

# Improvement of Human Capital Development: A Factor in Increasing the Mobilisation Potential of Ukraine

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## Abstract

Based on historical, legal, and sociological research conducted within a research project funded by the Ministry of Education and Science of Ukraine titled "Improvement of human capital development: a factor in increasing the mobilisation potential of Ukraine", theoretical and methodological principles for improving the mobilisation potential of Ukraine through human capital formation mechanisms are substantiated in this paper. An overview of the main approaches to the recruitment of armies in the context of historical evolution is conducted, and a list of actual and potential threats to a reduction of Ukraine's mobilisation potential is updated. Factors of motivation and demotivation influencing the participation or otherwise of Ukrainian youth in military mobilisation are defined. Optimal legal models for military mobilisation in a democratic constitutional state are also proposed. A general strategy whereby the policy of formation of patriotism through education and media for the actualisation of the mobilisation potential of Ukraine may be realised is also outlined. The article aims to develop conceptual bases for improving the mobilisation potential of Ukraine based on optimising the mechanisms of human capital formation. It also aims to enhance the mobilisation potential of Ukraine as a system-forming factor in ensuring the state's defence capabilities.

## Keywords

human capital, mobilisation potential, strategic narrative, patriotism

## 1 Introduction

The topic of our study is of particular relevance to the development of worldwide trends and technology in preparation for war, in the context of which the Ukrainian mobilisation potential is developing and can be seen in action during the active phase of the Russian-Ukrainian war in 2022.

Maintaining the state's defence capabilities and conducting an anti-terrorist operation in Ukraine from 2014 to 2022 constantly required partial military mobilisation, which has already been carried out in several waves. At the same time, there was a decrease in population activity and a decrease in the overall mobilisation potential of the country from one wave to another. In this regard, this paper aims to study the components of mobilisation

potential that lie outside the immediate focus of public policy but should still be relevant to public discourse. Theoretical elaboration of this topic, a process which has its origins in the classical canon of sociology, and in particular the writings of Charles Tilly, is actively being continued today by modern researchers, given the increasing number of cases of global political and social instability over the past decade.

In addition, the article aims to illustrate how the mobilisation potential of Ukraine and its features influenced the active phase of the Russian-Ukrainian war in spring 2022.

The research project of the Ministry of Education and Science of Ukraine "Improvement of human capital development: a factor in increasing the mobilisation potential of

Ukraine", which involved the authors of this article, aimed to solve an applied problem of strengthening the state's defence capabilities, as well as the dynamics of political, legal, social, and ideological institutions/practices. The results of the project – especially those from 2017–2020 – have a significant empirical basis, but both quantitative and qualitative sociological research approaches have been combined according to the authors' method.

## 2 Theoretical and methodological principles of improving the mobilisation potential of Ukraine

The most widespread meaning of the term "mobilisation" is the transfer process from relative serenity to the mode of hyperactivity. Charles Tilly, as an example, called mobilisation one of the very important components of collective action and collective behaviour in society. Mobilisation is a key component of the process whereby collective control of accumulated resources, which are needed for collective action, is acquired. The key stages of this process are collective interest (possible gains or losses from interaction with other groups or individuals), organisation (the process of structuring some group that determines the methods of interaction), and opportunity (the general probability of interaction) (Tilly, 1978).

The resources for collective action could be, for example, goods or material assets, workforce, electorates' votes, etc. The main factor in the mobilisation of such resources is the opportunity for their usage for the accomplishment of collective goals. Tilly also mentioned that, depending on the situation, the group could be well-structured, but with very limited access to the needed key resources, or vice versa, the group could be poorly structured, but with a good level of collective control over the resources.

Mobilisation is thus the process of simultaneous structuring of society and acquisition of access to the benefits available in society, regardless who owned them before the mobilisation. In the case of military mobilisation, the state is the key structure that deals with the redistribution of resources needed for war. Such resources could include human resources, which could both be used as fulfilment for the military and be the workforce in the war economy to provide goods and services for the military efforts of the state. There are also many examples in history that demonstrate a society's capacity for self-structuring and self-organisation if state mechanisms are weak or ineffective. If active groups within society do not see the state taking action to protect them after the beginning of the war, they may form paramilitary, militia, or insurgent groups that

take the initiative of military protection or the provision of "law and order" into their own hands. The example of Ukraine and its society in 2014–2015 and during the ongoing active phase of the Russo-Ukrainian war starting from February 2022 is characteristic of such a process.

