trust in NGOs during the wartime as NGOs are playing an important role in civic resistance and resilience (Table 06). *Trust in NGOs* is most strongly related to the belief that *Authorities Care*, which could suggest that NGO efforts reinforce the efforts of public institutions be it provision of some services or humanitarian efforts instead of undermining or competing with public institutions. Unity of civil society and authorities for the common goal during full-scale war is a desirable dynamic. At the same time, it is important for civil society to maintain its independent agenda and remain constructive but critical to be able to fulfil its vital role of providing oversight, checks and balances over public sector in a post-war period. The impact of *Ukrainian Media* is the second strongest driver, which illustrates the importance of visibility efforts. Additionally, *Community Cooperation* drives trust in NGOs as it encourages participation in NGO work but also NGOs provide the space for more organised cooperation on the community level. The effects of *Health Security* and *Displacement* point to the vital role NGOs play in addressing people's needs in relation to health and the needs of IDPs.

Participation in NGO Events drives trust, which is a good sign for sustaining NGO efforts. However, its effect is not particularly strong, which may imply that there are other drivers like visibility or vicarious experiences. Although all the effect are statistically significant, the model explains 14% of the variance in the trust (R-squared value), as SHARP study was not designed to test the role of NGOs in resilience and resistance, thus there are other drivers and variables that would help improve the explanatory power of the model that SHARP does not measure.³⁰

30. In typical social studies, it is expected that a model should be able to explain between 20% and 30% of the variance of the outcome.

Table 6

DRIVERS OF TRUST IN NGOS (SHARP 2022, RANDOM SAMPLE, N=4,327)³¹

	Standardised Coefficients – Beta	Statistical significance
Authorities care	0.20	0.000
Access to Ukrainian media	0.12	0.000
Community cooperation	0.09	0.000
Health security	0.06	0.001
Participation in NGOs' events	0.06	0.000
Displacement	0.05	0.001

31. The R² of the model is 14%. Standardised beta coefficients were used to allow for easier comparison of the effects of different drivers on the outcome (trust in NGOs), where bigger coefficients indicate a bigger magnitude of the predictor compared to others. Standardised coefficient (beta) represents the amount of change in the outcome (trust in NGOs) that is associated with a one standard deviation change in the driver in row, while controlling for the effects of all other drivers in the model. The positive sign indicates the driver increases trust in NGOs while the negative sign that it decreases the trust in NGOs. The model controls for education, income, and displacement. Age, gender, and settlement type are dropped as they are not statistically significant. Only statistically significant indicators are kept. Only the indicators with beta \geq |0.05| are reported. The p-values (statistically significant) help determine whether the relationships that we observe in the sample also exist in the larger population. The Breusch Pagan Test showed homoscedasticity of the residuals (p-value <0.001). The VIF was not greater than 1.2, indicating that there was no significant multicollinearity between the predictor variables. Cook's distance was examined to detect any influential outliers in the data, but none were found.

5. PUBLIC SERVICES, NECESSITIES, AND HUMAN SECURITY

Quick Read:

This chapter examines the state of service delivery and the availability of necessities across Ukraine with the aim of identifying what demographic groups in what regions have the greatest need of what support. The findings assert that **older age groups, low income groups, and those living in rural areas are more vulnerable** when it comes to access to services, access to basic necessities, and health security. Respondents in frontline oblasts like Mykolaiv, Kharkiv, and Zaporizhzhia as well as those in rural areas, and low-income and older age groups report that air raid shelters are a scarce necessity. On the other hand, in Dnipropetrovsk and Mykolaiv oblasts as well as for low-income respondents, access to clean water has raised a bigger need. Access to specialised medical care is relatively lower for rural residents, while the affordability of medicine is lower among older age and low-income groups, undermining their health security. The findings also show that **access to communication and information, especially to digital channels is high**. This creates more room for strategic communication as well as information dissemination when it comes to civic resistance and humanitarian efforts. Notably, findings also reveal that **school attendance across all regions continues to be high despite all the adversities caused by Russia's full-scale invasion**. However, the mode of education varies across macro-regions with offline and blended learning being the most common in the west, while the online mode being more prevalent in severely affected and partly occupied oblasts. Education is important for Ukraine's future human capital and for recovery efforts, but investments should ensure that online education is of high quality.

5.1. PROVISION OF PUBLIC SERVICES

SHARP measured usage and efficient provision of various services ranging from public transport to administrative services, and health care to welfare services. According to the SHARP random sample data public transport is the most used service, followed by healthcare (Figure 21). However, in certain regions, such as Cherkasy (3.4), Chernihiv (3.5), Mykolaiv (3.6), and Zakarpattia (3.6) oblasts, its usage is comparatively lower than the national av-

erage (5.0). This could be due to various reasons that could link to urbanity, reliability, and availability.

Figure 22 illustrates the correlation between usage of a particular service and satisfaction with the effective provision of that service. Overall, the correlations between experience of services and user satisfaction are not strong. This shows that positive experience with the service is not the only factor that influences respondents' satisfaction with that service; other factors could be at play, such as vicarious experiences, the influence of media, low expectations from service providers due to the war, and high trust in the institutions providing the service.

Figure 21

USAGE OF PUBLIC SERVICES (SHARP 2022, RANDOM SAMPLE, N=4,327)

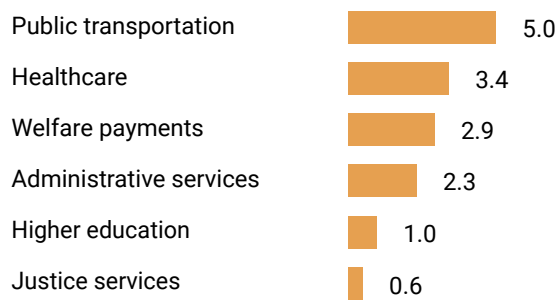


Figure 22

CORRELATION BETWEEN USAGE AND SATISFACTION WITH PUBLIC SERVICES (SHARP 2022, RANDOM SAMPLE, N=4,327)

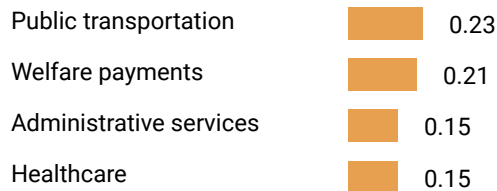
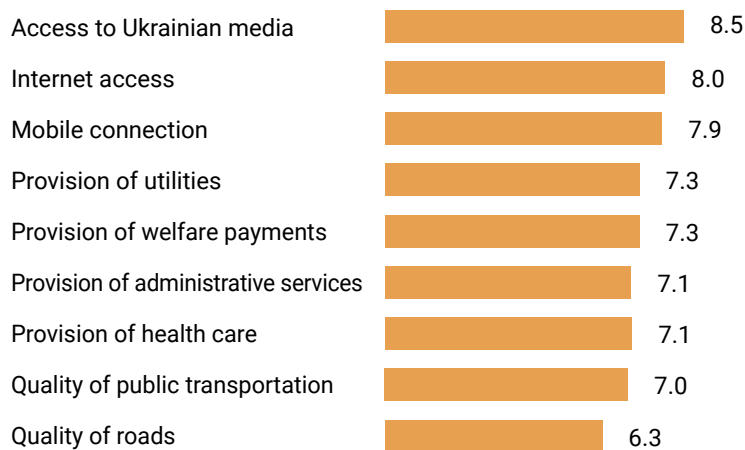


Figure 23

PROVISION OF PUBLIC SERVICES (SHARP 2022, RANDOM SAMPLE, N=4,327)



The level of satisfaction with various public services among the SHARP random sample is quite high, with the lowest score being 6.3 out of 10 for the quality of roads (Figure 23). The services considered to be most efficient are *Access to Ukrainian Media, the Internet, and Mobile Connections*, which all provide access to information and communication resources. This presents an opportunity for strategic communication, bolstering morale, disseminating useful information to address security concerns (such as access to air raid shelters and evacuation routes) and humanitarian needs (including invincibility points, water points, and food delivery), as well as promoting social cooperation and building networks for common action.

There are notable differences in media consumption patterns among age groups. According to the SHARP random sample, older age groups have lower *Access to Ukrainian media*, though it still remains high at 8.0 out of 10, compared to the 18–35 age group with a score of 8.9.³² Given that older age groups rely on mainstream media like TV and radio more frequently, their access is affected more by the conditions of war than that of the younger age groups, who use the Internet and social media more.³³

Mobile Connectivity is high for all demographic groups; however, there are notable differences as well. Low-income (7.6) and rural (7.4) respondents report a relatively lower level of degree of mobile connectivity compared to high-income (8.4) and urban (7.9 for small towns and 8.3 for large cities) respondents. Consequently, rural areas could benefit from improved mobile coverage, while low-income groups may benefit from special mobile plans.

