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GEOECONOMICS AS A TOOL OF MODERN GEOSTRATEGY

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Abstract. The scholarly article presents different analytical approaches to modern understanding and manifestation forms of geoeconomics as a tool of geostrategy. It contains a comprehensive list of conceptual tools, empirical roots, and case studies on the political-economic essence of geoeconomics. The paper's particular contribution is its direct connection with the practice and rooting of international political economy and poorly studied determination of geoeconomics with geostrategy in the evolving structure of the global world order and new vectors of geoeconomic dynamics of Ukraine. Based on the evolutionary method, the author has developed a matrix of approaches to understanding geoeconomics, demonstrated its progress, conducted a critical analysis of each of them, and put forward an original version and model of interpreting the relevant dynamic phenomenon following the strategic national interests of Ukraine. The myth of static assumptions about the existence of geoeconomics as a self-sufficient system that should have replaced geopolitics was debunked. Using the case study method, the key factors facilitating the geoeconomic expansion of China, the USA, and Russia are highlighted. Emphasis is placed on the role of other states in the formation of geoeconomics, and the issue of strategic autonomy is elucidated. The author justifies the genuine interest in geoeconomics as a component of geostrategy, demonstrates its determination, and specifies the main modern tools of geoeconomics. The impact of the military discourse on geoeconomics is proven, and the vectors of geoeconomic de-sovereignization of some countries in the context of economic globalization, geosecurity expansion, and the growing role of services in the GDP structure. The importance of studying the role of artificial intelligence, android robots and humanoids in GDP formation was separately emphasized; options of their influence on the world's geoeconomics and the development of humanity as a whole amidst neo-economics are modeled.

Key words: geoeconomics, geostrategy of modern Ukrainian State, neoliberal globalization, geoeconomic security, neoclassical economics, economic ideology, economic transformations, strategic autonomy, geoeconomic development, post-neoliberal.

JEL Classification: F11, P10

1. Introduction

The post-war development of the Ukrainian State, along with the transformational post-Russia processes and the dicentric processes of building strategic autonomies, will increasingly face the expressed forms of its further rejection as an independent and self-sufficient economic entity, an attempt to manipulate the loans granted during the war to generate supervised algorithms for managing and structuring

GDP following the requirements of the World Economic Forum and other influential geoeconomic actors.

There is a need to apply interdisciplinary methodology, in particular, national security studies and the theory of geostrategy, econometrics and mathematical statistics in their organic synthesis. The proposed approach makes it possible to reach a high-level abstraction through macroeconomic extrapolation models.

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Since state policy is a systemic phenomenon, there is a necessity to study emergent transformation processes in macroeconomics. Thus, the author puts forward a hypothesis about the evolution of geoeconomics and shapes a system of arguments about relevance to develop and study its highest form — neoclassical economics, in the context of implementing the geostrategy of the modern Ukrainian State.

The complex issues raised in the article are covered **for the first time** in this interpretation that excludes a practical need to cite and mention the research papers of those authors who have not dealt with the topic concerned and have not associated the formation of neoclassical economics with geostrategy.

The purpose of the article is to present an evolutionary macroeconomic model of the transformation of geoeconomics as a component of the modern Ukrainian State's geostrategy.

Among publications that have become classical and fundamental, it is essential to highlight the works of O. Bilorus, R. Weid, A. Halchinskyi, B. Gosling, V. Derhachev, C. Jean, R. Korzienivits, E. Kochetov, E. Lyutvak, D. Martin, J.-L. Mezger, T. Moran, P. Savon, and J. Firebug.

The contributions of modern foreign researchers of the geoeconomics phenomenon are also worth noticing, as follows: Milan Babić, Adam D. Dixon, Imogen T. Liu, Paolo Balmas, Sabine Dörry, Clara Weinhardt, Karsten Mau, Jens Hillebrand Pohl, Jaša Veselinovič, Scott Lavery, Sean McDaniel, Davide Schmid, Henrique Choer Moraes, Mikael Wigell (Milan Babi´c, Adam D. Dixon, Imogen T. Liu, 2022), and Joachim Klement (Joachim Klement, 2021).

The new global economic and political reality necessitates elaborating an updated toolkit and a paradigm for studying transformation processes, incl. in macroeconomics.

Over the years of independence, almost all the most significant from the standpoint of macro-economics economic phenomena have occurred in Ukraine, even such rare ones as hyperinflation and demonetization of GDP. As a result, the appeal to the economic content of geostrategy and strategic issues of geoeconomics is relevant in the context concerned.

The logical element of any research is to define the key concept with the subsequent presentation of one's vision following the research subject. Therefore, the author further considers the concept of geoeconomics amidst designing the geostrategy of the modern Ukrainian State.

2. The concept of geoeconomics

The Merriam-Webster dictionary notes the term was first used in 1981: it was then understood

as a combination of economic and geographical factors relating to international trade (Merriam-Webster.com Dictionary).

However, most scientific sources indicate that the term "geoeconomics" has been in routine use since 1990 and is associated with the name of Edward Luttwak (1990). While extrapolating the dominant paradigmatic formula for defining the concept of geopolitics, he also applied it to geoeconomics, which he interpreted as the science of spatial, temporal, and political aspects of the economy and resources (Luttwak, 1999).