The re-structuring of political elites or the masses following a revolution or *coup d'état* emerges in the case of the weakness of the state authority under foreign or internal pressure. In such cases, social mobilisation overwhelms the mobilisation of state structures.

Social mobilisation might be separated into the following stages: the accumulation of resources, the rise of collective control over the resources by limitation of personal demands, the creation of the common mechanisms for collective action, and the reduction of the level of personal and collective needs (Hirschman, 1970; Tilly, 1978). Depending on current circumstances, there could be three types of mobilisation: offensive, directed towards expansion or diffusion, defensive for self-protection, and preparatory to be ready for possible perspective events. The majority of such mobilisations are initiated by the elites of society and are directed at the subjection of people to the needs of the state government. Very often, both government and key social groups may be the main initiators of mobilisation actions (Rousseau and Blauvelt, 1998; Tilly, 2017).

In relation to the historical and contemporary experiences of Ukraine, mention should also be made of the widespread opinion of many researchers of the East-Central Europe (ECE) region that many former Communist countries have very limited opportunities for social mobilisation. The main reason for that is the general weakness of the institutions of civil society (Karl, 1995; Kuzio, 2000, Onuch, 2014). However, one may also note the examples of many different countries worldwide (i.e. developing countries) from the 1990s to the 2010s, some of which lost their economic significance, state, and social institutions, and even at times might be described as "failed" states. At the same time, some former communist countries from ECE successfully came through transition and created important institutions of their civil society after 2000. Spectacular examples of this process are the two Ukrainian revolutions of 2004 and 2014. Different social, national, and other groups of Ukrainian society played a massive part in them. The important component of the transformative processes in ECE was the "triplicity of transformation" when the economy, social sphere, and politics drastically changed during a short period. Some hold the view that such triplicity limited the possibilities of

social mobilisation (e.g. Bogaards, 2009; Diamond, 2002; Hale, 2008), but current events (2022) demonstrate that this was not the case. According to the existing theories of social mobilisation, the civil society that is still not formed in Ukraine should be the legitimating factor for social mobilisations (Belfield and Levin, 2002; Levitsky and Way, 2010; Wigell, 2008).

The situation in Ukraine during the last decade adds some patterns to the already mentioned analysis. There is a significant difference between the situations of 2014 and 2022 regarding the readiness of the state structures of Ukraine for war. During Spring-Summer 2014 the Ukrainian revolutionary government was very close to failure, but the situation of 2022 was much more controllable even though the direct military involvement of the Russian army was at least ten times stronger. At the same time, the society of Ukraine was very active in both cases, providing not only the army with volunteers but also forming the paramilitary units for territorial defence, evacuating tens and hundreds of thousands of people from the war zone, redistributing food and medicaments, providing shelter, etc. Is it still an open question as to whether there is a civil society in Ukraine? The authors of the current paper believe that state-initiated mobilisation in both 2014 and 2022 would not have been effective enough without the social mobilisation of the majority of the Ukrainian population. Without it, the results of war would be much more fruitful for Russia in both cases.

Our research project dealt with the phenomenon of military mobilisation and analysed the potential development of mobilisation. Most people associate the term "mobilisation" primarily with military affairs (Choliy, 2018).

A relatively linear correlation characterises civil-military relations in Europe. This is the case for most European states and includes the existence of general trends involving the interrelations of government, the subject population, and the military during the most important periods of history. The establishment of state structures in the contemporary sense of the word is the reality of the Modern period. During the 19<sup>th</sup> century, only the key structures for the manning, control, and government of the army were fully incorporated into the state apparatus and the army became an indivisible part of the state. The next stage in the development of civil-military relations was the period of establishment of national states in Europe when universal conscription and mass armies were widely introduced, and military obligation became personal. The conscription included the personal short-term obligation to serve in the

military during the peace to be later called up in the case of war. The mass armies of the 19<sup>th</sup> and 20<sup>th</sup> centuries became armies of citizens – ordinary people, who had civil trades and became soldiers only temporarily due to the urgency of war. The First and Second World Wars were the apotheosis of conscription when million-strong armies lasted for years and were used for the mass slaughter of the enemy's military and civilian population. During the 20<sup>th</sup> century, the term "mobilisation" received its contemporary meaning, i.e. the transition of the conscription army from peacetime rigorous and mass military training to a million-strong army that consists of previously trained civilians.