5.2. AVAILABILITY OF BASIC NECESSITIES

In addition to service provision, SHARP also assessed the availability of necessities ranging from absent to abundant (Table 07). Among the necessities measured, availability of air raid shelters is the lowest, followed by childcare. The frontline oblasts that require air raid shelters the most, Mykolaiv (2.7), Kharkiv (3.3), and Zaporizhzhia (3.2) oblasts reported the lowest levels of availability.³⁴

Respondents residing in rural areas reported significantly lower incidents of hearing or witnessing actual fighting or shelling, with a score of 3.6 compared to their urban counterparts' score of 6.1. This discovery implies that rural areas may be considered as a more desirable option for relocation, displacement, or evacuation from more hazardous regions. However, it is crucial to acknowledge that the rural respondents have lower access to necessities, including air raid shelters, as highlighted in Table 6 before making any decisions.

32. The differences are statistically significant (p -value=0.000, ANOVA) and of moderate size (Cohen's $d = 0.45$).

33. Опора, 'Медіаспоживання українців в умовах повномасштабної війни. Опитування ОПОРИ,' [Media Consumption of Ukrainian During Full-Scale War. Opora's Survey], Survey conducted by Kyiv International Institute of Sociology and commissioned by Opora, May 3-26, 2022, https://oporaua.org/report/polit_ad/24068-medias-pozhivannia-ukrayintsiv-v-umovakh-povnomasshtabnoyi-viini-opituvannia-opori.

34. The oblasts with the largest difference in scores for the availability of necessities show large Cohen's $d = .83$, ANOVA, p -value=0.000.

As an alternative, small towns may also be deemed suitable, as they report a score of 4.0 for exposure to fighting or shelling incidents, which is marginally higher than that of rural areas. Moreover, local residents' assessment indicates that the availability of necessities in small towns is comparable to that of large cities. Hence, this option may also be explored when developing relocation or evacuation plans. These findings represent the general picture on average, as such the absorption capacity of each single community should also be taken into account.

Low-income groups reported lower scores on the availability of necessities, except for housing, compared to high-income groups, including air raid shelters. Meanwhile, older age groups reported lower availability of necessities such as food, medicine, and air raid shelters. This is likely to be due to purchasing power, reduced mobility, and digital skills of lower income and older age groups. As such, efforts aimed at improving human security, especially on the personal physical security dimension should be carefully tailored to include older age groups. It should be noted that lower income

Table 7

AVAILABILITY OF NECESSITIES BY AGE, INCOME, AND TYPE OF SETTLEMENT (SHARP 2022, RANDOM SAMPLE, N=4,327)

	National mean	Age			Income				Type of settlement			
		18-35	36-59	60+	Money for expensive goods	Money for clothes	Money for food	No money for food	Large city (500K+)	Large town or city (50K-500K)	Small town (Less than 50K)	Village - Rural
Food	7.2	7.6	7.1	6.8	7.9	7.3	7.0	6.4	7.5	7.3	7.1	6.7
Housing	6.5	6.7	6.5	6.3	6.9	6.6	6.3	6.2	6.6	6.4	6.3	6.5
Medicine	6.5	6.9	6.5	6.0	7.1	6.7	6.2	5.7	7.1	6.9	6.6	5.0
Cash to withdraw	6.2	6.6	6.2	5.9	7.1	6.5	5.9	5.4	7.0	6.9	6.6	4.3
Fuel	6.0	6.3	6.0	5.8	6.8	6.1	5.8	5.3	6.4	6.5	6.1	4.9
Childcare	5.3	5.7	5.3	4.9	5.8	5.6	5.0	4.7	5.2	5.6	5.4	4.8
Air raid shelters	3.9	4.4	3.9	3.4	4.7	4.2	3.6	3.2	4.0	4.4	4.1	3.0

Note: The shaded cells represent the groups that have distinct scores for the specific measurement in the row, as compared to one or more other groups, with a significant difference (p-value of 0.000) of at least moderate effect size (Cohen's $d > 0.40$).

is often associated with older age, though not always: there is a negative association of moderate size between age and income groups.³⁵

Undoubtedly, access to education is a basic necessity and maintaining access to quality education during wartime is vital to Ukraine’s human capital, resilience, and recovery efforts. A majority of respondents in the SHARP random sample with school-aged children reported that their children attend school. Although we do not precisely know how regularly children attend school, non-attendance is very low at 5%. Additionally, the differences in non-attendance rates between macro-regions are small.³⁶ These findings indicate that children in Ukraine are attending school even if their macro-region is severely affected by Russian military aggression. The table below reports the percentages across different macro-regions when it comes to school attendance, while the figure presents this data in terms of scores over 10 on heatmaps where attendance patterns can be observed more visually.

Table 8

ACCESS TO SCHOOLS (SHARP 2022, SUBSAMPLE OF RESPONDENTS WITH CHILDREN OF SCHOOL AGE, N=985)

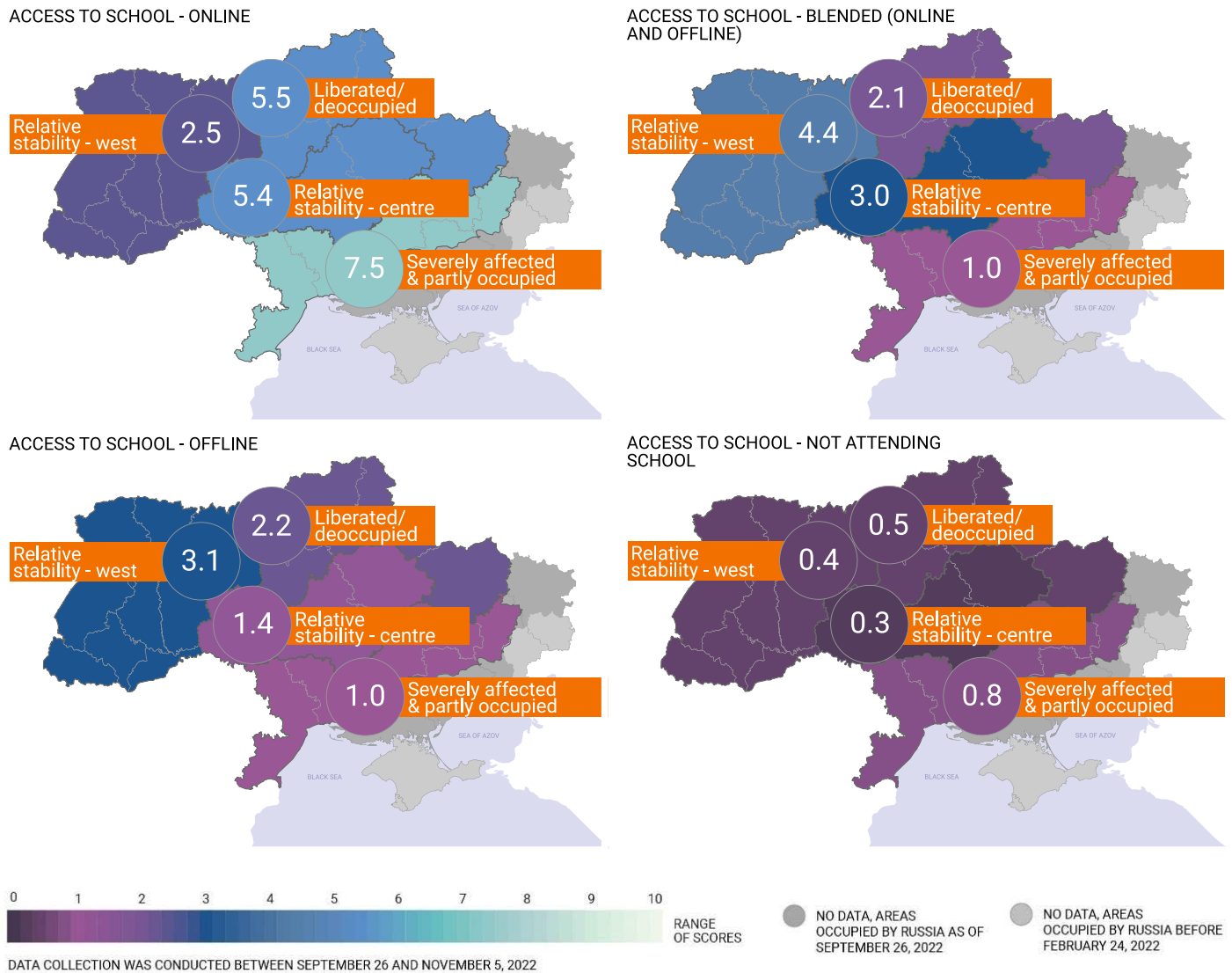
		Total	Severely affected & partly occupied	Liberated/ de-occupied	Relative stability – centre	Relative stability – west
Online	Yes	50%	75%	55%	54%	25%
	No	50%	25%	45%	46%	75%
Blended	Yes	27%	10%	21%	30%	44%
	No	73%	90%	79%	70%	56%
Offline	Yes	20%	10%	22%	14%	31%
	No	80%	90%	78%	86%	69%
Not attending	Yes	5%	8%	5%	3%	4%
	No	95%	92%	95%	97%	96%

35. Kendall’s tau-c = -0.28, p-value=0.000

36. The highest difference for non-attendance of schools is between Relative Stability-West and Severely Affected/Partly Occupied macro-regions of small value of Cohen’s d, 0.19, p-value < 0.05.