A somewhat transformed interpretation, but with the preservation of key terms, was provided by the Azerbaijani economist *Vusal Gasimli*, who defines *geoeconomics* as the study of the interrelations between economics, geography, and political science in an "infinite cone" rising from the center of the Earth to space (including the economic analysis of planetary resources) (Gasimli, 2015). Moreover, such a definition is actually duplicated in the Merriam-Webster Dictionary: "1. a combination of economic and geographical factors relating to international trade; 2. a government policy guided by geoeconomics" (Merriam-Webster.com Dictionary).

Even now, there is no a robust definition of the concept and consensus paradigm of geoeconomics; however, professional studies refer to the American strategist *Edward Luttwak* and the French economist and political scientist *Pascal Lorot* as those who first attempted to give scientific credence to the need to distinguish between geoeconomics and geopolitics. Moreover, later studies also highlight the lack of a unified position on the interpretation of geoeconomics (Marianne Schneider-Petsinger Geoeconomics explained).

In general, to understand the complex context, the author focuses not so much on the numerical definitions of many researchers as on the outcome of their analysis, which is presented in the form of an original matrix of approaches to the definition of geoeconomics based on the *evolutionary method*.

3. Evolutionary matrix of approaches to the definition of geoeconomics. Geoeconomics – an economic tool for achieving geopolitical goals

The relevant definition conveys the first stage of the distinguishment between geoeconomics and geopolitics. Thus, it reflects the relationship between geoeconomics and geopolitics and demonstrates the geopolitical angle subordinate to geoeconomics. Such a definition aims, on the one hand, to demonstrate the availability of an individual phenomenon "geoeconomics", and on the other hand, to show its correlation and determination

by geopolitics, which stipulates and admits the existence of geoeconomics as its own toolkit.

Taking into account the subordination of geoeconomics to geopolitics, it is proposed to apply a three-level approach to understanding and studying geoeconomics: 1) the *level of policy*, as in international political economy; 2) the *integration layer*, as in economic geography and industrial organization; 3) the *level of transactions*, as in financial economics. Furthermore, analysis levels in geoeconomics (policy, integration, and transactions) also relate to national policy, which can vary from industry-specific tax breaks to anti-money laundering laws or sanctions restricting some cross-border financial transactions (Singer, J. David, October 1961).

In their work "War by Other Means: Geoeconomics and Statecraft", *Robert D. Blackwill & Jennifer Harris* noted that *geoeconomics* is the use of economic instruments to promote and defend national interests, and to produce beneficial geopolitical results; and the effects of another nation's economic actions on a country's geopolitical goals (Blackwill, Harris, 2016).

The upside of the mentioned approach is that geoeconomics has received a boost for its independent development and has begun to be considered separately from geopolitics, at least in conceptual terms. At the same time, geopolitics retained its dominant importance in the theoretical aspect and set the context for its implementation via geopolitical goals: in practice, it changed a particular vector of designation, not activities.

Therefore, within geoeconomics of the initial stage, geoeconomic goals, interests, priorities, strategies, and security did not become the objects of individual studies and therefore did not acquire adequate content and operationalization in the macroeconomics of countries and regions and the geoeconomic landscape. According to E. Luttwak, there were some attempts to grasp the diminishing importance of military force, which is inferior to geo-economic power.

Over time, the approach was annihilated and disavowed when, first, on August 8, 2008, the world did not react to Russia's aggressive war against Georgia – the annexation of its territory, and then the hybrid war launched by Russia in 2014 against the Ukrainian state by annexing the Ukrainian Crimea and parts of the Ukrainian territory in the east, and later the barbarous war launched on February 24, 2022.

President Clinton's initial assumption was that geoeconomics had replaced geopolitics (Robert D. Kaplan, 2022). And another US President, Richard Nixon, stated that "geoeconomics" had surpassed military strength and traditional geopolitics, and America had to hammer out its swords not on

coulters but microchips (Nixon, January 15, 1992). Consequently, the above myths were debunked.

4. Geoeconomics – a self-sufficient science with its research subject and implementation tools, including a geopolitical one

According to such an approach, geoeconomics is opposed to geopolitics. Subsequently, it became clear that the achievement of economic goals is impossible only via economic instruments as in the first approach. There was a sound understanding that the achievement of economic goals, geoeconomic dominance, and expansion is possible using the geopolitical potential of the state, international entities, and transnational corporations. Therefore, a characteristic feature of the evolution of the understanding of geoeconomics at the stage concerned was the awareness of the need to apply geopolitical tools to achieve and implement geoeconomic interests.

Our standpoint resonates with Adam Dixon's opinion who argues that the manifold ways in which globalized networks of corporate power and control can be weaponized, manipulated, and instrumentalized, challenges and at the same time complements geopolitics (Milan Babic, Adam Dixon).

The variability of goals and means of geoeconomics is characteristic of this stage, but awareness of one fact becomes decisive: the achievement of geoeconomic results and the satisfaction of geoeconomic interests outside the context of geopolitical tools is impossible.

5. Clear differentiation between geopolitics and geoeconomics at the conceptual level are often analyzed in the aggregate, and the latter is considered as a subtype of the former

The article proves the feasibility of their differentiation at the conceptual level. Comparing traditional geopolitics and geoeconomics, the author assumes that they have entirely different qualities and effects for their goals both at the national and international levels. It is important that they provide for the formation of alliances and the fact whether they are driven by the dynamics of balancing, dominance or poor balancing.