Alexander Bezruk gives his definition of "mobilisation potential" for contemporary situations. In his opinion, it is the combination of components, which may influence the general military capabilities of countries or coalitions. Different potentials in the formation of state capabilities each play different roles; there might be up to several tens of them. The most important among them are military, economic, demographic, and political potentials (Bezruk, 2017).

Bezruk defines military potential as "an opportunity of a state or state coalition to maintain an army and improve it, provide its military preparedness, fulfil it with skilled staff, supply it with modern arms and equipment, the same as all kinds of supplies during the peacetime and especially in the time of war" (Bezruk, 2017:p.8).

However, even this definition still does not take into account the idea that the military component of the mobilisation potential cannot be realised by exclusively military methods and instruments. Soldiers will never fulfil their duties without the usage of other potentials, especially the economic potential of their state (the possibility to provide the needs of the country's armed forces during the time of war) or demographic potential (the need to provide manpower according to the army's needs). The important component of mobilisation potential is the moral and psychological condition of the population and the level of understanding of the need to take part in the mobilisation activities of the state. That is why nowadays mobilisation potential depends pretty much not exclusively on the military, but also other, civil components. Such components, at the first glance, could be very distant from actual military mobilisation.

An essential feature of the development of the contemporary mobilisation potential of Ukraine is the influence of global and regional tendencies on the process of its formation. In our opinion, it is possible to say that the classical meaning of mobilisation potential is lost nowadays (Tilly, 2017). In other words, there have been consecutive

decreases in the quantity of previously trained soldiers in Ukraine and globally over the last three decades.

Historically, there are not too many alternative ways to provide the army with soldiers. There were military democracy, voluntary enlistment, feudal military obligation, draft recruitment, and universal conscription used to fulfil the army with soldiers. The goal of universal conscription was to provide short-term military training for as many men as possible. During the 19<sup>th</sup> century, there were usually three to four years of military training, while during the 20<sup>th</sup> century it was one to three years. Those who served in the army were afterwards sent back to civil life. After that, they were considered as prepared for possible future war. The contemporary meaning of "mobilisation potential" is the result of such usage of people resources. This was the critical "mass of thousands" man, who had previously been trained and could be used in a war. The wars of the last third of the 19<sup>th</sup> century, WWI, WWII, and the Cold War were planned as wars that would involve hundreds of thousands of soldiers. Huge masses of perspective soldiers were crucial for such wars with casualties numbering tens of thousands of people per day or per week. The usage of conscription reached its peak in the second half of the 20<sup>th</sup> century due to the formation of two mutually antagonistic military blocks that planned to start the Third World War in the worst case scenario.

Historically, military service became one of the methods whereby the state apparatus penetrated society, coinciding in time with the process of formation of national states. Being in the military became an important stage in the life of every young man. Military service also included education and ideological training that became an important method for influencing society.

However, the general global trend of civil-military relations changed during the 1990s. The main reason for that was the end of the Cold War and the peace that was expected to last forever. Most European countries drastically decreased the number of men that were drafted until the end of the 20<sup>th</sup> century. Starting with the new Millennium, many countries abolished or suspended obligatory military service. In 2010 it was almost exclusively volunteers who served in the military within the EU (Mjosen and van Holde, 2002). Consequently, it is possible to say that a new trend of civil-military relations emerged in Europe. It has also a global character (Flynn, 2002; Frevert, 2004).

There are several exceptions to the aforementioned trend. Some countries decided to keep different forms of conscription in use during the last decade (like Austria or

Finland). There are also cases of countries, which decided to continue to use conscription due to regional instability (North and South Korea, Taiwan, Israel). Among them is also the post-Soviet region in ECE. In contrast to the EU member states, Eastern Europe still mostly uses compulsory military service. The trendsetter here is the Russian Federation, whose approach can also be seen in the majority of its border countries.