Figure 24

ACCESS TO SCHOOLS (SHARP 2022, SUBSAMPLE OF RESPONDENTS WITH CHILDREN OF SCHOOL AGE, N=985)



However, there are differences in the mode of instruction used in schools across different macro-regions.³⁷ Offline and Blended learning are the most popular modes of instruction in the west, where there is relative stability in the oblasts. In contrast, Online learning is more prevalent in severely affected and partly occupied oblasts. Thus, providing stable and affordable internet connectivity to ensure school attendance is maintained is essential. It is also important to ensure that digital curricula and supportive content in severely affected and partly occupied areas is high quality and easily accessible. Although online education is not a substitute for offline education in terms of children’s and adolescents’ development, the fact that school attendance is continuing even in severely affected and partly occupied areas is still a positive finding in terms of Ukraine’s future human capital pros-

37. The macro-regional differences are statistically significant (p-value = 0.000, ANOVA) and of at least moderate level (Cohen’s d > 0.40) between at least two macro-regions.

pects. Besides, investments in the safety of school premises may be more beneficial for children in relatively stable areas where the instructions are conducted offline at least in part.

5.3. HUMAN SECURITY

Access to clean water is one of dimensions of human security. While the national score for *Access to Clean Water* is relatively high at 6.7 out of 10, it is significantly lower in Mykolaiv (5.4) and Dnipropetrovsk (5.5) oblasts, indicating a dire need for support in these regions.³⁸ Similar to access to other services and necessities, the lowest income groups report lower scores (5.6) on *Access to Clean Water* compared to highest income groups, (7.4).³⁹ Therefore, low-income groups would benefit the most from improved access to clean water or assistance in repairing damaged water delivery infrastructure.

Another key human security dimension measured by the SHARP study was *Health Security*. Similar to the vulnerabilities diagnosed for access to services and necessities, analysis shows that health security is also lower among older age, low-income, and rural residents (Table 09). Thus, the *Accessible Medicine* programme could be updated and further tailored to the needs of older and low-income groups. Meanwhile, *Access to Specialised Medical Services* is a more acute concern for rural residents.

Table 9

HEALTH SECURITY BY AGE, INCOME, & TYPE OF SETTLEMENT (SHARP 2022, RANDOM SAMPLE, N=4,327)

	National score	Age			Income				Type of settlement			
		18–35	36–59	60+	No money for food	Money for food	Money for clothes	Money for expensive goods	Large city (500K+)	Large town or city (50K–500K)	Small town (Less than 50K)	Village – Rural
Access to basic and emergency medical services	6.9	7.6	6.9	6.3	5.8	6.5	7.3	8.0	7.3	7.3	7.0	6.0
Buying necessary medicine is not a problem	6.6	7.5	6.5	5.9	4.6	5.9	7.3	8.4	6.9	6.8	6.7	5.9
Access to specialised medical services	5.3	5.9	5.3	4.8	4.0	5.0	5.7	6.7	6.3	5.9	4.8	4.2

Note: The shaded cells represent the groups that exhibit the association with specific measurement in the row of a moderate statistically significant size (Kendall's tau-c >= 0.20, p-value= 0.000).

38. The Cohen's d for the oblasts with the lowest score (Mykolaiv oblast, 5.4) and the highest one (Sumy oblast, 8.1) is 0.90 or large, p-value is 0.000.

39. Cohen's d for No money for food and Money for expensive goods groups is 0.52 (moderate), p-value is 0.000, ANOVA.

6. THE FUTURE VISION AND DIRECTION FOR UKRAINE

Quick Read:

This chapter examines the future vision of Ukraine in terms of its external relations and future direction, especially when it comes to EU and NATO orientations. **Notably, the analysis presented confirms that differences concerning Ukraine's membership in the EU and NATO has significantly decreased compared to 2021.** As such, the SHARP study clearly demonstrates that there is now strong unity across income and age groups as well as across macro-regions, which are expressing strong support for both EU and NATO accession. There were significant differences between macro-regions, age, and income groups in 2021 regarding Ukraine's EU and NATO membership. In 2022, support for EU is as high as 92% and for NATO is 88% nationally. The adverse experiences related to the Russian full-scale military aggression further reinforce the desire for NATO especially among those who were previously sceptical. Tangible economic benefits from joining the EU and NATO (utilitarian motives) are not among the driving forces for support for the EU and NATO in the face of Russia's full-scale invasion, where other security and ideological motives may have become more prominent drivers of support as well as the belief that the authorities are steering Ukraine in the right direction.

The consensus regarding Ukraine's national orientation towards the Western world is stronger than ever. According to the SCORE 2021 data, there was a notable preference for EU membership, with a score of 5.9 out of 10. Also in 2021, the support for NATO was at 5.3 and the support for a non-aligned status was 4.9 while for the Eurasian Economic Union (EEU) with Russia, Belarus, Armenia, Kyrgyzstan, and Kazakhstan it was remarkably low at 2.5 out of 10.⁴⁰ The results from the SHARP 2022 random sample illustrate that those who opted for non-aligned status diminished and those who supported the EEU almost disappeared. In 2022, the support for EU and NATO membership scores not only increased, but also converged, rising to 8.6 and 8.4 respectively. Whereas the endorsement for non-aligned

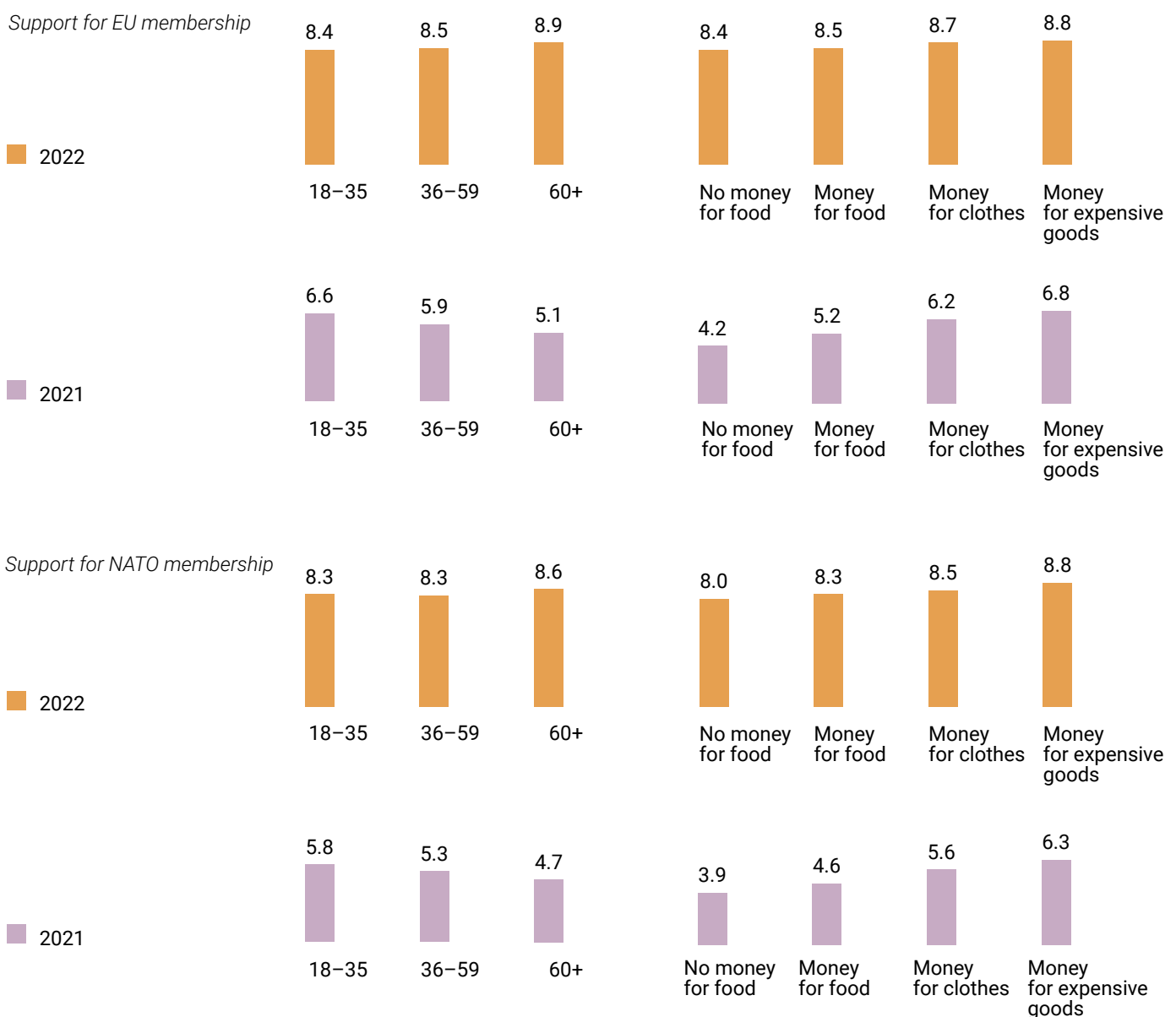
40. Ruslan Minich, Nestor Cheryba, and Dr Ilke Dagli-Hustings, 'Ukrainian Expectations from European Integration: Based on SCORE 2021 Ukraine,' SeeD, February 2022, p.20, https://api.scoreforpeace.org/storage/pdfs/PB_UKRTCA20_Support-for-EU.pdf.

status and more notably, the support for EEU is much lower with the scores of 3.4 and 0.6 respectively.