European strategists made the mistake of wishful thinking when transmitting and spreading narratives about "changes in Russia's geostrategy towards Europe" (Mikael Wigell, Antto Vihma). History quite often shows that the non-imperial strategy of Russia remained the same, except for deceiving some European states, bribery, blackmail, industrial spying, maintaining usual intelligence subversive and intrusive activities to cause discomfort, nuisances,

elements of controlled chaos in the European community, unity, and integrity. Moreover, there were chaos infiltration and zero inclusion, as well as steady-going conditions for geoeconomic energy dependence on Russian energy resources. In fact, Russian geoeconomics pursued "the strategy of fight fire with fire", splitting the EU into different areas, not only economic ones. As geoeconomics was cut off from geopolitics and most scientists dreamily considered it dogmatics, the EU turned to lose strategic sustainability and balance. In addition, economic problems caused varied attitude and a lack of unified European politics regarding Russia, which at the beginning of the barbarous war was identified as inconsistent and non-systemic, incapable reaching agreed complex consensuses geoeconomics.

However, Mikael Wigell and Antto Vihma believe that the 2014-15 drives for a more coordinated European approach were produced by changes in the focuses of Russia's geostrategy. The resort of Russia to geopolitics began to act as centripetal power resulting in the enhancement of EU unity. Due to sensitivity to threat, centripetal trends are evident in economic sanctions, the growing leadership of Germany in external EU policy, and discussions about an energy union. The analysis requires delving into the way a strategic choice - geopolitics vs geoeconomics - influences the consistency of rogue states and models of alliances (Mikael Wigell, Antto Vihma). However, we do not share the ideas of the mentioned authors as the leadership of Germany did not affect the prevention of the war and Merkel's anti-Ukrainian policy, attempts to put into effect Nord Stream, further exposure of coup d'état attempts made under Scholz's rule, and adverse conspiracy options for achieving the mentioned goal, allow claiming the following: during Merkel's term, Germany lost the sense of strategic danger and sought to develop economic relations with Russia pursuing financial benefits by relying on the illusions of geoeconomics. At the same time, Russia had ulterior plans to sow discord within Europe, deprive it of unity, and make it geopolitically dependent. It is also interesting to note that analytics of European countries differ in interpreting the geoeconomic expansion of Russia and China. If the former was beyond dispute and its performance was identified as a change "in the geostrategy towards Europe", the actions of China in the field of high technologies, access to investments in high-tech production, or the implementation of 5G networks were subject to security-centrism and hence relations between geoeconomics objectives and geostrategy were established and identified.

Thus, the author *concludes*: a lack of universal science-based criteria for identifying geoeconomics

led to European commodity dependence on Russia and contributed to delaying a solution on military aid to the Ukrainian State on the first days of the war.

6. The term "geoeconomics" acts as a collective and generalizing concept and is used to describe a wide range of concepts

In the most general sense, it is applied as a synonym for international economic relations with an emphasis on the global structure of such relations. In general, supporters of the relevant position take a dim view of the very term and the separation of geoeconomics, as well as geopolitics and other pseudoscientific theories of historical and geographical determinism based on critical geopolitics. Such a position is shared by Milan Babic who stated that geoeconomics, as a relatively new concept, has not yet been fully integrated into the broader research canon of international relations. Geoeconomics is theoretically close to an integrated approach to international relations stressing cross-border economic links and global networks as focal points for understanding international politics. A contribution to the topic concerned could analyze how geoeconomics can be integrated as a broader research program in international relations, how different theoretical implications complement/diverge from international relations theory, or how geoeconomics challenges elucidate the assumptions of available studies on international relations (Milan Babic, Adam Dixon).

7. Geoeconomics – an organic and combined synthesis of international economics and geostrategy

It is the standpoint that we present in this scientific article, given the author's understanding of both geostrategy which is significantly and drastically different from geopolitics, and the methodology of strategic communications and the *theory of strategic transformations* (developed by V. Lipkan) amidst the modern content of the geostrategic landscape.

Other theories convey geoeconomics in various manners and can be subject to political and economic research:

- weaponized interdependence: Farrell & Newman, 2019);
- "economic statecraft" (Aggarwal & Reddie, 2021);
- "geoeconomic competition" (Gertz & Evers, 2020);
- spatial flexibility (Moisio, 2019);
- "geopoliticization" of trade and investment (Meunier & Nicolaidis, 2019).

However, the approaches of one of the founders of geoeconomics *E. Luttwak*, who argued that it is an admixture of the methods of commerce to the logic of the conflict (Luttwak, 1990), are already outdated

and do not correspond to its modern content, elements and forms of manifestation. The statement by Babych is somewhat irrelevant: "Geoeconomic strategy aims rather at market control and profit extraction than at projection of state power abroad" (Babi'c, 2021). By referring to the case of China, we further demonstrate how the toolkit of geoeconomics embodied in geostrategy determines and shapes soft conditions for establishing state power, which is not limited only to the economic sector.

Russia's barbarous war against the Ukrainian State evidenced the worthlessness of the postulates of neoclassical economics regarding the "logic of commerce", which supposedly separates market dynamics from political power. For Russia, there is no logic between goals and consequences, even at the current stage (beginning of 2023): capital outflow, a drop in the GDP, a lack of foreign investment, economic sanctions, a ban on access to high technologies, etc. – this defies the "logic of commerce" but fully echoes neo-imperialist ideology, as follows:

- politics has always been and remains above the economy;
- ideas have always prevailed over expediency and pragmatism;
- political illusions of the ruling class are always above national interests.