Universal conscription now resembles a choice of weak countries from regions of high geopolitical instability which have to exploit their citizens for a military purpose much more intensively and sometimes even without their citizens' consent. Very often it is the only possible way for such countries to prevail in the contemporary world.

In current conditions, obligatory and compulsory manning of the army seems to be the only available option for Ukraine. The main threat to the Ukrainian stability and existence is Russia. The latter has a much bigger military and mobilisation potential. That is why Ukraine has no choice and only much more effective exploitation of available human resources would be the decisive factor for its continued existence in possible conflict with an enemy, Russia that overwhelms Ukraine several times with its economic and human resources. Only state-led violence and compulsion in form of military conscription could form the adequate basis for a possible large-scale conflict with Russia. A model involving a small professional army as per the general European trend could not be applied to Ukraine due to its regional situation and ongoing military conflict with Russia, which started in 2014 (Wawro, 2014), and turned into a full-blown war in 2022.

As of May 2022, the military success of Ukraine relies mostly on the usage of superior equipment, communication, and military tactics, multiplied by the inadequacy of the Russian military as compared to their goals in this war. The contemporary mobilisation potential of Ukraine consists of many factors, including military, economic and humanitarian aid from all over the world, the same as geopolitical support, and a very high level of motivation of the Ukrainian population to fight in this war. The latter is provided by the skilled information campaign in media and censorship of Ukrainian authorities plus some national features relevant to centuries-long historical narratives. We should mention here that until now the Ukrainian army is mobilised by the rules of compulsory military service, and every man of productive age is forbidden to leave the country's borders. At the same time, tens of thousands of men voluntarily enlisted for the army or territorial defence.

Such a situation is a benefit for Ukraine in this war, but it will not last forever; the state will still have to use violence for mobilisation if the war is going to last a long time.

Another very important component of the development of Ukraine's mobilisation potential takes into account humanitarian issues. There have been many times in Ukraine's past when the country's huge prospective mobilisation potential was destroyed by information or political campaigns, and prospective soldiers refused to enter the war. While using conscription nowadays, the state should not simply use brutal force and conscript people to the army but must also be sure that it represents soldiers' interests. Otherwise, soldiers may refuse to go to war in a time of need, and the country's mobilisation potential would be lost not due to military factors, but due to humanitarian considerations.

We will explore several key trends that may influence the processes for the development of Ukraine's mobilisation potential in Section 3.

### **3 Legal and civil component of increasing mobilisation potential: human capital development through improving approaches to the formation of strategic narrative**

The concept of "strategic narrative" is defined by the current Doctrine of Information Security (President of Ukraine, 2017) and is realised as a specially prepared text intended for verbal presentation in the process of strategic communications to influence the information target audience. Strategic communications are a coordinated and appropriate use of communicative capabilities of the state – public diplomacy, public relations, military relations, information and psychological operations, and activities aimed at promoting the goals of the state (President of Ukraine, 2017).

The legal regulation of mobilisation training and mobilisation consists in the relations of state bodies and local self-government bodies concerning their mobilisation training and mobilisation and the performance of military duty by citizens (Ivanchenko, 2017). To avoid the frustration of the population at the stage of a real need for mobilisation measures, it is advisable to include in the Law of Ukraine "On mobilization preparation and mobilization" (from 21.10.1993, No. 3543-XII) various aspects of national-patriotic education (Law of Ukraine, 1993).

At the core of increasing mobilisation potential is the formation of an active civic position, the manifestation of which is possible through political mobilisation by establishing the national identity of citizens based on the spiritual values of the Ukrainian people and national identity. This is

possible, taking into account the development and dissemination of socio-state moral values of the Ukrainian people through the formation of a national-patriotic worldview, and the delineation of a nationally oriented strategic narrative within the information and legal policy of the state.

### **3.1 Civic patriotism as a value base of mobilisation potential**

Measures of national and patriotic education lay the foundation for increasing mobilisation potential. The high value significance of patriotism is due to its ability to mobilise society, attract and concentrate material and human resources, especially in conditions of internal or external threats that could disrupt the stability of society (Yenin, 2018). At the state level, a special place is given to patriotic rhetoric in connection with the mass conscription into the army to wage wars in the context of the development of nation-states in the period of industrial capitalism and the formation of colonial empires. Patriotic propaganda through the institutions of mass communication has contributed to the formation of national identity and ensuring the loyalty of army recruits and combat-ready soldiers to the newly created state. Political elites are expanding access to educational institutions for the formation and retransmission of national and cultural codes (Yenin, 2016).

