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THEORETICAL BASIS OF THE MILITARY EXPENDITURES INFLUENCE ON THE SUBJECTIVE WELL-BEING IN THE GLOBAL MILITARIZATION SPACE CONDITIONS

Abstract. This paper consists of a statement of the problem, three main sections and a conclusion. First, the author will describe the trade-off between military and other state expenditures, which is called "Guns versus Butter." Problematic issues related to citizens' support of public expenditures on the defense sector are highlighted. The public reaction to an increase in military expenditures can be positive in the case of existing or potential armed conflicts, or negative in the case of a rapid overlapping of social welfare expenditures and deterioration of subjective well-being. The second chapter deals with the militarization of global space. Here, the issues of the growth of global military expenditures and their distribution are highlighted using the example of the most militarized countries and countries with the largest index of military power. For comparison, the Global Firepower Index and Global Militarization Index coordinate systems were used. The issue of the impact of military expenditures on economic growth and the need for each country to independently establish priority areas of development is highlighted. The third chapter describes the concept of subjective well-being and the factors that influence it. The dependence of subjective well-being on military expenditures directly depends on public support, existing and potential armed conflicts in which the state is involved. Existing studies have examined this relationship in developed and developing countries. The conclusions indicate promising areas of research, in particular, for Ukraine, which is involved in an active armed conflict.
Key words: “Guns versus Butter”, militarization, subjective well-being, military expenditures, GDP.
JEL classification: H56, H69, P16.

Formulation of the problem

The idea that increases in military expenditures come at the expense of spending on other areas of provision is part of the mainstream budget policy, in part due to the rhetoric of leaders such as President Eisenhower. This potential trade-off is becoming more common as politicians of different ideologies discuss budget issues as "Guns versus Butter" (Horsley 2012).

Early empirical analysis of long-term budget allocations revealed a significant trade-off; Russett concludes that "Guns come at the expense of Butter" (Russett 1969).

At the same time, other studies have provided little evidence that military expenditures crowds out welfare spending (Domke et. al. 1983).

Do Guns compete with Butter, or are they its complement?

The world today is full of conflicts. These global problems create instability in society and increase the conflict potential of individual countries. New challenges and threats to the international security system force leading countries to look for ways to strengthen defense capabilities and confront criminal regimes.

Economically developed and developing countries, as subjects of global economic processes, react, to the best of their ability, to a wide range of modern threats and their potential origins, resorting to micro- and macro-forecasts. Undoubtedly, the main thesis is the tendency to increase spending on defense needs, increase the strength and modernization of the already existing capabilities of the armed forces.

At the beginning of the 21st century, there is a tendency to increase military expenditures, mainly at the expense of key players on the world stage, namely: the USA, China, russia, countries of Western Europe and the Middle East. After the withdrawal of the US army from Iraq, global military spending decreased, and increased again in 2019 due to russian preparations for a full-scale armed aggression against Ukraine. This also led to an increase in the NATO military contingent in the countries of Central and Eastern Europe.

What could be the consequences of the global militarization of space?

While other areas of public expenditures have been studied for their relationship to subjective well-being, the role of military expenditures has not been widely studied. Using different perspectives on defense policy and human welfare, it is possible to establish whether military expenditures has a positive or negative effect on subjective well-being along with socioeconomic development.

It is necessary to establish the impact of military expenditures on subjective well-being in developed countries and in developing countries. Increasing military expenditures, particularly when it has already reached saturation point, is likely to crowd out other important sectors of fiscal policy that are equally effective in reducing the likelihood of violent conflict.

Although public preferences for military expenditures change over time depending on the salience of external and internal threats to national security, it is important to examine how increased public spending on the defense sector may affect individual levels of subjective well-being.

How does military expenditures affect subjective well-being?

Analysis of recent research and publications

Research by S. Bjørnskov, W. Chen, M. Clark, R. Costanza, B. Fisher, and others focused on the impact of military expenditures on the subjective well-being of citizens.

There is much debate in the literature regarding the ability of government to stimulate or inhibit subjective well-being by increasing military expenditures.