As a result, within geoeconomics, it is necessary to discuss not only *conflicts* and antagonisms (that is, struggle and dominance, which are natural postulates of geopolitics) but primarily *competition* and *cooperation*. The vector of modern political and economic studies by foreign researchers resonates with our vision (Kanai, Schindler, 2019; Kolodyazhnyy, Auyezov, Louise, 2021).

8. Modern realities and manifestations of geoeconomics

The importance of analyzing the evolution of the concept of "geoeconomics" is due to its inherent transformative nature and the capacity to change its manifestation forms depending on the geo-economic landscape, geostrategic priorities, and the level of achieving strategic goals.

To illustrate the manifestations of geoeconomics, we cover its specific manifestations using a case study as exemplified by the most influential countries: China, the United States, and Russia.

The People's Republic of China. The most striking example of the use of geoeconomics as the driver and foundation for the establishment of world domination is the policy of modern China, in particular, the political leadership of the fifth generation led by Xi Jinping. During the reign of the fifth generation, China began to apply economic

instruments to achieve its geostrategic ambitions, influence the world community, and softly impose its technological devices and networks. China increasingly makes other countries dependent on its goods and services, and thus, it significantly influences the control and formation of individual components of the GDP structure.

China is moving towards world domination systematically, gradually, and inevitably thanks to achievements in artificial intelligence, computeraided learning and various cyber capabilities used to gain control not only over the economic potential of foreign countries. According to the head of the Pentagon's military software development unit, *Nicolas Chaillan*, US cybersecurity is "kindergarten" compared to China (The Pentagon's chief military programmer). Therefore, geoeconomics is infused with the implementation of a proactive cybersecurity policy, which is an essential modern tool for preserving infrastructure potential.

In his monograph, *V.A. Lipkan* aptly predicted that in 2022, social and interstate tension would significantly increase due to the closure of many industrial enterprises, primarily in the motor vehicle industry (Lipkan, Zubko, 2022). It is driven by the fact that Beijing significantly reduced export quotas for natural minerals by 40% in 2010, referring to the need to ensure "environmental safety" despite repeated claims to the WTO. Tensions and trade wars between the US and China are mainly the aftermaths of the US high-tech industry's heavy reliance on rare earths from China (Kashchuk).

The PRC's intensification towards the militarization of its foreign policy and the constant timing of the accession of Taiwan (without constraining itself by the obligation not to use force) are effects of the awareness of the complete dependence of other countries on China, primarily in terms of highend manufacturing and the production of ultramodern weapons. Thus, a clear implementation of the geoeconomic paradigm in promoting the geostrategic goals of the PRC is visualized.

It is worth noting that geoeconomics is an essential tool of the modern PRC's geostrategy.

Implementing the PRC's geoeconomic strategy by the fifth generation of leadership allows us to conclude that after 2025, even the physical capacity of other countries to manufacture new weapons becomes remote and doubtful since rare-earth minerals are the strategic raw materials for their production.

In addition, China seeks to employ geoeconomic tools to address its political problems: China has repeatedly cut car imports from Japan or halted exports of Chinese rare earths to Japan to weaken Tokyo's resolve over territory and sovereignty in the East China Sea. Another example is the provision of assistance to Africa – China rewards those countries that vote for it in the UN.

It is also necessary to mention the case of the withdrawal of Ukraine's signature from the document condemning the torture of Uighurs in China.

The insidiousness of China in exploiting the gaps and errors, principles, and structure of the options of neoliberal globalization is well-studied in the work (Liu, Dixon, 2021) which elucidates the evolution of China's global economic rise. Thus, our task is not so much to state the obvious as to form vectors of how Ukraine can use the above to meet its strategic national interests.

In this regard, Ukraine is shaping sufficient prerequisites for the proper use of the relevant situation in its favor through attracting foreign direct investment (in combination with their screening following the principles of security-centrism (Lipkan, 2003)) and the placement of high-tech industry facilities on its territory with the subsequent development of both an appropriate production and industrial base and the market of high-intelligent and technological services. Geostrategic discourse and geostrategy as a political-security practice allow for insight into the objective of geoeconomics and its role in constructing the united, prosperous, strong, and economically powerful Ukrainian state.

Given the consolidation of the state role in the Chinese economy, the revival of state capitalism "with Chinese specifics", the growth of state-owned enterprises, and the acquisition of private corporations by the state (for example, the acquisition of the Ant Group in the PRC in 2023) (Billionaire Jack Ma will lose control of Ant Group), we conclude that China is a canonical example of the use of geoeconomic potential at the cutting edge of promoting its own geostrategy. The deep integration of global trade links, the attempts to implement the "One Road One Belt" project, and control via cyber-espionage over financial world markets have made geoeconomics an essential and powerful tool for satisfying the geostrategic interests of the PRC.

The United States of America. Let's be frank: from the standpoint of geoeconomics and political logic, it is confusing why in response to the Russian annexation of Crimea, the United States and other countries did not send troops to protect Ukrainian territory but only imposed sanctions against Russia. What was the difference between the annexation of Crimea and the occupation of territory in the east of the Ukrainian State and the Iraqi invasion of Kuwait, or the Yugoslav war, when the United States, despite the NATO Charter, organized an international coalition and carried out armed protection of its partners?