Our research group with the support of the Ukrainian branch of the international organisation YMCA, as well as the Ministry of Youth and Sports of Ukraine conducted eight focus group discussions in Ukraine during October 2017 – January 2018. The total sample – 58 respondents from the youth cohort aged 17 to 20, who are members of NGOs, student government, local initiatives, including YMCA members. Moderated group discussions showed that motivating factors prompting individuals to take part in military mobilisation are the values of patriotism, the prestige of service in the army, financial incentives, benefits, social advertising, opportunities to combine military service with education, and glorification of the image of the Armed Forces in the media. According to a significant proportion of the young people we interviewed, the low professional and moral authority of the political class is a demotivating factor for young people to feel willing to take part in military mobilisation; other contributory factors were young people's feeling of limited chances of professional self-realisation; a perception of war as a means of enrichment of the government and representatives of big business; the low professional prestige of military service; a lack of decent state aid and protection after

returning from hostilities; and insufficient awareness of the ideological content of war (Yenin and Serbulov, 2020). A primary external threat can lead to the general mobilisation of youth on the basis of patriotic values – a full-scale military invasion of other states into Ukraine.

The profession of a serviceman is one of the least attractive professions for young people, one that is not seen as ensuring success in life according to the research data of the Center of Independent Sociological Research Omega Limited Liability Company, which was conducted on the order of the Ministry of Youth and Sport of Ukraine. The sample for this research consisted of 1200 respondents, representative of the population of Ukraine (excluding temporarily occupied and uncontrolled territories) of the appropriate age category by sex, age, region of residence, and size of settlement. The reliability of the data is 95%, and the margin of error is 2%. (Center of Independent Sociological Research Omega Limited Liability Company, 2016).

In our opinion, the organisation of the state on the principles of ethnic nationalism threatens the basic principles of liberal democracy of the societies that are members of the EU, and this contradicts the values of a significant part of young people in Ukraine. Civic patriotism is an alternative model that can have both unifying and mobilising potential for the national community and its younger generation.

A representative survey conducted by the authors during the 2018/2019 academic year among students of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" showed that the majority of young people surveyed – 69% of respondents – said that, in their opinion, patriotism is the desire to live and work for the good of their country. In the first wave of the study, 1229 people in grades 1–5 were interviewed. It is noteworthy that both female and male students were included in the sample, which allowed to expand the heuristic potential of the study and even look at some aspects outside of the prism of gender stereotypes. Alternative conceptualisations such as "Love for your Homeland", "Pride for your country and the achievements of its citizens" and "Willingness to defend homeland with weapon" were also quite widely agreed with, scoring 58.5%, 55.4% and 33.0% respectively (Table 1).

At the same time, the survey found that a number of respondents – albeit a small number – were convinced that patriotism is the elevation of one's own nation above

**Table 1** University students' answers to the question "What do you think is patriotism?"

Answer options	Frequency	%
Desire to live and work for the good of their country	626	70.1
Love for your Homeland	522	58.5
Pride for your country and the achievements of its citizens	495	55.4
Willingness to defend homeland with weapon	295	33
Army support on a volunteer basis	145	16.2
Exaltation of one's own nation over others	38	4.3
Purchase of exclusively domestic goods	30	3.4
Your option	49	5.5
Hard to answer	32	3.6

Note: Authors' survey among students of Igor Sikorsky Kyiv Polytechnic Institute, 2018/19. Respondents could choose multiple answers

others. The prevalence of such beliefs is not mass, but the spread of this trend is quite possible, so an urgent task of the modern education system is to prevent the spread of such views and attitudes.

The above tendencies towards the reluctance of the majority of young people to defend the Homeland with weapons are confirmed in other ways. In particular, this thesis explains why the vast majority of respondents (72.7%) unequivocally consider contract service on a voluntary basis to be more acceptable in modern conditions as a way of recruiting to the Armed Forces (Table 2).