Theoretically, military expenditures affects the subjective well-being of citizens. Fisher and others have written about improving the quality of life due to a multitude of interacting objective and subjective elements.

In the conditions of the global militarization of space and the existing armed conflict in Ukraine, the study of the theoretical foundations of the influence of military expenditures on subjective well-being is relevant.

The purpose of this article

The purpose of this article is the analysis of scientific works to determine the trade-off "Guns versus Butter", the trend towards a global increase in military expenditures and their impact on the subjective well-being of citizens.

It is necessary to clearly outline the relevance of this issue for Ukraine, which is involved in an armed conflict of high intensity.

Presenting main material. Guns yield butter?

Military expenditures can be seen as a hidden welfare cost because of its potential positive effects on employment and aggregate demand. "Guns and Butter" complement each other: it is likely that a population that agrees to an increase in social welfare spending will later also support an increase in military expenditures. This is especially true of the contingent that supports the active role of the government in creating jobs.

However, there are contexts in which the two types of costs are viewed not as complementary, but as competing. Contexts where military expenditures is salient – because of the national security situation – are more likely to consider the "Guns or Butter" trade-off. When the geopolitical situation makes it easier to justify a greater military burden, concerns about compromises are minimized (Laron 2018).

The strong relationship between public preferences for military expenditures and policy outcomes, foreign policy attitudes, and political support means that changes in public opinion have important implications for national security and defense budget allocations (Bartels 1994; Eichenberg, Stoll 2003; Hartley, Russett 1992; Higgs, Kilduff 1993; Ladd 2007).

Wlesien Christopher questions that public response to military expenditures may be limited to situations where national security is paramount; this is served by convincing evidence of the sensitivity of politics at the individual level in a wide sample of democratic regimes, according to the thermostatic model (Wlezien 1995).

The results show the extent to which pro-military parties can use the national security environment to mobilize greater support for military expenditures. The public generally supports an increase in military expenditures within six months of a hostile international dispute. These studies were conducted in the USA, so the question arises whether public opinion affects the approval of the military budget in Ukraine.

How do citizens see the relationship between military expenditures and social security? Do they see a trade-off between Guns and Butter, or do they view costs as Guns yield Butter?

It has been suggested that attitudes depend on people's underlying perceptions of the proper role of government. Those who believe that the government should play an active role in job creation will view the two types of spending as complementary, while those who oppose this role will view the two types of spending as competing.

A society that supports the creation of government-funded jobs is an example of a complementary attitude toward both types of spending. These people see positive externalities of military expenditures and are more likely to believe that both types of spending contribute to economic growth. This theory is confirmed by the combined sample and models used by K. Laron for his research (Laron 2018).

Militarization of global space

Total global military expenditures rose 0.7 percent in real terms in 2021 to $2,113 billion. It was the seventh year in a row that spending increased. According to new data on global military expenditures, the top five nations in 2021 were the United States, China, India, the United Kingdom, and russia, which together accounted for 62 percent of spending (Table 1).

As a result of the sharp economic recovery after the 2019 Covid-19 pandemic, the global military burden – global military expenditures as a share of global gross domestic product (GDP) – fell by 0.1 percentage point from 2.3 percent in 2020 to 2.2 percent in 2021 .