The answer lies in the author's presentation and interpretation of geoeconomics: at the moment of Russia's invasion of Ukraine, the economic toolkit of influence on Russia was more profitable for the United States. The same situation is evident in 2023, when

the barbarous war continues: 1) on the one hand, the United States gains economic benefits from sanctions against Russia; 2) on the other hand, it has managed to drive Russia out of the European energy market and, together with Qatar, become the principal supplier of energy to Europe; 3) in addition, it has secured orders for its military-industrial complex for many years in advance to replenish the stocks of weapons, particularly of European countries that will supply them to Ukraine; 4) the number of loans that Ukraine has taken from the United States also makes it strategically and economically attractive to earn prolonged profits on credit interest and other preferences that the Ukrainian state will experience only over the years.

The United States has also spearheaded international efforts to influence Iran's nuclear policy through *sanctions*. At present, we can state that the advantage of the dollar and the dominance of the United States in the international financial system mean that American sanctions have a significant impact.

"Just as in the war the artillery conquers territory by fire, which the infantry can then occupy, the aim here is to conquer industries of the future by achieving technological superiority (Luttwak, 1999). "Infantry" in E. Luttwak's analogy corresponds to commercial production, which can also be supported by the state via: 1) various forms of subsidies; 2) loan offer at interest rates lower than market ones.

Thus, geoeconomics creates conditions under which foreigners usually pay lower interest than local borrowers, whose taxes pay concessions received by foreigners. However, to balance the financial system, the state can make concessions for local producers, i.e., preferential loans and special tax regimes. (for example, Program from the Government: 5-7-9 in Ukraine). At the same time, amidst the geoeconomic process, there may be situations that have not been specified in advance and the determination and production cycles of economic processes cannot be changed, which is why originally attractive conditions can be changed over time. Moreover, the exit from the geoeconomic process is much more difficult than the entrance.

Another geoeconomic tool of influence is the screening of foreign direct investment, with the help of which and under the "pretext" of which it is possible to regulate the entry of "desired" and prevent the entry of "undesired" investments.

One of the manifestations of geoeconomics is *geoeconomic competition*. In turn, *geoeconomic competition*, which is also evident in the US-China trade war, has exacerbated many questions, primarily of theoretical nature:

- the war consequences go beyond the borders of these two states and affect other states and regions;

- at the same time, the consequences are within a new geospatial formation: the geoeconomic landscape;
- who is a geoeconomic actor, and how is it different from the international entity;
- whether states are the only possible actors capable of accumulating the strategic potential and strategic power of the state and the whole society to implement the geostrategy;
- whether transnational corporations can compete in this regard on a par with the state / group of states by accumulating such capacities.

Foreign researchers also pay attention to the need for the theoretical and empirical study of the relevant issues (Milan Babic, Adam Dixon).

Another actor who actively uses geoeconomics as a toolkit of geostrategy is Russia.

Russia. Russia is using its energy potential to achieve strategic goals. In 2008, it cut off gas pipelines to some parts of Europe in the middle of winter amid political disputes. The Kremlin provides enormous financial support to the annexed Crimea.

Because of the barbarous war, Russia is experiencing international isolation, and thus, the geoeconomic vectors are altering significantly. Russia has begun to compete with Iran in the world oil and gas markets, including oil sales to China, while actively cooperating in procure kamikaze drones and unmanned aerial vehicles.

An interesting geoeconomic effect of Russia's strategic negligence is that it currently ties first and second place with North Korea in economic dependence on China. As shown above, since geoeconomic instruments are determined by geostrategy, economic dependence on China means actual political dependence and further desovereignization of Russia.

Therefore, the mentioned facts may explain the strategic uncertainty of China about Russia's war against Ukraine.

- 1. Failure to condemn Russia produced the following benefits and advantages to the PRC:
- it remained a reliable partner in the procurement of energy carriers with preferential and cut prices;
- led to a significant infiltration of the yuan into interstate settlements, strengthening its potential as an international currency;
- $\boldsymbol{-}$ made Russia dependent on the Chinese economic system.
- 2. The lack of direct support for Russia created conditions under which the trade war between the United States and China did not take it up a notch, and China (its enterprises, organizations, and businesses) was not subject to sanctions.

Therefore, we reach an important intermediate conclusion: modern geoeconomics is a tool for establishing monopoly geoeconomic dependence and imperative geoeconomic desovereignization.

The dependence of Russia's economic progress on the economic needs of China and its capacities to overcome COVID and problems in the stock market allows for confirming the natural integration of economic systems, quite possibly through the partial acquisition of some sectors of the economy.

The practical conclusion from the above – regarding the implementation of geoeconomics within the geostrategy by the three countries – is the formation of the author's list of predominant geoeconomic instruments.