The previous disparities among various age and income groups, as well as macro-regions, have considerably diminished, promoting a strong sense of solidarity regarding Ukraine’s future vision. Notably, the difference in support between the 18–35 and 60+ age groups in the SCORE 2021 random sample was 1.5 for EU support and 1.1 for NATO. This difference has reduced to 0.6 and 0.4 respectively in the SHARP 2022 random sample (Figure 25)⁴¹ Similarly,

Figure 25

FUTURE VISION BY AGE AND INCOME GROUPS: SCORE 2021 (N=12,482) V SHARP 2022 (N=4,327)



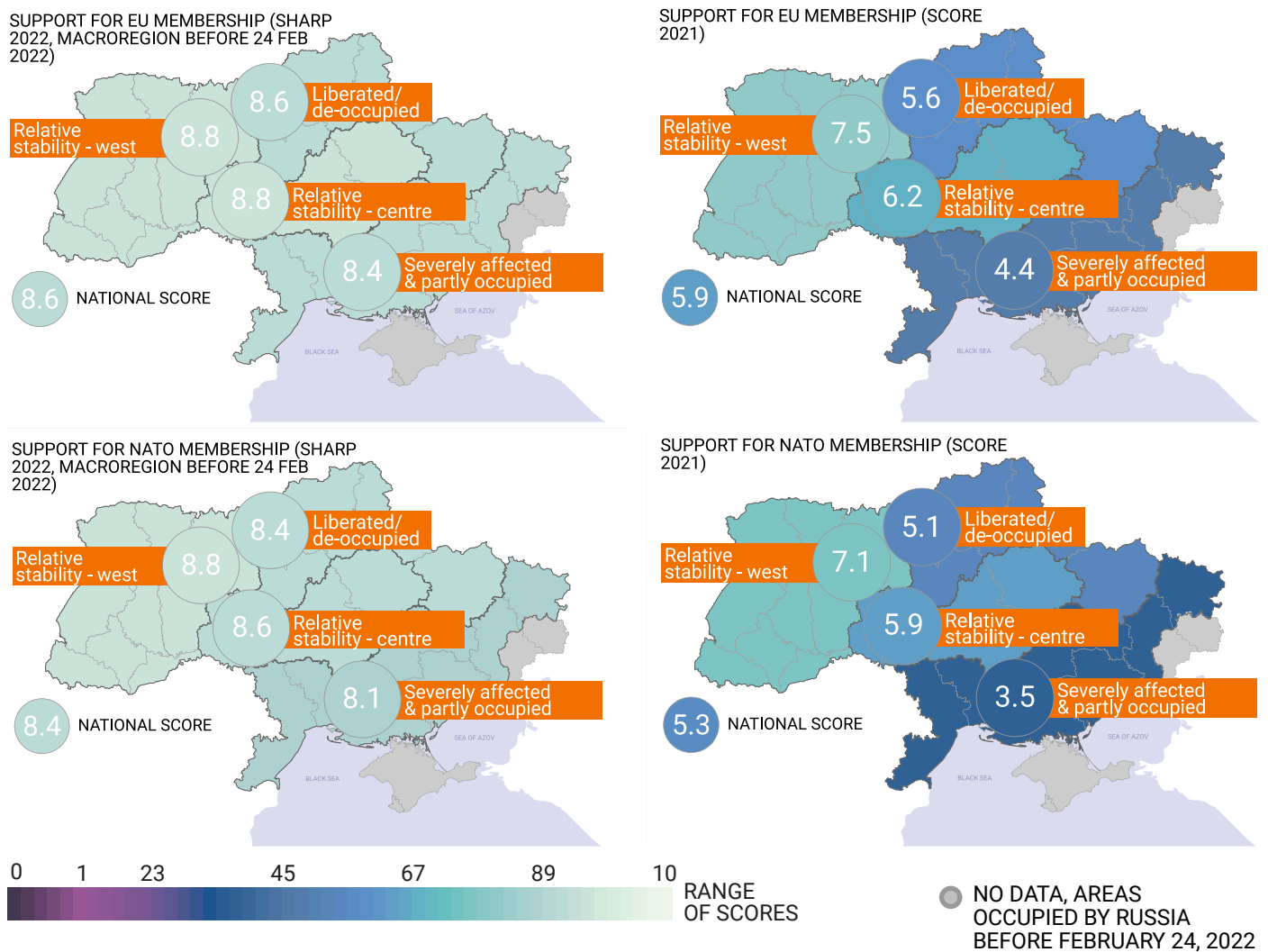
41. The Cohen’s d between 18–35 and 60+ age groups for the support for EU was 0.42 (moderate) and for the NATO – 0.29 (small). It reduced to 0.26 (small) and 0.15 (negligible) in 2022. The p-value is 0.001.

the differences between higher and lower income individuals have declined from 2.6 in 2021 to 0.3 in 2022 for EU support, and from 2.5 to 0.8 for NATO.⁴²

Moreover, the discrepancies in future vision among macro-regions have also lessened in 2022 in comparison to 2021. To ensure the comparability between the SHARP 2022 and SCORE 2021 data, we utilised the SHARP's distribution of oblasts between macro-regionst and considered the macro-region of residency before February 24, 2022. The most prominent differences were observed between the Relative Stability-West and Severely Affected/Partly Occupied macro-regions, which have declined from a 3.1 difference in 2021 to 0.4 in 2022 for EU support and from 3.6 to 0.7 for NATO, as demonstrated in the Maps.⁴³

Figure 26

FUTURE VISION BY MACRO-REGION: SCORE 2021 (N=12,482) V SHARP 2022 (N=4,327)



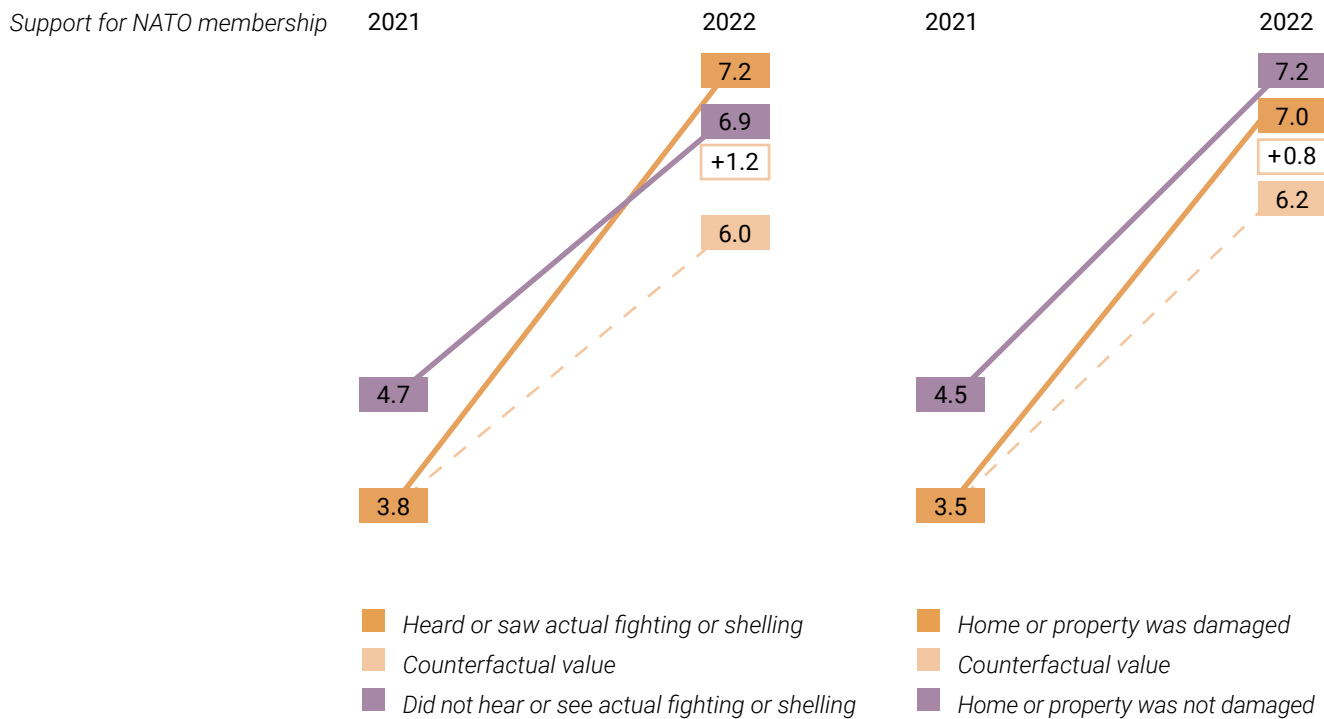
42. The Cohen's d between respondents with money for expensive goods and those with no money for food for the support for EU was 0.45 (moderate) and for the NATO – 0.47 (moderate). It reduced to 0.13 (negligible) and 0.22 (small) in 2022. The p-value is 0.001.