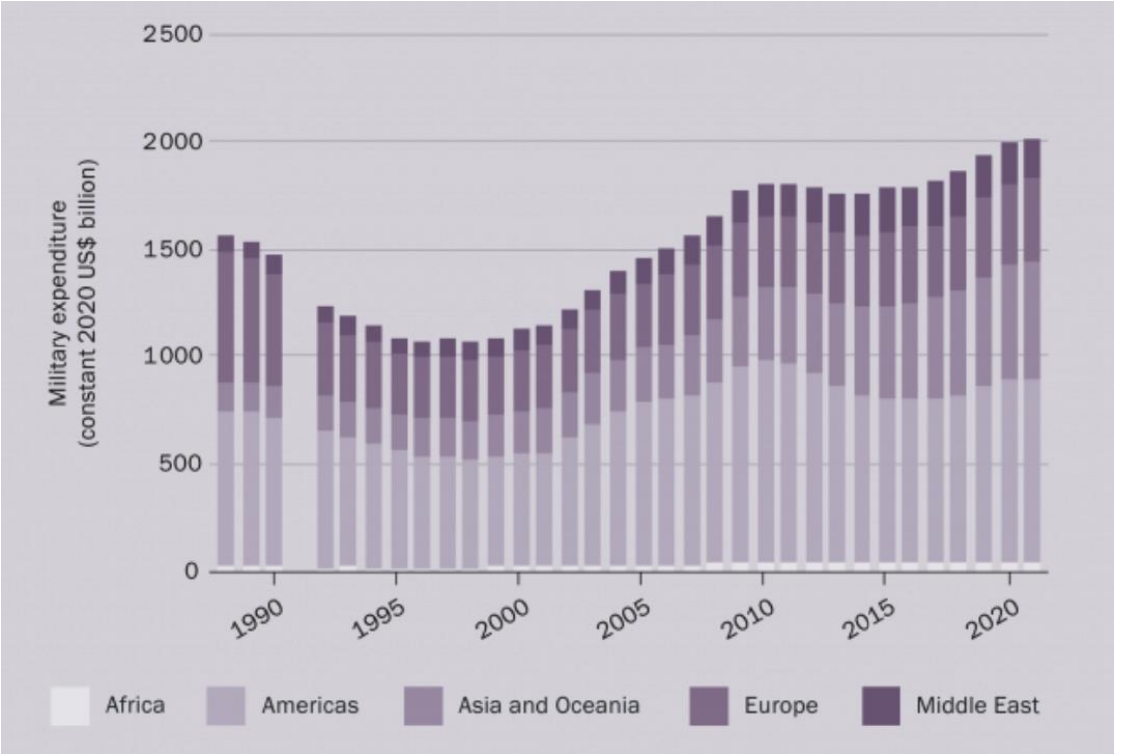

Figure 1. World military expenditures 1988-2021 (SIPRI 2022).

Since 2012, the US has increased funding for military research and development (R&D) by 24 percent, while funding for arms procurement has decreased by 6.4 percent. In 2021, spending on both decreased.

"*The increase in research and development spending over the decade 2012-2021 suggests that the United States is focusing more on next-generation technologies*," said Alexandra Marksteiner, researcher at SIPRI's Military Expenditures and Arms Production Program. "*The US government has repeatedly emphasized the need to maintain the technological superiority of the US Army over strategic competitors.*"

Ahead of a full-scale invasion of Ukraine, russia has increased its military expenditures by 2.9 percent in 2021 to $65.9 billion as it builds up its forces along the Ukrainian border. The increase in military expenditures was carried out for the third year in a row, and in 2021, russian military expenditures reached 4.1 percent of GDP.

"*High oil and gas revenues have helped russia increase its military expenditures in 2021*," said Lucie Bereau-Seudro, director of SIPRI's Military Expenditures and Arms Production Program.

The "national defense" budget line, which accounts for about three-quarters of russia's total military expenditures and includes the financing of operational costs as well as weapons purchases, was revised upward during 2021. The final figure was $48.4 billion, up 14 percent from what was projected for the end of 2020.

As Ukraine has strengthened its defenses against russia, Ukraine's military expenditures has increased by 72 percent since the annexation of Crimea in 2014. Spending fell to $5.9 billion in 2021, but still accounted for 3.2 percent of the country's GDP.

Germany, the third largest spender in Central and Western Europe, spent $56.0 billion on military needs in 2021, or 1.3 percent of its GDP. Military expenditures was 1.4 percent lower compared to 2020 due to inflation (SIPRI 2022).

Table 1. Military expenditures in the world's leading countries in 2021 (SIPRI 2022).