9. Predominant geoeconomic tools

Thus, the predominant geoeconomic tools at this stage of the development of socio-economic formation, given the synthesis of political and economic theory and analysis of geoeconomic practice, comprise the following:

- strategic policy for integration into the global economy to their strategic national interests' advantage;
- trade policy;
- global value chains;
- supply chains;
- investment policy, including state one;
- economic and financial sanctions;
- energy embargo (Babić, Dixon, Liu, 2022);
- financial and monetary policy;
- objects of strategic, including financial infrastructure;
- energy and raw materials;
- different forms of assistance;
- the performance of transnational elites, networks, forums, influence agents, their infiltration into the public administration of countries whose economic potential is of geoeconomic interest;
- internationalization of own monetary unit;
- introduction of blockchain technologies into the economy;
- introduction of artificial intelligence and humanoid robots;
- introduction of the national digital currency;
- cybernetic means.

According to *Robert D Blackwill* and *Jennifer Harris*, while some function in the same way as in the past (assistance), others are new (cyber) or operate in a different environment (energy) (Blackwill, Robert D.; Harris, Jennifer, 2016).

10. From geoeconomics to neoeconomics of the Ukrainian State

On the one hand, February 24, 2022, was the commencement of the practical realization of the Ukrainian State's geostrategy and, on the other hand, of the European civilizational breakdown, primarily regarding universal values and the economic price of political processes.

The war is transforming the Ukrainian nation, but the main thing is the transformation of the state apparatus and strategic architects, which contribute to epoch-making macroeconomic systemic changes in the geostrategic landscape.

Scientists are responsible for a future model of economic strategy and a model of neoclassical economics the Ukrainian State will be able to implement amidst geostrategy. After all, it affects Ukraine's position: on the forefront and vanguard of world economic and geostrategic changes, or in the concert hall – as a contemplator and passive participant and performer of global agendas, reboots, decisions of the WEF, WHO, etc.

Neoclassical economics is defined as a system of strategic infrastructure objects driven by the complex effect of economic factors and the corresponding state infrastructure policy upon which the value of tangible objects prevails not so much as the ability to provide vital services and perform relevant functions.

Neoclassical economics is defined as the economy of knowledge, the application of the latest information technologies, new business processes, and the introduction of a centralized national cryptocurrency, trade bots, and artificial intelligence. Hence, the decisive factor is the enhancement of the role of providing services together with a decrease in the role of tangible assets.

As a result, the structure of Ukraine's GDP changed noticeably from 2000 to 2020. If in 2000, services accounted for only 29%, in 2020, the level increased to 70%, almost as in Japan (71%).

It means that Ukraine is ready to actively participate in the formation of a new neo-economic order since creativity and the introduction of new business processes will manage to ensure leadership and competitiveness.

The outstanding feature of neoclassical economics is the development of not only intellectual capital but also artificial intelligence and the metaverse, which significantly expand the classical ideas about production factors, which are presented later. For example, in 2022 Mark Zuckerberg due to the untenable development of the metaverse project lost more than \$71 billion, which is the largest loss of wealth among all billionaires whose financial status is tracked by Bloomberg. Zuckerberg's powerful fall is explained exclusively by market factors and make us recall once again the transformation of his company into a metaverse (Played in the meta universe: Mark Zuckerberg lost 70 billion dollars). Therefore, the generation of abnormal profits and losses is not associated with the classical factors of production: 1) labor (purposeful activity of people); 2) land (natural resources); 3) capital (means of production). At the present stage, modern authors often

consider entrepreneurship to be the fourth factor of production. Production factors also comprise science, information, human capital, etc.

In our opinion, a change in the concept of "labor" is main and key. The concept takes a new meaning within neoclassical economics because it should refer to the purposeful labor of people, humanoid robots, bots, artificial intelligence, and neural networks. The classical factor of production (human labor) is currently supplemented in augmented reality within the metaverse, as well as the functioning of trade bots capable of performing up to 200 operations per second and the performance of artificial intelligence. For example, in Hong Kong, Tang Yu, the AI-driven virtual robot humanoid, successfully works as CEO of NetDragon Websoft Holdings Ltd (developer of mobile and online games). Tang Yu optimizes the flow of processes and increases the quality of work tasks and the speed of their execution. It is also a real-time data hub and analytical tool to support rational decision-making in day-to-day operations, contributing to more effective risk management systems (AI-powered 'boss', staff getting along thanks to HK-listed enterprise). Thus, robots will also be able to work and participate in capital gains and provide services.

The introduction of artificial intelligence, trade bots, blockchain – these factors in the near future will amplify economic theories. At the same time, the development of neo-economy principles, provided that robots are self-sufficient, will be less dependent on a common logical and pragmatic geostrategy but will be guided by original algorithms and criteria of economic benefit and feasibility.

11. Conclusions

Odiousness and metamorphoses of geoeconomic entities, which use diverse solutions under the guise of "strategies" as a smear, bring the world closer to sad destructive and anti-humanistic solutions devoid of the implementation of strategic national values and interests and the preservation of national identity.