In our opinion, this can be explained by the desire to shift the responsibility for the defence of the Homeland (in the part "with weapon") to those who do it of their own volition and for material reward.

This reveals the dialectic of patriotism and patriotism of the word, as well as the dialectic of the form and content of patriotism: young people can sincerely assess their feelings for the Homeland as patriotic (in the sense of patriotism), but indirect measurement shows the fallacy of these beliefs.

**Table 2** University students' answers to the question: "What are the most appropriate methods of manning the Armed Forces of Ukraine?"

Answer options	Frequency	%
Contract service on the basis of voluntary service	636	72.7
Service on the basis of general military service (conscript service)	154	17.6
Hard to say	85	9.7
Total	875	100

Note: Authors' survey among students of Igor Sikorsky Kyiv Polytechnic Institute, 2018/19.

Thus, the unattractiveness of military service among respondents is mostly due to its perceived failure to satisfy vital needs: material and security (Table 3).

At the same time, 50.9% said that military service is an opportunity to harden their character, 47.3% – the opportunity to learn to handle weapons, the opportunity to learn discipline and order – 44.5% (Table 4).

It was important to get an answer as to what might change the respondents' opinion about military mobilisation. The analysis of the received closed and open answers showed that almost a third of the respondents (30.4%) will not change their decision under any circumstances. Another 42.9% indicated that they would change their minds if there was a real threat to their close relatives. The existence of a part of respondents (18.1%) who could not answer this question indirectly indicates respondents who can become the part of society with

**Table 3** University students' answers to the question: "What makes military service unattractive the most?"

Answer options	Frequency	%
Insufficient provision of soldiers during service	487	54.7
Extra-statutory relations (hazing, arbitrariness towards soldiers)	453	50.9
Threat of deteriorating health	378	42.5
Long break with civilian life	355	39.9
Opportunity to be mobilised in the future to participate in hostilities	313	35.2
Significant physical and emotional stress	276	31
Strict military discipline and order	135	15.2
Your answer	64	7.2
Hard to say	45	5.1

Note: Authors' survey among students of Igor Sikorsky Kyiv Polytechnic Institute, 2018/19. Respondents could choose multiple answers

**Table 4** Distribution of answers to question: "What benefits do you think can be gained during military service?"

Answer options	Frequency	%
Opportunity to harden the character	452	50.9
Opportunity to learn to handle weapons	419	47.3
Opportunity to learn discipline and order	394	44.5
Ability to lead an independent life	189	21.4
Formation of the ability to cooperate with the team	187	21.1
Formation of patriotism	133	15
Opportunity to master a profession that may be needed in civilian life	86	9.7
Your answer	72	8.1
Hard to say	118	13.3

Note: Authors' survey among students of Igor Sikorsky Kyiv Polytechnic Institute, 2018/19. Respondents could choose multiple answers

which it is possible to work most effectively in the context of changing attitudes to the mobilisation potential of the country (Table 5).

#### 4 Experimental approbations of the developed and proven mechanisms and tools to increase the mobilisation potential of Ukraine based on human capital development

The risks to the successful development of human capital in Ukraine are largely due to the low capacity of state institutions to effectively implement their functions, and thus meet the needs of society. Manifestations of this threatening trend became apparent in 2014, when part of civil society took over certain functions of state power to provide and support the army, demobilised soldiers, families affected by the conflict in the East, internally displaced people (IDPs), and others. This process accelerated the formation of civic consciousness in Ukrainian society and contributed to the development of volunteering. At the same time, such positive manifestations occurred not due to the evolutionary "maturation" of civil society, but due to the lack of other ways to meet its vital needs.

In scientific discourse there is a position on the interpretation of such "insolvency" of the state through the term "fragility of the state". In this case, the concept of "fragility" is meaningfully opposed to the model of sustainability, emphasising such dimensions of insolvency as political, economic instability, environmental instability, fragility in the security dimension, and the fragility of society as a whole in the context of the development of the conflict in eastern Ukraine.