Country	Military expenditures in current prices, $ billions	% to the global volume	% to GDP
USA	778	36,8	3,4
China	252	11,9	1,9
India	72,9	3,5	2,7
russia	61,7	2,9	3,8
United Kingdom	59,2	2,8	2,1
Saudi Arabia	57,5	2,7	6,9
Germany	52,8	2,5	1,3
France	52,7	2,5	1,9
Japan	49,1	2,3	1
South Korea	45,7	2,2	2,5

When conducting a detailed analysis of the militarization process, the main attention should be paid to both the total military expenditures and their ratio to the gross domestic product (GDP). This ratio is used to measure the militarization burden on the country's economy (military burden). In 2021, at the global level, the average ratio of military expenditures to

global GDP was 2.5%, taking into account the significant digital divide. Among the countries included in the top, it is possible to distinguish the military load from 1% in Japan to 6.9% in Saudi Arabia. India allocated 2.7% for the needs of the defense sector in 2021, and russia - 3.8% (see Table 1).

The declared normative level of military expenditures in NATO countries in relation to GDP is 2%. Currently, among the European countries of the alliance, this norm has been slightly increased in the Baltic states and Poland, which border russia (NATO 2022). The military burden in russia is 3.8%, which is significantly higher than the level of NATO countries. The military burden, which puts pressure on the economy of Ukraine, is 3.2%.

The main purpose of military expenditures is to ensure the state's defense capability and fighting capacity, and to maintain and develop its military potential. The comparative characteristics of the military power of the countries of the world can be carried out using the Global Firepower Index (GFP) rating system. In addition to the military budget, GFP uses more than 50 other indicators. The GFP ranking is based on each country's potential for warfare on land, sea, and air. The results include measures of army personnel, equipment, natural resources and geography. There are also bonuses (+), which can act, for example, the presence of nuclear weapons, NATO membership, the volume of oil production and consumption, and penalties (-), such as an underdeveloped fleet in landlocked countries, the size of the national debt, the state transport infrastructure, excessive oil consumption, etc. The top 8 most powerful armies in the world according to the GFP-2022 version are listed in Table 2.

Table 2. Top 8 countries by the military power of armies in the Global Firepower 2022 rating (GFP 2022).

Constituents	USA	russia	China	India	Japan	South	France	United

						Korea		King-dom
Index	0,0453	0,0501	0,0511	0,0979	0,1195	0,1261	0,1283	0,1382
Changes in the index compared to 2019	+73%	+78%	+75%	+91%	+71%	+67%	+80%	+72%
Active military personnel, thou-sands of people	1390	850	2000	1450	240	555	205	194
General Air Force, unit	13247	4173	3285	2182	1449	1595	1055	693
Battle tanks, unit	6612	12420	5250	4614	1004	2624	406	227
Missile launchers, unit	1366	3391	3160	1388	99	574	13	44
Navy, unit	484	605	777	295	155	234	180	75

The rating was led by the USA, with an indicator of 0.0453, followed by russia - 0.0501. A significant increase in the military power of these two countries, compared to 2019, is also noticeable. As for Ukraine, it ranks 22nd in the overall rating with an index of 0.3266. In Table 3, we offer to consider a comparison of the index and its components of Ukrai-ne and russia.

Table 3. Comparison of the military power of Ukraine and russia in the Global Fire-power 2022 rating (GFP 2022).

Constituents	Ukraine	russia
Index	0,3266	0,0501
Active military per-sonnel, thousands of people	200	850
General Air Force, unit	318	4173
Battle tanks, unit	2596	12420
Missile launchers, unit	490	3391
Navy, unit	38	605

An important component of the country's military power is its human resource, which consists of active military personnel and reserves. The first positions in the GFP-2022 rating are held by the countries with the largest population: China, India, the USA, and russia. Although the US army is not the largest in terms of the number of military personnel, it is

the most powerful in terms of available weapons, ahead of other countries in terms of the power of the air force and naval forces.

The second position in the rating of the power of armies is occupied by russia, which has the largest number of armored vehicles, control over the extraction of energy resources, and nuclear weapons.

Since 2019, Ukraine has moved up 7 positions in the GFP rating and currently ranks 22nd, the military power index is 0.3266. In terms of the number of active military personnel, Ukraine ranks 23rd in the overall ranking, the Air Force ranks 33rd, tanks rank 13th, armored fighting vehicles and self-propelled artillery rank 6th, rocket launchers rank 12th. At the same time, penalty points are accrued for an underdeveloped navy, excessive oil consumption and a large public debt.