Subsequent imitation of geopolitics in geoeconomics will lead to the throwback of its role and status, as shown above, in presenting the evolutionary matrix of approaches to understanding the concept of geoeconomics. That is, geoeconomics will again turn into a servant of geopolitics and will become the tool of the WEF, other forums, and transnational corporations treating the world community and the noosphere as their system of governance outside the context of sovereign democracy, national identity, humanism, and other universal values; and most importantly, it will exist as a conflictual and confrontation system. Under such conditions, geoeconomics can suffer the same consequences as geopolitics: it will transform from the art of managing the geoeconomic landscape into craftsmanship, a blasphemous wrench and servicing the geopolitical goals of international entities:

- 1) instead of integration and constructive globalization, revanchism of *geohistorical subjects will take place* which will dominate over the economic and infrastructural potential of countries through military force and inspirational and infiltrated into the system of public administration economic mechanism;
- 2) instead of introducing neoclassical economics and increasing the role of services in the GDP structure, it will take other forms: banditry and raiding, takeover, barbarism, genocide, enrichment of the elect, global coercive measures determined either by climate change, diseases, the food crisis, or water and energy restrictions, decarbonization, etc. modern distorted form of the neoclassical economy is de-infrastructurization, when in pursuing the geopolitical goal of enslaving a particular social system, the country's infrastructure potential is deliberately and purposefully destroyed, the provision of vital services and the performance of vital functions are impossible, thereby undermining the institutional capacity of the state to remain a holistic and organized political system of civil society charged with satisfying the most important needs of citizens (Lipkan, Zubko, 2022);
- 3) geohistorical manipulations of clandestine services and conspiracy units imbued with the spirit of mercantilism under the pretext of the ideas of "good and humanism", democracy and human rights will spread and scale (Lipkan, V.A. Reason for humanism).

One of the essential strategies for realizing the relevant policy was the concept of *strategic uncertainty*, under which the proclaimed and attainable goals of geoeconomics are significantly different in their nature, effects and takeaways obtained after its application.

According to the geostrategic discourse introduced and scientifically grounded by the author, the strategic goal of geoeconomics is to proactively establish control over promising sectors of the future, including objects of strategic high-tech and space infrastructure, through the achievement of technological superiority via geostrategic tools given the balance of the growth principles of security-centrism, strategic economic policy, and economization of strategic policy.

The proposed evolutionary matrix of approaches to understanding geoeconomics led to the formulation of a theoretical justification for the continuity of neoliberal globalization and the collapse of relative hegemonic stability in the aftermath of strategic instability upon which the effective use of geoeconomics tools will be an indicator of the ability to positively transit from the level of adaptation to strategic instability (whereby changes and geostrategic landscape can be irreversible) to the growing equilibrium and strategic transformations (when circumstances remain in the fairway of the management system of strategic architects).

In our opinion, it is perspective to study the issues of strategic autonomy, the relevance of which is evident against the background of the increase in China's economic power and the strengthening of fifthgeneration power within the state, industrial consolidation in state ownership, as well as the militarization of international relations combined with growing political turbulence in the United States and, as a result, the weakening of its global leadership, which contributed to decentralization and instability of the geoeconomic development of the world financial system. The concept of strategic autonomy should be interpreted as a guiding principle of regional development of blocs of states, which together strengthen their synergistic potential to influence globalization processes and the implementation of their strategic national interests. Amidst geoeconomics, the concept of strategic autonomy can be an additional tool for the effective activities of regional international entities as full-fledged and self-sufficient geoeconomic actors.

The logic of *strategic choice* includes not only the issues of military, security, cyber, and other nature but primarily of *geoeconomic* one. Therefore, in understanding the essence of geoeconomics, it is crucial to find out its causes and conditions, other determinants, key actors, and consequences in the context of the implementation of the modern Ukrainian state's geostrategy upon permanent variability of the global economic order.

Geostrategic discourse makes it possible to deprive macroeconomics transformations of tactical nature. Thus, there is maneuvering between threats and the resource potential for protection against them due to the implementation of reactive policies, including economic ones. Such tactics lie in saving available advantages and privileges, preserving a certain status without sweeping qualitative structural macroeconomic changes. Geostrategy inspires and fills the very geoeconomics with strategic content.

References:

Aggarwal, V.K., & Reddie, A.W. (2021). Economic statecraft in the 21st century: Implications for the future of the global trade regime. *World Trade Review*, 20(2), 137–151.

AI-powered 'boss', staff getting along thanks to HK-listed enterprise. Available at: https://www.chinadaily.com.cn/a/202212/13/WS6397dee7a31057c47eba419f.html

Babi'c, M. (2021). State capital in a geoeconomic world: Mapping state-led foreign investment in the global political economy. *Review of International Political Economy*. DOI: https://doi.org/10.1080/09692290. 2021.1993301

Babić, M., Dixon, A.D., & Liu, I. T. (2022). "Geoeconomics in a Changing Global Order". In: Babić, M., Dixon, A.D., Liu, I.T. (eds) The Political Economy of Geoeconomics: Europe in a Changing World. International Political Economy Series. Palgrave Macmillan, Cham. DOI: https://doi.org/10.1007/978-3-031-01968-5_1

 $Billionaire\ Jack\ Ma\ will\ lose\ control\ of\ Ant\ Group.\ Available\ at:\ https://root-nation.com/ua/news-ua/it-news-ua/ua-milyarder-dzhek-ma-vtrativ-kontrol-nad-ant-group/$

Blackwill, Robert D., & Harris, Jennifer (2016). War By Other Means: Geoeconomics and Statecraft (1 ed.). Cambridge, MA: Belknap Press.

Edward N. Luttwak (1990). From Geopolitics to Geo-Economics: Logic of Conflict, Grammar of Commerce // The National Interest № 20 (Summer 1990), pp. 17–23. Available at: https://www.jstor.org/stable/42894676

Edward N. Luttwak (1999). Turbo-capitalism: winners and losers in the global economy (1st U.S. ed.). New York: HarperCollinsPublishers.