Existing sociological research into the state of Ukrainian society, and, consequently, public opinion, does not allow us to have confidence about the constant restoration of the socio-political situation, and also about

**Table 5** Distribution of answers to question: "What factors may change your decision on military mobilisation?"

Answer options	Frequency	%
Real threat to my loved ones/relatives	366	42.9
Nothing, my decision will not change under any circumstances	259	30.4
Hard to say	154	18.1
Real threat of punishment for evasion of military service	69	8.1
Persuasion is an authoritative person for me	66	7.7
Your answer	34	4.0

Note: Authors' survey among students of Igor Sikorsky Kyiv Polytechnic Institute, 2018/19. Respondents could choose multiple answers

strengthening and improving the quality of human capital in Ukraine as well. However, some key indicators for monitoring the "fragility" of the state are currently at risk and clearly signal a crisis, bordering on an explosive situation. In particular, according to a poll conducted in October 2020 by the Razumkov Centre's sociological service, the balance of trust (the difference between the share of those who trust and those who do not trust) in officials (−67.4%), in the Verkhovna Rada of Ukraine (Parliament) (−58.8%), in the judiciary (−61.1%) and, worst of all, in the anti-corruption bodies, shows significant negative values. At the same time, the highest positive balance of trust can be observed in the Armed Forces of Ukraine (+38.8%), the church (+34%), and volunteer organisations (+31.2%) (Razumkov Centre, 2020). This indicator is critical in a situation where we are thinking about the development of the Ukrainian state in its pre-war period. We recognise that the unity of the population around the trust in the Armed Forces of Ukraine has become much clearer since the beginning of full-scale Russian aggression on February 24, 2022. Several military experts and political scientists later acknowledged that the resilience of Ukrainian society in the first weeks of the conflict was unprecedented. However, even before the conflict started, sociological data suggested that it was quite predictable.

On the one hand, there was a destructive tendency for the population to distrust the effectiveness of the majority of government agencies - an alarming signal of the failure of the state as a whole. On the other hand, the rather high level of institutions directly connected and involved in the functioning of Ukraine's mobilisation potential has not decreased for a long time. In fact, the frustration of the population in the official structures, which are responsible for meeting the basic needs of society, involuntarily strengthens the credit of loyalty to their backups - volunteer organisations and the church. At the same time, the high level of public confidence in the current Armed Forces of Ukraine is an important and comforting indicator.

Based on the sociological approach proposed above, we can assume that the most effective channels of information influence to strengthen the mobilisation potential of the country may be a church, representatives of public organisations, volunteers, volunteer battalions, representatives of the Armed Forces of Ukraine, local authorities and educational institutions, which permeate all social institutions and have one of the greatest potential impacts on human capital development. Research into the effectiveness of certain mechanisms to increase mobilisation potential by improving the quality of human capital in

Ukraine inevitably leads us to the need to fix those trends that latently affect (in both stimulating and disincentivizing senses) all phenomena and processes in society. Therefore, based on the recognised methodology of threat and risk analysis for the development of society, which is used for analytical research of the World Economic Forum the Global Risk Report, we identify several threats that, in our opinion, have had and could have the most significant impact on all processes relating to the functioning of the mobilisation potential of Ukraine (World Economic Forum, 2020). The methodology of the World Economic Forum involves identifying several risks in two dimensions: measuring the probability of occurrence and measuring the strength of the impact. Thus, the top rating of threats is a list of destructive trends inherent in a complex socio-economic system (in our case - Ukrainian society as a whole), which are either likely to occur or have the most significant impact on processes and phenomena.

Research into the field of mobilisation capacity formation can be classified as quite complex and associated with uncertain conditions, and therefore, requires the use of a rather complex combination of tools and research methodology. For this purpose, in addition to the quantitative sociological survey, a combined method was used, which provided for a combination of the method of expert survey and SWOT analysis.

SWOT analysis contains the following components:

1. Strengths – positions that describe the system and characterise its inherent internal qualities;
2. Weaknesses – inhibitory factors that exist in the system and may adversely affect its functioning;
3. Opportunities – factors that belong to the external environment of the system and can favourably affect its development;
4. Threats – factors that can potentially threaten the efficiency and effectiveness of the system as well as belonging to its external environment.

Experts were asked to assess the competitive advantages and limitations of human capital development through the education system. As this expert opinion is intended to reflect future trends in the system, experts were asked to assess these factors on two-time horizons until 2025 and 2030 following the tradition of Foresight research.