The state must independently determine the balance between "Guns" and "Butter" to best meet the needs of citizens and protect national security, with existing and potential armed conflicts influencing this choice. Hibbs and Douglas consider the trade-off between military and consumer goods as a useful measure of choice success (Hibbs, Douglas 2010).

Military expenditures can increase when a country is involved in a military conflict. It is likely that a balanced tax program can serve to protect national security. It is necessary to consider the principle of economic growth through regulation of the tax burden, which will explain the impact of taxes on the economy.

The International Center for Conversion in Bonn (BICC) classifies states according to the level of militarization into five groups: from very high to very low. For this purpose, the Global Militarization Index (GMI) is used. The most militarized countries are Israel, Oman and Azerbaijan. Ukraine ranks 16th in the overall ranking of countries. It is obvious that the reason for the increase in military expenditures in Ukraine is the russian-Ukrainian war. Table 4 shows the Top 16 countries in the GMI 2020 ranking.

To improve compatibility between different GMI indicators and prevent distortion of values during calculation, at the first stage each indicator is represented by a logarithm with a factor of 10. Second, all data are calculated according to the formula:

$$x=(y-min)/(max-min),$$

where min and max represent the lowest and highest value of the logarithm, respectively.

In the third step, each indicator is calculated according to a factor that reflects the relative importance given to it by BICC researchers. To provide a final score, the weighted scores were added together and then finally normalized to a scale of 0 to 1000.

In general, GMI provides detailed analysis of specific regional or national events. The purpose of the BICC is to facilitate the debate on militarization and to highlight the often inconsistent allocation of resources. In order to measure the value of a country's military apparatus, researchers compare military expenditures with spending on, for example, education or health care (as a percentage of GDP), comparing the total number of military personnel and military equipment with the number of teachers or doctors and the general population .

Clearly, the more militarized societies are those in which military expenditures exceeds spending on education or health care. GMI subindices and baseline indicators include military expenditures, active military personnel, and availability of heavy weapons.

Table 4. Top 16 countries by level of militarization in the Global Militarization Index 2021 rating (GMI 2021).

Country	Military expenditures	Military personnel	Heavy weapons	GMI score	GMI rank	Changes compared to the previous year
Israel	3,57	1,9	3,26	437	1	3,65
Oman	5,56	0,96	1,98	425	2	31,53
Azerbaijan	4,11	0,7	2,2	389	3	54,58
Kuwait	4,18	0,69	2,74	381	4	25,12
Armenia	3,14	1,98	2,43	377	5	1,44
Saudi Arabia	4,53	0,74	2,24	375	6	10,65
Brunei	3,88	1,58	2,04	375	7	28,15
Bahrain	3,39	1,36	2,73	374	8	-1,8
Singapore	2,9	1,45	2,87	361	9	9,69
russia	3,29	0,97	2,81	354	10	10,16
Jordan	3,32	1,13	2,44	344	11	5,29
Algeria	4,05	0,87	1,77	335	12	9,57
South Korea	2,42	1,71	2,3	321	13	8,25
Greece	2,39	1,21	2,77	318	14	0,6
Cyprus	1,82	1,66	2,85	316	15	5,59
Ukraine	3	0,55	1,94	305	16	30,3

A state must independently determine the balance between military and other expenditures to best meet the needs of its citizens and protect national security, with existing and potential armed conflicts influencing these choices. Investments in the state economy, technological development and innovation contribute to increasing the level of national security and defense. The military burden on the economy must be sufficient to protect the country from potential or existing threats.

The relationship between military expenditures and economic growth varies by country, location, income, geopolitical factors, etc. Military expenditures may not have a direct impact on economic growth, or may hinder economic growth due to its high cost. South Korea and Israel have achieved tremendous economic development despite high military expenditures. Russia is an example of an excessive military burden on the economy with a negative impact on subjective well-being.

Conclusions and prospects for further research.