Farrell, H., & Newman, A. L. (2019). Weaponized interdependence: How global economic networks shape state coercion. *International Security*, 44(1), 42–79.

Gasimli, Vusal (2015). Geo-economics. Baku: Center for Strategic Studies, 208 p.

Gertz, G., & Evers, M.M. (2020). Geoeconomic competition: Will state capitalism win? *The Washington Quarterly*, 43(2), 117–136.

Joachim Klement (2021). GEO-ECONOMICS "The Interplay between Geopolitics, Economics, and Investments". CFA Institute Research Foundation. 320 p. Available at: https://www.cfainstitute.org/en/research/foundation/2021/geo-economics

Kanai, J.M., & Schindler, S. (2019). Peri-urban promises of connectivity: Linking project-led polycentrism to the infrastructure scramble. *Environment and Planning A: Economy and Space*, 51(2), 302–322.

Kashchuk D. Gold mineral resources of Ukraine. How to attract investors to the Ukrainian gold and rare earth mining market. Available at: https://www.epravda.com.ua/rus/columns/2020/06/23/662171/

Kolodyazhnyy, A., Auyezov, O., & Louise, H. (2021, July 23). *Rosatom, DP world to join efforts on arctic container shipments.* Reuters. Available at: https://www.reuters.com/business/energy/rosatom-dp-world-join-efforts-arctic-container-shipments-2021-07-23/

Lipkan, V.A., & Zubko, G.Yu. (2022). Strategy of the state infrastructure policy of Ukraine: [monograph]; according to the general edition of V.A. Lipkan. Kyiv: Lipkan V.A., 1008 p.

Lipkan, V.A. (2003). Safety science: Study guide. Kyiv: Publishing House of the European University, 208 p.

Lipkan, V.A. (2022). Geostrategy of the modern Ukrainian state: principles of formation. *Bulletin of Lviv University. Series of philosophical and political studies*, 42, 268–277. Available at: http://fps-visnyk.lnu.lviv.ua/archive/42_2022/35.pdf

Lipkan, V.A. (2022). Regarding the need to create a geostrategic discourse. *Politicus*, 3, 34–41. Available at: http://politicus.od.ua/3_2022/5.pdf

Lipkan, V.A. (2022). The theory of geostrategy: a discursive analysis. *KELM (Knowledge, Education, Law, Management)*, 4(48), 217–228. Available at: http://kelmczasopisma.com/ua/viewpdf/9001

Lipkan, V.A. Reason for humanism. Available at: https://www.lipkan.com/privid-gumanizmu/

Liu, I.T., & Dixon, A.D. (2021). Legitimating state capital: The global financial professions and the transnationalization of Chinese sovereign wealth. *Development and Change*, 52(5), 1251–1273. DOI: https://doi.org/10.1111/dech.12681

Luttwak, E.N. (1990). From geopolitics to geo-economics: Logic of conflict, grammar of commerce. *The National Interest*, 20, 17–23.

Luttwak, Edward N. (1999). "Theory and Practice of Geo-Economics" from Turbo-Capitalism: Winners and Losers in the Global Economy. New York: HarperCollins Publishers.

Marianne Schneider-Petsinger Geoeconomics explained. Available at: https://www.chathamhouse.org/2016/12/geoeconomics-explained

Merriam-Webster.com Dictionary. "Geo-economics". Merriam-Webster.com. Merriam-Webster. Retrieved 9 August 2020. Available at: https://www.merriam-webster.com/dictionary/geo-economics

Meunier, S., & Nicolaidis, K. (2019). The geopoliticization of European trade and investment policy. *JCMS: Journal of Common Market Studies*, 57 (S1), 103–113.

Mikael Wigell, Antto Vihma Geopolitics versus geoeconomics: the case of Russia's geostrategy and its effects on the EU. *International Affairs* (*Royal Institute of International Affairs*), vol. 92, no. 3 (May 2016), pp. 605–627. Available at: https://www.jstor.org/stable/24757627

Milan Babi'c, Adam D. Dixon, Imogen T. Liu (2022) The Political Economy of Geoeconomics: Europe in a Changing World. Available at: https://link.springer.com/book/10.1007/978-3-031-01968-5

Milan Babic, Adam Dixon A New Age of Ambition: Geoeconomics and Geopolitical Competition in the Globalised World Economy. Available at: https://ecpr.eu/Events/Event/SectionDetails/1140

Moisio, S. (2019). Re-thinking geoeconomics: Towards a political geography of economic geographies. *Geography Compass*, 13(10), e12466.

Nixon, Richard (January 15, 1992). "Seize the Moment: America's Challenge in a One-superpower World" (First ed.). Simon & Schuster, p. 23.

Played in the meta universe: Mark Zuckerberg lost 70 billion dollars. Available at: https://mediasat.info/uk/2022/09/23/zukerberg-vtrativ-70-mlrd-dollll/

Robert D. Kaplan, WSJ, 26 Aug. 2022.

Singer, J. David (October 1961). "The Level-of-Analysis Problem in International Relations". World Politics. Cambridge University Press, 14(1): 77-92.

The Pentagon's chief military programmer: the US lost the AI war to China. Available at: https://root-nation.com/ua/news-ua/it-news-ua/ua-usa-china-ai/

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