43. The Cohen's d between Relative Stability – West and Severely Affected / Partly Occupied macro-regions (those with the most difference) for the support for EU was 0.93 (large) and for the NATO – 1.06 (large) in 2021 (SCORE 2021). It reduced to 0.19 (small) and 0.17 (small) in 2022 (SHARP 2022, random sample). The p-value is 0.001.

Experiences of war-related adversities also influenced the views on NATO membership positively. The macro-regions most affected by Russia’s full-scale invasion, which used to be the most sceptical about NATO prior to the full-scale invasion, experienced the biggest increase in support for NATO. The SHARP panel data showed that respondents who witnessed actual fighting or shelling, as well as those whose homes or property were damaged due to Russia’s military actions, experienced a significantly stronger increase in support for NATO compared to the expected change if they had not had such experiences (Figure 27).⁴⁴ This further adds to the unity around direction towards NATO and that Russian aggression is reinforcing Ukrainians’ desires for a stronger security alliance with the West.

Figure 27

EFFECT OF WAR-RELATED ADVERSITIES ON SUPPORT FOR NATO (SHARP 2022, PANEL SAMPLE, N=495)



44. Here the methodology of treatment effect analysis (or difference-in-difference - DiD) was applied to the SHARP panel data. The DiD method involves estimating the difference in outcomes between the treatment and control groups both before and after the intervention. The treatment effect is then estimated by comparing the difference in changes in outcomes over time between the treatment and control groups. The key inference underlying the DiD method is that in the absence of the treatment, the trends for outcome changes over time would have been the same in the treatment and control groups. This is known as the counterfactual, which refers to what would have happened without the treatment or intervention. Model itself represents a linear model with predictors as time points (2021 and 2022 in our case), variables with control and treatment group (were assigned retrospectively), and the interaction of the two predictors as a separate predictor. In panel data DiD models, we include individual-specific fixed effects to account for time-invariant differences between individuals. These fixed effects help control for unobserved factors at the individual level, enabling us to isolate the treatment effect by focusing on differential changes within individuals over time. Only statistically significant interactions (p-value <0.05) were presented in the study, which suggested the presence of treatment effect over the time. The DiD method is also used in Chapter 3, please refer to that chapter for more guidance on how to interpret this analysis.

Within the SHARP 2022 random sample, the strongest indicators that correlate with support for the EU and NATO are *Trust in the Ukrainian Army*, *Trust in Central Institutions*, and *Authorities Care*.⁴⁵ The findings suggest that the respondents may perceive EU and NATO membership as instruments of national security and defence against Russian aggression. All in all, there is a strong alignment between citizens' future vision and authorities' geopolitical direction for Ukraine. Furthermore, the weak correlations with income (.06 and .09 for EU and NATO, respectively) and the small differences among income groups (Figure 25) suggest that tangible economic benefits from joining the EU and NATO (utilitarian motives) are not among the driving forces for support for the EU and NATO in the face of Russia's full-scale invasion.

45. Ukrainian Army: Pearson's $r = .33$ for EU and $.34$, for NATO, central institutions: Pearson's $r = .24$ for EU and $.23$, for NATO, and Authorities care: $.23$ for and $.22$ for NATO.

7. METHODOLOGY

7.1. DATA COLLECTION & SAMPLE DESIGN

SHARP Wave 1 was funded by PFRU and implemented in partnership with SeeD, DG-East, TCA, and UNDP (see About Partners section for more details). The first phase of the SHARP study comprised two different sampling techniques, namely: purposive panel sampling and nationwide random sampling. Data was collected through structured and quantitative computer-assisted telephone interviewing (CATI). The fieldwork for this phase was conducted by the Kyiv International Institute of Sociology (KIIS) between September 23rd and October 5th, 2022 for the panel sample, and September 26th to November 5th, 2022, for the main random sample.

The SHARP study's **nationwide random sample** (N = 4,327) is spread across all oblasts and is representative of the adult population as of 2021, according to data from the State Statistics Service of Ukraine.⁴⁶ To account for the volatility of displacement patterns following Russia's escalation of the war against Ukraine on February 24, 2022, the sample was constructed using the question about the respondents' place of residence before that date. The use of probabilistic sampling and a large sample size should ensure that the SHARP random sample reflects the perceptions of a larger population in Ukraine. To address the effects of displacement abroad on demographic structure (such as age and gender), ranges were used instead of prescriptive quotas for added flexibility. Additionally, a specific reduced coefficient (0.3) was applied for the volume of the oblast quota for Donetsk, Luhansk, and Kherson oblasts, as a significant proportion of these areas were under occupation and experiencing hostilities during the survey period, making it challenging to reach relevant respondents. These oblasts are excluded from the analysis at the level of oblasts due to small sample size. However, they are included for the analysis at the national or macro-regional level. Only the areas controlled by Ukraine as of the time of data collection were included in the survey.

46. The oblast with the largest unweighted sample size is Dnipropetrovsk oblast (442 respondents), the smallest ones are Mykolaiv (110), Donetsk (39), Kherson (2), Luhansk (1) oblasts. The last three oblasts are excluded from the analysis on the oblast level because of insufficient sample size to extrapolate the results to a large population in the oblasts. They are considered in the analysis on the national and macro-regional level.

The **SHARP panel sample** (N=495) consists of SCORE respondents surveyed in 2021 who consented to be contacted and provided their phone numbers.⁴⁷ For the present round of SHARP Wave 1 data collection, panel respondents from the most affected oblasts in the east, north, and south of Ukraine are specifically targeted.⁴⁸ Although the sample is not random or representative of entire Ukraine, it is useful to track the changes and their causes by referring to the very same people with the same questions over time to understand changes in perceptions, attitudes, and needs, and investigate the impact of the full-scale invasion on different oblasts and groups.

The SCORE 2021 was funded by USAID's Democratic Governance in the East programme and UNDP, and implemented in partnership with SeeD as well as USAID's Transforming Communications Activity. The **SCORE 2021 sample** is also utilised throughout the paper. Data collection for this sample was carried out from January to May 2021. The national sample consists of 12,482 face-to-face interviews (CAPI) from 24 oblasts and Kyiv city, and it is representative of the adult population of Ukraine (18 years old and above).⁴⁹ The sample excludes certain categories of the adult population and geographical areas, including the Autonomous Republic of Crimea, Sevastopol city, and non-government-controlled areas of Donetsk and Luhansk oblasts.

47. For more information, see app.scoreforpeace.org

48. The list of oblasts in the panel sample: Odesa, Mykolaiv, Dnipropetrovsk, Kherson, Zaporizhzhia, Donetsk, Luhansk, Kharkiv, Sumy, Chernihiv, Kyiv, Zhytomyr oblasts and Kyiv city.

49. The largest oblast was Donetsk oblast (2,358 respondents), the smallest one was Chernivtsi oblast (180).

Table 10

SHARP 2022'S AND SCORE 2021'S RANDOM SAMPLE SIZES BY OBLAST

		SCORE 2021	SHARP nationwide random sample Residence prior to 24 Feb 2022.	
		Count	Weighted	Unweighted
Relative stability – West	Zhytomyr oblast	250	142	151
	Rivne oblast	220	126	137
	Volyn oblast	210	113	125
	Khmelnyskyi oblast	246	157	163
	Ivano-Frankivsk oblast	235	165	175
	Lviv oblast	488	323	335
	Ternopil oblast	222	120	133
	Zakarpattia oblast	241	148	154
	Chernivtsi oblast	180	101	114
	Subtotal	2,292	1,395	1,487
Relative stability – Centre	Cherkasy oblast	264	168	164
	Poltava oblast	302	180	193
	Kirovohrad oblast	203	132	125
	Vinnytsia oblast	328	207	215
	Subtotal	1,097	687	697
Liberated/ Deoccupied	Kyiv City	648	380	371
	Kyiv oblast	388	238	239
	Chernihiv oblast	205	104	120
	Kharkiv oblast	559	221	250
	Sumy oblast	238	116	132
	Subtotal	2,038	1,059	1,112
Severely affected and partly occupied	Donetsk oblast	2,358	126	39
	Dnipropetrovsk oblast	708	495	442
	Odesa oblast	823	292	300
	Mykolaiv oblast	594	102	110
	Luhansk oblast	1,132	4	1
	Zaporizhzhia oblast	801	159	172
	Kherson oblast	639	9	2
	Subtotal	7,055	1,187	1,066
Total	12,482	4,327	4,362	

As a result of the differences in data collection methods (CATI for SHARP and CAPI for SCORE) and the varying scope of areas occupied by Russia, we refrain from making direct comparisons of scores between SCORE 2021

and SHARP 2022. However, we are able to compare patterns. For instance, we observe that the difference in support for the EU between age groups is much less pronounced among SHARP 2022 random sample respondents than among SCORE 2021 respondents. Additionally, as the majority of questions are the same, we can track changes using the panel sample.