It is widely recognized that the fundamental role of a democratic state is to create a society in which people have a better quality of life (Veenhoven, Ouweneel 1995; Whiteley et. al. 2010). According to Maslow's (1970) hierarchy of needs, a person seeks to satisfy five different levels of human needs located in the hierarchy. It is important to note that safety is one of the most important needs that must be met before moving on to higher needs (Clarke 2005, Costanza et. al. 2007). Indeed, a person needs to be in a safe environment to protect himself from existing threats. Having completed this stage, a person begins to conceptualize his needs at a higher level, strive for self-development and actualization.

As for developed countries, the preservation of existing economic structures and socio-political institutions largely depends on successful protection against potential threats. Having satisfied the basic needs of the lower level, people can concern themselves with individual freedom and autonomy, which have been shown to have a significant impact on subjective well-being (SWB) (Frey 2008). Disruption of society as a result of serious violent conflicts can threaten existing values, freedom and institutions (Ullman 1983). Thus, people's desire for security can be quite strong even at an advanced economic stage, and government intervention in the defense sector will have a positive effect on overall well-being.

Similarly, in developing countries, the desire to be in a safe environment is one of the important conditions for increasing the subjective assessment of life (Inglehart et. al. 2008). Drawing on value-environment fit theory, Sortheix F. and Lönnqvist J. found that an emphasis on security values is evident in developing countries. They explain that the presence of strong security values is a reaction to the perceived lack of danger from external threats (Sortheix, Lönnqvist 2014). Therefore, it logically follows that if the government provides guarantees of protection against external threats, the SWB can increase.

Relevant studies have also found empirical evidence that increased military expenditures contributes to economic growth and better objective living conditions (Aizenman, Glick 2003).

In summary, it is expected that because people highly value the defense sector at various stages of development and require states to effectively use legal force to contain any potential external and internal violent conflicts, government intervention in the defense sector is expected to have a positive impact on SWB (Barnett, Adger 2007).

However, in developing countries, where one lives in an environment where basic human needs are not adequately met, it remains questionable whether defense sector interventions have a positive effect on subjective assessments of the good life. In fact, a large number of studies have found that increasing military expenditures does not contribute to economic growth (Biswas, Ram 1986).

Again, a strong theoretical justification for these findings is that the growth of the defense sector typically takes away scarce resources that would be used for other productive civilian investments. An increase in military expenditures may also discourage individual savings, as it may be financed mostly through taxes rather than through debt issuance (Deger 1986).

Once other basic human conditions are adequately provided for, defense sector interventions can become more meaningful as they complement and reinforce other fundamental human needs. However, given existing resource constraints, interventions in the defense sector will only have a negative impact on individual SWBs in developing countries if other basic human needs are not adequately addressed by the government.

It is important to note that the preservation of a peaceful society in developed economies has also been achieved by increasing the general welfare of the state, building democratic institutions, and providing basic social services in the fields of social security, education, and health care. In other words, government intervention in other fundamental objective conditions of life is just as important as strengthening the state's military capabilities when it comes to maintaining peace.

Thus, similar to the argument applied to developing countries, because the government is able to support reliable institutional structures (such as market processes, democratic system or governance) and satisfy the basic

human needs of the public, an individual may recognize the government as legitimate and not worry about the future (Barnett, Adger 2007).

Certain rights in developed countries (such as public education or general social services) become increasingly important because people often depend on selling their own labor to earn a living in an integrated global market system (Esping-Andersen 2013).

Thus, it can be predicted that the potential effect of displacing military expenditures from spending on other important budgetary areas will be significant. In addition, several serious consequences can arise if the level of military expenditures is deemed excessive or has already reached saturation point. For example, this can lead to a repetitive process of increasing the military capabilities of neighboring states, as their perceptions of external threat and danger constantly increase. Thus, given that the basic level of military expenditures is already sufficient, an increase will only disrupt the existing peaceful environment and, as a result, increase the risk of violent conflicts, which also negatively affects individual SWBs (Albalate, Bel, Elias 2012).

Many researchers suggest that at the individual level, several demographic, social, and economic factors, such as individual sense of agency, political value, employment status, individual income, marital life, religion, interpersonal trust, age, and education, have a significant impact on SWB. Gross government expenditure (ratio of gross government expenditure to GDP), GDP per capita, GDP growth (%), national unemployment rate and democratization index also affect the overall level of SWB.