As a result of several studies (both desk research and empirical, related to the collection of sociological information), we can form the following list of threats to the human capital of Ukraine in the context of strengthening mobilisation capacity, shown in Table 6.

**Table 6** Rating of threats to human capital development in Ukraine for the period 2021–2022

Threats by the probability of occurrence for the period 2021–2022	Threats by force of influence for the period 2021–2022
Economic stagnation exacerbated by the further spread of global diseases (including Covid-19)	Uncontrolled spread of infectious diseases
Crisis of the medical system	Deployment of the armed conflict in eastern Ukraine
Rising unemployment	Deployment of the education system crisis (its further failure to adequately meet the needs of the labour market)
Increasing hybrid threats	Decreased state capacity
Getting a low grain yield	The environmental crisis, including the water supply crisis

This list of potential threats to the development of human capital in Ukraine reflects all three dimensions of the model of sustainable development: social, economic, and environmental.

Referring to the results of the study of the level of trust of the population of Ukraine in certain social institutions, it should be noted that in the above list of threats the threat of an education crisis is directly related to the forecast of human capital formation. This is due to the incorporation of the education system and educational technologies in all, without exception, spheres of social life, and the high level of public involvement in the education system. In addition, Ukraine has become one of the leaders in the coverage of higher education, and between 1980 and 2010, the average number of years spent educating people over the age of 15 has almost tripled. These and other similar data show the strong potential of the education system in terms of influence and formation of human capital in Ukraine. Therefore, an interdisciplinary team of researchers (representatives of various fields of knowledge: from history to public administration and sociology) conducted an expert assessment of the system of factors that will affect the nature and pace of human capital development in Ukraine's education system.

Thus, according to experts, the strengths with the most significant formative effect on human capital are the process of digitalisation of education, high demand for educational services, and modernisation of vocational education. In contrast, destructive factors such as the uncompetitive level of wages among educators, the associated increase in the average age of research and teaching staff, and the

disparity between the structure of supply and demand in the labour market are contrasted. The most probable in terms of implementation in the period up to 2025 experts identified opportunities such as the deployment of globalisation processes that will increase the academic mobility of participants in the educational process as well as increase opportunities for combining formal, non-formal, and informal education, thereby strengthening the role of education in civic competences and the involvement of practitioners in the education system through the introduction of dual education practices. At the same time, the most foreseeable among the threats in the time horizon until 2025 and 2030 is the threat of brain drain.

### 5 Conclusion

Pre-2022, the possibility of increasing the mobilisation potential of Ukraine consisted in two main factors: to ensure the functioning of general military service in Ukraine and to continue to form reserves of pre-trained soldiers. Regardless of the public mood or the position of individual political groups, this position is virtually unalterable and must be applied in the future. If military reserves are not prepared, Ukraine will lose its mobilisation potential in the long run. This factor has been actualised due to the beginning of the active phase of the classical war with Russia in February 2022 and the now real possibility of long-term conflict. In the absence of preparation of military reserves, Ukraine will, in the long run, lose its mobilisation potential and gradually weaken. Another factor in increasing the country's mobilisation potential is the state humanitarian policy in all its elements, and in particular, those directed towards increasing human capital. Mobilisation in modern conditions should mean not only bringing the army to a state of heightened readiness, but also an understanding on the part of the population of state needs and priorities in a particular historical situation and actions aimed at ensuring the common good. In connection with the development of modern military conflicts of a hybrid nature, a situation of disorganisation and disorientation of the population amid changing economic, political, or international circumstances is common. Therefore, the government must develop and implement national strategies (national narratives) that will not change depending on political circumstances and will determine the country's development in the long run. An important factor in such strategies is the development of concepts of effective state patriotism as an important modern factor in the formation of a political nation and

the development of the state patriotic education system. In our opinion, the organisation of the state on the principles of ethnic nationalism threatens the basic principles of liberal democracy of the societies that are members of the EU, and its also contradicts the values of a significant part of young people in Ukraine. The success of ethnic patriotism compared to civil patriotism in state-building processes of Ukraine is doubtful and does not allow us to

hope for a unifying and mobilising potential in the long-term historical perspective.

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