7.2. OBLASTS AND MACRO-REGIONS

The lowest unit of analysis in this study is the oblast. To account for the volatility of displacement patterns following Russia's escalation of the war against Ukraine to a full-scale degree on February 24, 2022, the sample was built using the respondents' place of residence before that date, as the reference statistics applied is from 2021. However, the scores for oblasts reflect the opinions during the data collection, based on the question about the current oblast of residence. To ensure comparability with the SCORE 2021 data, in some cases, we refer to pre-February 24 scores for oblasts or macro-regions. While we refrain from making direct score comparisons, we can compare patterns (as outlined above).

Due to the small number of unweighted respondents who resided in Donetsk (39 cases), Luhansk (1), and Kherson (2) oblasts, they are excluded from the oblast-level analysis. However, for other analyses and comparison between demographic groups and macro-regions, all the cases are kept.

The term 'macro-region' refers to a grouping of oblasts which enable a more granular analysis due to the bigger sample size than in the case of a single oblast. For instance, we can compare the scores of IDPs and stayers for each macro-region separately, something that would be not possible on the oblast level due to a small sample size. Our grouping of oblasts in macro-regions is based on the following two criteria: the first one is a traditional geographic characteristic (north, east, south, centre, west) while the second criterion is the degree and scope of exposure of different oblasts to the Russian full-scale invasion. Therefore, for the purposes of SHARP's partners, we distinguished the following macro-regions:

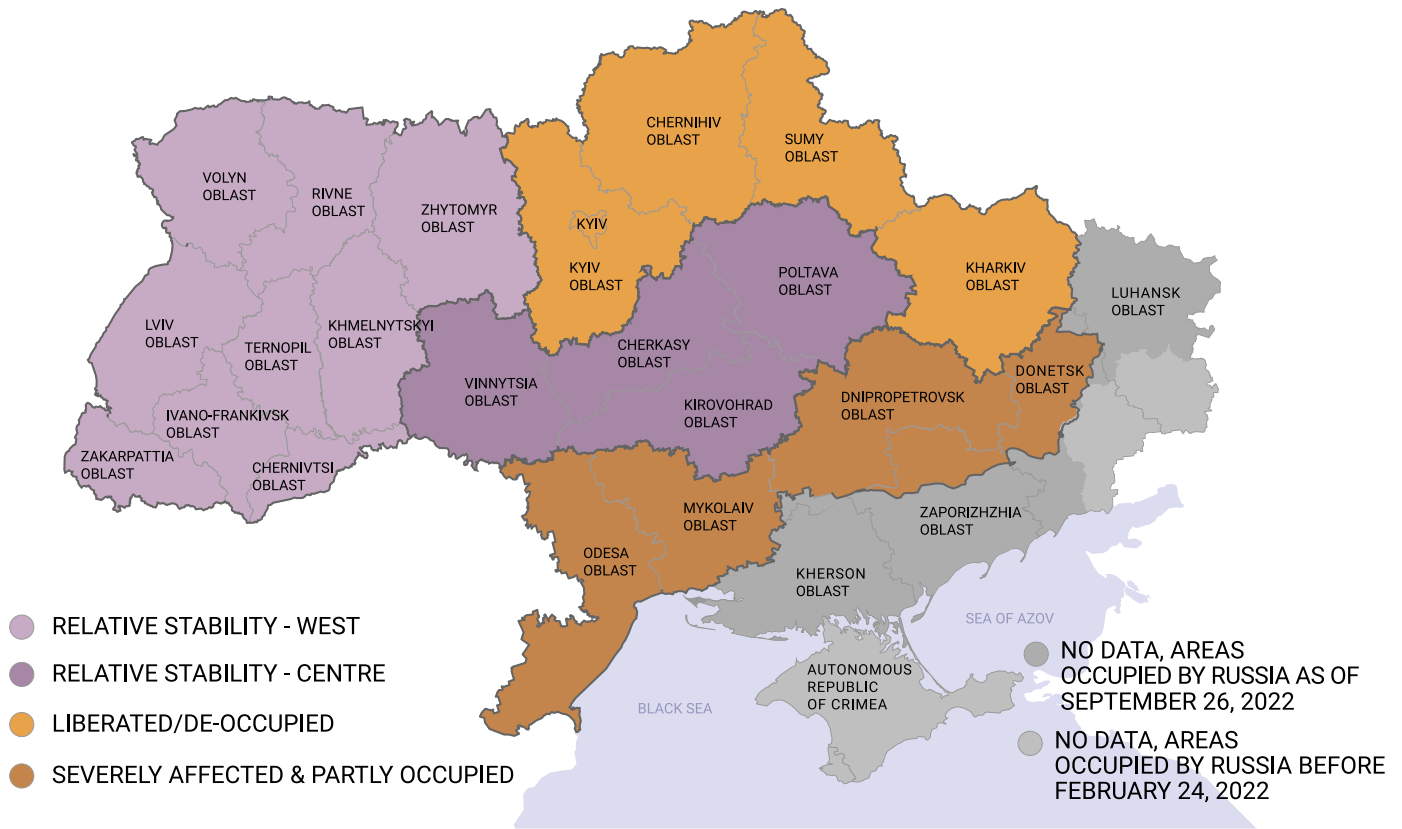
- **Severely Affected and Partly Occupied oblasts** which are mostly the ones from the east and south of Ukraine. Only the respondents who resided in the area of partly occupied oblasts that was controlled by Ukraine during the time of the survey are represented here. The severely affected oblasts refer to those that were targeted with physical attacks (shelling and ground forces) the most before and during the data collection.⁵⁰ They are close to the frontline and partly occupied oblasts. Besides, the merge of severely affected and partly occupied oblasts decreases the discrepancies in the sample size of macro-regions which should have a positive effect on the reliability of statistical tests like ANOVA (see Section on [Intergroup comparisons](#)).

50. Olha Polishchuk and Gleb Voloskyi, 'Ukraine: A Looming Escalation as the War Enters Its Second Year,' ACLED, <https://acleddata.com/conflict-watchlist-2023/ukraine/>.

OCHA, Ukraine: Situation Report, September 21, 2022, <https://reliefweb.int/report/ukraine/ukraine-situation-report-21-sep-2022-enukru>.

Figure 28

MACRO-REGIONS FOR SHARP 2022 STUDY



- **Liberated or De-occupied:** the oblasts that were largely or entirely liberated before the data collection.⁵¹ Zhytomyr oblast is rather considered as relatively stable as the great majority of its territory was not occupied. Also, Ukraine liberated the majority of Kharkiv oblast in September 2022.⁵² The part of Mykolaiv oblast that was occupied by Russia and liberated by Ukraine is considered as severely affected as it geographically borders with these oblasts. It should be noted that the liberated oblasts, especially Sumy and Kharkiv oblasts, underwent frequent air and drone strikes by Russia after liberation.⁵³
- **Relative Stability – Centre.**
- **Relative Stability – West.**

The oblast is the lowest unit of analysis. Therefore, when we refer to the oblast as liberated or de-occupied, this does not imply that the entire oblast was occupied by Russia and liberated by Ukraine thereafter but rather some part of it.

51. ACLED, Ukraine Conflict Monitor, <https://acleddata.com/ukraine-conflict-monitor/>.

52. Institute for the Study of War, Russian Offensive Campaign Assessment, September 26, 2022, <https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-september-26>.

53. ACLED, Ukraine Conflict Monitor.

7.3. HOW TO READ SHARP/SCORE INDICATORS

Indicators are what we use to more accurately capture social phenomena, such as *Sense of Civic Duty*, *Social Tolerance*, *Trust in Central Institutions*, or *Civic Engagement*. Indicators are SCORE's and SHARP's building blocks. They are presented in the form of heatmaps on the SCORE/SHARP web platform, comparison tables, and used for modelling. Indicator value is **from 0 to 10**, where 0 is the absence of the phenomenon in society and 10 its maximum presence. Each indicator is measured through a range of questions, which in SeeD we call questionnaire items. The responses to each questionnaire item are added together to obtain a total score for the indicator. Multiple questionnaire items are used to look at the same phenomenon from different angles, to have a more accurate measurement of the phenomenon in society. For example, instead of asking citizens to what extent they feel civic duty, we use a scale made up of four questionnaire items which make up the *Sense of Civic Duty* indicator, covering sense of agency and civic responsibility aspects of the concept. We ask to what extent the following statements describe respondents on a Likert type scale to build the indicator after running statistical tests such as factor analysis and reliability tests:

- I believe that ordinary people like me cannot change anything in this community, even if they try.
- What happens to Ukraine in the future is not my problem. I let others worry about this kind of thing.
- I believe politics is for politicians; it is not something I can understand and contribute.
- There is no point in voting in elections; my vote would not make a difference anyway.