According to the study, the results of several specifications show that military expenditures in general has a negative effect on individual SWBs in both developed and developing countries (Kwon 2022). These findings are based on the theoretical assumption that while an individual prioritizes different sets of criteria in his subjective evaluation of the quality of life in the phases of socio-economic development, the defense policy sector is expected to interfere with other important social policy sectors, adversely affecting on SWB at all stages of development.

Statistics show that strengthening national security may not be a top priority for people in both developed and developing countries. It is likely that in developing countries, with limited resources available, increased intervention in the defense sector inevitably reduces public investment in other important sectors such as social security and infrastructure development, which are expected to have a positive impact on the SWB at this stage of development. The same is true in developed countries, as people react negatively to increases in military expenditures that may be seen as excessive when they implicitly signal the threat of violent conflict.

Despite the fact that these existing studies contribute to the acquisition of new knowledge in the literature, it is relevant to study the impact of military expenditures on security in Ukraine, since relevant studies have shown that violent conflict usually arises due to human insecurity. When livelihoods are significantly threatened, the state must provide adequate services and opportunities to affected individuals to enable them to recover from the loss. If not, a person tends to look for alternatives. For example, joining military alliances in developing countries can be a rational decision because it can lead to more secure social and economic opportunities that are not available to civilians (Stewart, Fitzgerald 2000). Ukraine's integration with the EU and NATO is expedient.

Conclusions and prospects for further research. In fact, many studies of military expenditures indicate that the existence of a threat consistently determines the level of military expenditures. Thus, the construction of a linear regression, which includes the presence of a threat (for example, violent conflicts or war), will provide very important information about the independent impact of military expenditures on the Security of Ukraine.

In addition, the possible crowding-out effect of military expenditures needs further study. Indeed, it would be useful to examine the trade-off between military expenditures and other social spending that primarily addresses basic human needs (such as health care, education, or other economic sectors). While some studies discuss the potentially positive impact of social spending on SWB, it would be interesting to investigate

whether there are inverse relationships between social and military expenditures in government budget decisions.

Future research can directly address this issue for Ukraine. New findings on these issues will expand knowledge about the dynamics between public fiscal policy and the SWB.

Examining the public response to military expenditures and how public opinion affects military budget approval is an interesting topic for future research. Whether the public will support increased military expenditures 24-48 months after the start of a military conflict is an open question.

How do citizens generally see the relationship between military expenditures and social welfare? Do they see a trade-off between guns and bitter, or do they view costs as "Guns yield Butter"? The attitude probably depends on the potential or actual armed conflict in which the state is involved. Also, additional military expenditures creates additional jobs funded by the government and private enterprises.

The proposed general theory focuses on context-dependent factors. This would explain the effect of guns/butter in Ukraine. A situation where military expenditures is a major public concern because of a national security situation creates a clear trade-off in favoring military expenditures and health care over other areas.

References

AIZENMAN J., GLICK R. (2003), Military Expenditure, Threats, and Growth. *National Bureau of Economic Research.* DOI: 10.3386/w9618.

ALBALATE D., BEL G., ELIAS F. (2012), Institutional determinants of military spending. *Journal of Comparative Economics*. 40 (2), 279–290. DOI: 10.1016/j.jce.2011.12.006.

BARNETT J., ADGER W. (2007), Climate change, human security and violent conflict. *Political Geography*. 26(6), 639–655. DOI: 10.1016/j.polgeo.2007.03.003.

BARTELS, L. (1994), The American Public's Defense Spending Preferences in the Post-Cold War Era. *Public Opinion Quarterly*. 58, 479–508.

BISWAS B., RAM R. (1986), Military Expenditures and Economic Growth in Less Developed Countries: An Augmented Model and Further Evidence. *Economic Development and Cultural Change.* 34(2), 361–372. DOI: 10.1086/451533.

CLARKE, M. (2005), Assessing well-being using hierarchical needs. *WIDER Research Paper.*

COSTANZA, R., et al. (2007), Quality of life: An approach integrating opportunities, human needs, and subjective well-being. *Ecological Economics*. 61(2), 267–276. DOI: 10.1016/j.ecolecon.2006.02.023

DEGER, S. (1986), Economic Development and Defense Expenditure. *Economic Development and Cultural Change*. 35(1), 179–196. DOI: 10.1086/451577.

DOMKE, K., et al. (1983), The Illusion of Choice: Defense and Welfare in Advanced Industrial Democracies, 1948–1978. *American Political Science Review.* 77, 19–35.

EICHENBERG R., STOLL R. (2003), Representing Defense: Democratic Control of the Defense Budget in the United States and Western Europe. *The Journal of Conflict Resolution.* 47, 399–422.

ESPING-ANDERSEN, G. (2013), The Three Worlds of Welfare Capitalism. *John Wiley & Sons.*

FREY, B. (2008), Happiness: A revolution in economics. *MIT Press.*

GFP (2022), Military Strength Ranking. https://www.globalfirepower.com/countries-listing.php (Application date: 2022.11.25).

GMI (2021), Global militarization Index. https://gmi.bicc.de/ranking-table (Application date: 2022.11.25).

HARTLEY T., RUSSETT B. (1992), Public Opinion and the Common Defense: Who Governs Military Spending in the United States? *American Political Science Review*. 86, 905–915.

HIBBS J., DOUGLAS R. (2010), The 2010 midterm election for the US house of representatives. *CEFOS working paper*. 1 (9), 1–15.

HIGGS R., KILDUFF A. (1993), Public Opinion: A Powerful Predictor of US Defense Spending. *Defence and Peace Economics*. 4, 227–238.

HORSLEY, S. (2012), House to Vote on GOP Bill Framed as Guns vs. Butter. *NPR*. https://www.npr.org/2012/05/10/152390960/house-to-vote-on-gop-bill-favoring-guns-over-butter. (Application date: 2022.11.25).

INGLEHART, R., et al. (2008), Development, Freedom, and Rising Happiness: A Global Perspective (1981–2007). *Perspectives on Psychological Scienc.* 3(4), 264–285. DOI: 10.1111/j.1745-6924.2008.00078

KWON, C. (2022), The Effect of Defense Spending on Subjective Well-Being: Cross-Country Evidence. *Research in quality of life.* 17 (4), 1961–1989.

LADD, J. (2007), Predispositions and Public Support for the President during the War on Terrorism. *Public Opinion Quarterly*. 71 (4), 511–38.

LARON, K. (2018), Guns Yield Butter? An Exploration of Defense Spending Preferences. *Journal of Conflict Resolution.* 63 (5), 1193-1221.

NATO (2022), Defence Expenditure of NATO Countries (2014-2021). https://www.nato.int/cps/en/natohq/news_193983.htm (application date: 2022.11.25).

RUSSETT, B. (1969), Who Pays for Defense? *The American Political Science Review*. 63, 412–426.

SIPRI (2022), World military expenditure passes $2 trillion for first time. https://www.sipri.org/media/press-release/2022/world-military-expenditure-passes-2-trillion-first-time (Application date: 2022.11.25).

SORTHEIX F., LÖNNQVIST J. (2014), Personal Value Priorities and Life Satisfaction in Europe: The Moderating Role of Socioeconomic Development. *Journal of Cross-Cultural Psychology*. 45(2), 282–299. DOI: 10.1177/0022022113504621.

STEWART F., FITZGERALD V. (2000), The Economic and Social Consequences of Conflict. *OUP Catalogue Oxford University Press.*

ULLMAN R. (1983). Redefining Security. *International Security*, 8(1), 129–153.

VEENHOVEN, R., OUWENEEL, P. (1995), Livability of the welfare-state. *Social Indicators Research.* 36(1), 1–48. DOI: 10.1007/BF01079395.

WHITELEY, P., et al. (2010), Government Performance and Life Satisfaction in Contemporary Britain. *The Journal of Politics*. 72(3), 733–746. DOI: 10.1017/S0022381610000137.

WLEZIEN, C. (1995), The Public as Thermostat: Dynamics of Preferences for Spending. *American Journal of Political Science.* 39 (4), 981–1000.