Each respondent receives a score for every indicator from zero to ten, depending on their answers to each of the indicator's item. Each item carries the same weight. Then we add up all scores together and divide it by the number of respondents to have one score for the indicator. All the multi-item indicators used in the SHARP have good to excellent reliability, with Cronbach's alphas ranging between 0.7 and 0.9. Sometimes, we can have single-item indicators as well, for example, *Sense of Belonging to the Country* which is measured with the question: 'People may feel different degrees of attachment to their place of living. Please tell me how attached you feel to your country.' Transforming single-item questions into scores (e.g., scales, indicators) let us compare the indicators with multiple-item indicators and then use them in modelling and analysis with multiple-item scales.

Some indicators may be composites, we sometimes call these meta-indicators or composite indicators. This means that the indicator is made-up of two or more sub-indicators, for example, the human security indicator consists of personal, political, economic, health, and environmental security. For more on SHARP/SCORE analytical tool kit, please click [here](#).

7.4. DATA ANALYSIS

7.4.1. WEIGHTS

We apply weights throughout all the analysis for the SHARP 2022 random sample. They are built upon the demographic structure of the Ukrainian population (age, gender, oblasts) according to the 2021 statistics by the State Statistics Service of Ukraine. The oblasts of the respondents' residence before February 24, 2022 are considered when creating the weights. This way we ensure that the sample reflects the large population of Ukraine on the national and oblast levels. The weights are not created for the purposive panel sample.

7.4.2. BIVARIATE MEASURES OF ASSOCIATION

To examine the direction and magnitude of an association between two indicators, Pearson correlation coefficients were calculated for continuous variables, while Kendall's tau c and Cramer's V were used for ordinal and nominal variables, respectively. All correlations mentioned in this report are statistically significant at a p-value of 0.05 or below.

7.4.3. INTERGROUP COMPARISONS

To assess whether group means are different at a statistically significant level, Analysis of Variance (ANOVA) tests were conducted. All group comparisons reported are statistically significant at a p-value of 0.05 or below. A medium effect size (0.4 or more) was used to present data for demographic group comparison, while a large effect size (0.7 or more) was used for Oblast level disaggregation to emphasise stronger differences and account for the bigger number of groups in the case of oblast comparisons. No differences among gender groups were found to be of at least moderate size which are meaningful for policy interventions.

7.4.4. MODELLING

Models help understand what affects an indicator or what this indicator influences itself. When an indicator is part of a model, we call them 'drivers', as they drive (positively or negatively) other indicators they are linked to. In a model, the indicator that all the drivers are influencing and predicting is called an 'outcome'. We run models to understand how best to create positive change on an outcome, such as civic resistance or trust in institutions.

In predictive analyses, **linear regressions** and **binary logistic regressions** were used. For both models, assumptions were checked to ensure that the model was valid and reliable. Linearity assumption⁵⁴ ensures that there is a linear relationship between the predictor and the outcome variable, independence assumption ensures that the residuals are not correlated with each other, absence of influential outliers ensures that the influential points are not driving the regression coefficients, absence of multicollinearity (VIF – variance inflation

54. In logistic regression, the assumption of linearity means that the relationship between the explanatory variables and the outcome variable is linear when expressed in terms of the natural logarithm of the odds of the outcome variable.

factor – not greater than 1.2) ensures that the predictors are not highly correlated with each other, which can lead to unstable estimates, and sufficient sample size to ensure stable estimates.

Additionally, for linear models, homoscedasticity and normality of residuals were checked. The Breusch Pagan Test was used to check the presence of heteroscedasticity. Homoscedasticity ensures that the residuals have a constant variance across all levels of the predictor variables, which is necessary for valid inference, while normality of residuals ensures that the residuals are normally distributed, which is necessary for valid hypothesis testing.

In linear regression, adjusted R squared was used to determine the model's goodness-of-fit. Adjusted R-squared adjusts for the number of predictors in the model and provides an estimate of how much variance in the outcome variable is explained by the predictor variables in the model. Standardised beta coefficients were reported to demonstrate the magnitude and direction of each predictor variable on the outcome variable. Standardised beta coefficients denote the degree of change in the outcome variable for every 1-unit (standard deviation) of change in the predictor while controlling for the influence of all other predictors in the model. This allows for easier comparison of the magnitude of the effect of different predictor variables on the outcome variable.

In logistic regression, McFadden's Pseudo R-squared was used instead of R-squared to assess the goodness of fit of the model; values of 0.2 (20%) or higher indicate good fit.⁵⁵ To interpret the effect of predictor variables on the outcome variable odds ratios were used. An odds ratio greater than 1 indicates that the odds of the outcome occurring are higher for the first group, while an odds ratio less than 1 indicates that the odds are higher for the second group.

7.4.5. FACTOR AND CLUSTER ANALYSIS

In this study, a cluster analysis was carried out to investigate the elements of social cohesion in Ukraine. To identify the number of dimensions of social cohesion, we performed an exploratory factor analysis using principal component analysis, varimax rotation with Kaiser normalisation on the predefined indicators. The extracted factors are weakly correlated (from 0.12 to 0.22). The number of factors was determined based on Eigenvalues greater than or equal to 1, and loadings of 0.6 or greater were considered for factor interpretation. We also considered the theoretical frameworks in defining the indicators in each dimension. The clustering was conducted on four dimensions of social cohesion extracted with the factor analysis, namely: **Identification, Confidence in Political Institutions and Figures, Orientation for Common Good, and Actions for Common Good.**

55. G. A. J. Hemmert, L. M. Schons, J. Wieseke, and H. Schimmelpfennig, 'Log-likelihood-based Pseudo-R2 in Logistic Regression: Deriving Sample-sensitive Benchmarks,' *Sociological Methods & Research* 47, no. 3 (2018): 507–531, <https://doi.org/10.1177/0049124116638107>.

A hierarchical cluster algorithm was used, and a two-cluster solution was selected based on the majority rule for cluster selection. This combination was found to have the best Dunn Index (0.07), Silhouette (0.44), and Connectivity measures (56.9).

The cluster solution proposed by the clustering algorithm was compared to a range of 2 to 8 clusters using several algorithms, including hierarchical, k-means, PAM, or AGNES. Based on the results, the two-cluster solution was chosen as the most suitable for this study.

7.4.6. DIFFERENCE-IN-DIFFERENCE OR TREATMENT EFFECT ANALYSIS

Difference in differences modelling is used in a variety of disciplines to estimate the effect of an intervention by comparing the changes in outcomes over time between a population that was exposed to an intervention and a population that was not.⁵⁶

Linear regressions with interaction terms were used in the present study, in order to understand the effect of time and an 'exposure' variable (e.g. Experience of Displacement) on other outcome indicators (e.g. Civic Engagement) in the longitudinal panel data. In panel data DiD models, we include individual-specific fixed effects to account for time-invariant differences between individuals. These fixed effects help control for unobserved factors at the individual level, enabling us to isolate the treatment effect by focusing on differential changes within individuals over time. Significant interaction coefficients ($p < 0.05$) were interpreted further. The DiD models were used as quasi-experimental designs where the control and treatment groups were assigned retrospectively.

The Difference-in-Differences (DiD) method is based on the assumption that if there had been no treatment, the outcome for the treatment group would have followed the same trend as the control group over time (known as the parallel trends assumption). This assumption forms the counterfactual scenario which represents what would have happened to the treatment group in the absence of the intervention. It is essential that the trend of the outcome variable does not significantly differ between the treatment and control groups, except for the effect of the treatment itself. Although the counterfactual scenario need not be identical for both groups, any deviation from the expected trend in changes in the outcome for the treatment group can be attributed to the effect of the treatment.

This method was applied the study the effect of war-related adversities as well as the effect of participation in various forms of civic resistance on the elements of social cohesion. The exposure to adversities and participation in civic resistance are considered as treatments, respectively.

56. Columbia Public Health, 'Difference-in-Difference Estimation,' 2019, available at: <https://www.publichealth.columbia.edu/research/population-health-methods/difference-difference-estimation>, accessed: February 14, 2023.

ScienceDirect, 'Difference-In-Differences,' available at: <https://www.sciencedirect.com/topics/economics-econometrics-and-finance/difference-in-differences>, accessed: February 14, 2023.

ABOUT PARTNERS

Centre for Sustainable Peace and Democratic Development (SeeD) works with international development organisations, governments, and civil society leaders to design and implement evidence-based, people-centred strategies for the development of peaceful, inclusive, and sustainable societies. Working in Europe, the Middle East, Africa, and Asia, SeeD provides policy advice for social transformation that is based on citizen engagement strategies and empirical understanding of the behaviour of individuals, groups, and communities. The SeeD approach focusses on understanding the root causes of social problems by developing and empirically testing a science-based theory of change.

The Partnership Fund for a Resilient Ukraine (PFRU) unites the Government of Ukraine with its closest international government partners to deliver projects in liberated, frontline and, where possible, occupied areas that strengthen Ukraine's resilience against Russia's war of aggression. In partnership with its financing partners, the Government of Ukraine governs PFRU's political, strategic, and technical direction. By bringing together the Government of Ukraine's and its allies' influence and expertise, PFRU seeks to deliver essential and immediate support and rally behind the Ukrainian people.

Democratic Governance East Activity (DG East) is an 8-year programme of The United States Agency for International Development (USAID). DG East works with civil society, local government entities, and independent media outlets in and from eastern and southern Ukraine to strengthen the connection and trust between citizens and their government. The overall objectives of DG East are to 1) support greater acceptance of a shared civic culture based on common values and understanding; and 2) promote participation to improve Ukraine's governance, reform processes, and help resolve community problems. The programme addresses immediate war-response needs, promotes good governance, and strengthens an inclusive civic identity.

USAID's Transformation Communications Activity (TCA) is a six-year activity of the United States Agency for International Development (USAID), which

aims to strengthen Ukrainian democracy through comprehensive research, innovative communication initiatives, and the creation of socially meaningful content.

The United Nations Development Programme (UNDP) supports strategic capacity development initiatives to promote inclusive growth and sustainable human development. Through partnerships with national, regional, and local governments, civil society, and the private sector, UNDP strives to support Ukraine in its efforts to eliminate poverty, develop the population's capacity, achieve equitable results, sustain the environment, and advance democratic governance. The United Nations Recovery and Peacebuilding Programme (UN RPP), an integral part of UNDP in Ukraine, supports the economic recovery of war-torn communities, further accelerates decentralisation and health-care reforms in these regions, and strengthens community security and social cohesion in target communities. Although the UN RPP was initially designed to respond to and mitigate the causes and effects of the armed conflict in east of Ukraine, after the large-scale Russian invasion began on 24 February 2022, the Programme expanded its activities to the most war-affected oblasts of Ukraine, located primarily in the east and south of the country.

GLOSSARY

Access to clean water	The extent to which one is satisfied with the access to clean water for household use in their locality.
Access to information and communication means	The extent to which one is satisfied with the access to the Internet, Ukrainian media, and mobile connection provision in their locality.
Access to Ukrainian media	The extent to which one is satisfied with the access to Ukrainian media in their locality.
Authorities care	The degree to which one feels that Ukrainian authorities represent their concerns and views, equally care about all parts of Ukraine, and are ready to listen.
Availability of air raid shelters	The extent to which air raid shelters are available in the locality where an individual resides.
Availability of cash to withdraw	The availability and abundance of physical currency that can be obtained by individuals from banks, ATMs, or other financial institutions in the locality where an individual resides.
Availability of childcare	The extent to which childcare facilities (functioning kindergartens, childminders, after kindergarten clubs etc.) are available in the locality where an individual resides.
Availability of food	The extent to which food is available in the locality where an individual resides.
Availability of fuel	The extent to which fuel is available in the locality where an individual resides.
Availability of housing	The extent to which housing is available in the locality where an individual resides.

Availability of medicine	The extent to which medicine is available in the locality where an individual resides.
Availability of necessities	The extent to which necessities like food, fuel, housing, medicine, air raid shelters, childcare, cash to withdraw are available in the locality where an individual resides.
Civic engagement	The degree to which one participates in formal and informal civic, social, and political matters such as voting in elections, attending events organised by local authorities, volunteering, participating in activities aimed at improving one's neighbourhood, etc.
Civic resistance – Donate money	Whether one has donated money since the Russian full-scale invasion of Ukraine to support Ukraine's civic resistance.
Civic resistance – Host IDPs in my house free-of-charge	Whether one has hosted IDPs in one's house free-of-charge since the Russian full-scale invasion of Ukraine to support Ukraine's civic resistance.
Civic resistance – Join territorial defence force or another armed group(s)	Whether one has joined territorial defence force or another armed group(s) since the Russian full-scale invasion of Ukraine to support Ukraine's civic resistance.
Civic resistance – Join the Ukrainian Armed Forces (ZSU)	Whether one has joined the Ukrainian Armed Forces (ZSU) since the Russian full-scale invasion of Ukraine to support Ukraine's civic resistance.
Civic resistance – Participate in cyber-attack and information resistance	Whether one has participated in cyber-attacks and information resistance since the Russian full-scale invasion of Ukraine to support Ukraine's civic resistance.
Civic resistance – Report war crimes	Whether one has reported war crimes since the Russian full-scale invasion of Ukraine to support Ukraine's civic resistance.
Civic resistance – Trying to keep myself and my family safe	Whether one has tried to keep themselves and one's family safe since the Russian full-scale invasion of Ukraine to support Ukraine's civic resistance.
Community cooperation	The degree to which one feels that people in one's community care for each other and cooperate to solve common problems.
Economic security	The degree to which one has a stable source of income, capacity to provide for nutritional needs, and can rely on social welfare payments if one needs them.

Education level	The level of one's education based on the highest level of education completed from primary/unfinished secondary education to postgraduate degree or higher.
English language knowledge	Self-evaluation of one's knowledge of the English language.
Environmental risk	The degree to which one is concerned about environmental risks in one's locality.
Environmental security	The degree to which one is satisfied with the quality of air and overall environmental health in one's locality.
Family was separated due to the war	Whether one's family members were forced to separate from each other as a result of the Russian full-scale invasion of Ukraine.
Feeling of tensions between IDP and host communities	The extent to which one feels that there are tensions between internally displaced and host communities in one's locality.
Health security	The level of access to and affordability of both basic and specialised medical services.
Heard or seen actual fighting or shelling	Whether one has heard or seen actual fighting or shelling since the Russian full-scale invasion of Ukraine.
Home or property was damaged due to military actions	Whether one's home or property was damaged as a result of the Russian full-scale invasion of Ukraine.
Income level (current)	The level of household income based on one's purchasing power, where 0 means one does not have enough money for food, and 10 means one has enough for expensive items.
Intention to move to different locality	Whether one plans to move to different locality within the same oblast, another oblast, or abroad in a month ahead.
Intention to return to locality before February 24, 2022	Whether one plans to return to one's locality before February 24, 2022, in a month ahead.
Intention to stay in the locality	Whether one plans to stay in one's current locality in a month ahead.
Internet access	The degree to which one is satisfied with the Internet service provision in one's locality.
Lived under occupation	Whether one has lived under occupation since the Russian full-scale invasion of Ukraine.

Mobile connection	The degree to which one is satisfied with the mobile connection provision in one's locality.
Personal safety	The degree to which one feels safe in everyday life.
Physically assaulted	Whether one has been physically assaulted since the Russian full-scale invasion of Ukraine.
Pluralistic Ukrainian identity	The degree to which one believes that everyone despite their ethnic and cultural background who lives in Ukraine is an integral part of Ukrainian society.
Provision of administrative services	The degree to which one is satisfied with administrative services in one's locality (e.g. obtaining official documents).
Provision of health care	The degree to which one is satisfied with the health services in one's locality.
Provision of infrastructure	The degree to which one is satisfied with the provision of utilities (e.g. water, electricity), quality of road network, and public transportation services in one's locality.
Provision of utilities	The degree to which one is satisfied with the provision of utility services (e.g. water, heating, electricity, and waste disposal) in one's locality.
Provision of welfare payments	The degree to which one is satisfied with the welfare payments to those who is in need (e.g. disabled, unemployed, pensioners, scholarships).
Quality of public transportation	The degree to which one is satisfied with the efficiency of public transportation in one's locality.
Quality of roads	The degree to which one is satisfied with the quality of roads in one's locality.
Russian language knowledge	Self-evaluation of one's knowledge of the Russian language.
Sense of belonging (overall)	The combined degree of attachment to one's place of living (country, region, settlement).
Sense of civic duty	A composite indicator made up of a sense of agency and civic responsibility. It measures the degree to which one feels responsible for the future and well-being of one's society and country and to which one feels that ordinary people can change things in one's community.

Social Tolerance	The combined level of social tolerance towards different minority and marginalised groups (e.g. immigrants, Roma, LGBTQI+) in terms of personal interaction and/or acceptance in the community. The geographical and linguistic groups (people from other regions, Russian-speaking, and Ukrainian-speaking Ukrainians) are not part of this indicator as used through the study to keep its comparability with SCORE 2021.
Support for EEU membership	The level of support for Ukraine to become a member of the Eurasian Economic Union with Russia, Belarus, Armenia, Kyrgyzstan, and Kazakhstan.
Support for EU membership	The level of support for Ukraine to become a member of the EU.
Support for linguistic diversity	The degree to which one is confident that linguistic differences enrich national identity.
Support for NATO membership	The level of support for Ukraine to become a member of NATO.
Support for non-aligned status	The degree to which one thinks that Ukraine should be strictly non-aligned and not join either pro-Western or pro-Russian entities.
Trust in central institutions	The combined level of trust in national institutions such as the President, Parliament, Cabinet of Ministers, and courts.
Trust in local institutions	The combined level of trust in local administrations and village or town heads.
Ukrainian Language knowledge	Self-evaluation of one's knowledge of the Ukrainian language.
Usage of administrative services	The frequency of one's personal usage of administrative services in one's locality.
Usage of healthcare	The frequency of one's personal usage of healthcare services in one's locality.
Usage of higher education	The frequency of one's personal usage of services provided by institutions of higher education in one's locality.
Usage of justice services	The frequency of one's personal usage of justice services in one's locality.
Usage of public transportation	The frequency of one's personal usage of public transportation in one's locality.
Usage of welfare payments	The frequency of one's personal usage of welfare payments in one's locality.