

# วารสารวิชาการผลประโยชน์แห่งชาติ

## National interest

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# วารสารวิชาการผลประโยชน์แห่งชาติ National Interest

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## บทบรรณาธิการ

วารสารวิชาการผลประโยชน์แห่งชาติฉบับที่ 17 จัดทำขึ้นระหว่างช่วงของการเปลี่ยนแปลงโลกของชั่วอำนาจ จากโลกชั่วเดียวไปสู่โลกหลายชั่วเนื่องจากความทะเยอทะยานของสหรัฐฯในฐานะเจ้าจักรวาลไม่สามารถรักษาตำแหน่งของตนเองไว้ได้ด้วยเหตุผลของขนาดเศรษฐกิจที่มีแค่ 15% ของจีดีพีโลกและอยู่ในโซนการเงินและการบริการเมื่อเข้าสู่ความขัดแย้งกับรัสเซียไม่สามารถที่จะเตรียมความพร้อมและประกันให้กับทีมงานของตนเองได้โดยเฉพาะการสนับสนุนด้านยุทธโศปกรณ์ กระสุนปืนใหญ่และหลายประเทศที่ไม่ใช่ชาติตะวันตก(โลกาภิวัตน์ชั่วใจ)ไม่ให้การสนับสนุนมาตรการคว่ำบาตรต่อรัสเซียส่งผลให้หลายประเทศตกลงกันที่จะหาทางเลือกทางการค้าโดยไม่ใช้เงินดอลลาร์ในการทำธุรกรรมการค้าระหว่างประเทศเป็นเงินสกุลท้องถิ่นแทนและสร้างผลประโยชน์ร่วมกันให้ใกล้ชิดมากยิ่งขึ้นเนื่องจากเงินดอลลาร์ถูกใช้เป็นอาวุธทางการเมืองขัดขวางความก้าวหน้าการขยายตัวการค้าระหว่างประเทศ

สำหรับเป้าหมายของวารสารวิชาการผลประโยชน์แห่งชาติฉบับนี้ เป็นผลงานของนักวิชาการ 4 ท่าน ที่นำเสนอ

บทความที่หนึ่งเกี่ยวกับวิธีการกำหนดและปฏิบัติตามนโยบายที่จะทำให้เกิดการพัฒนาเศรษฐกิจด้วยตนเองในกรณีศึกษาเศรษฐกิจของรัสเซีย เนื่องจากเศรษฐกิจรัสเซียพึ่งพาตลาดทุนระหว่างประเทศมากเกินไปและ อัตราการเติบโตจีดีพี ที่ต่ำ แบบจำลองการพัฒนาเศรษฐกิจของรัสเซียได้เปลี่ยนจากแนวทางเสรีนิยมทางการเงินไปสู่การมุ่งความสนใจไปที่การบริโภคภายในประเทศและทดแทนการนำเข้า กลยุทธ์นี้ส่งเสริมการเติบโตอย่างเป็นอิสระโดยใช้ประโยชน์จากแรงงานและทุนในท้องถิ่นขณะเดียวกันก็จัดการกับระบบการชำระเงินที่ใช้เงินท้องถิ่นหรือมิตรประเทศแทนเงินสกุลดอลลาร์

บทความที่สองตรวจสอบความจำเป็นของกฎหมายโรคระบาดระหว่างประเทศเพื่ออำนวยความสะดวกในการตรวจจับตั้งแต่เนิ่น ๆ การตอบสนองอย่างรวดเร็ว การกระจายทรัพยากรอย่างเท่าเทียมกัน และการบังคับใช้กฎหมาย โดยอ้างอิงถึงเหตุการณ์โรคระบาดในอดีตและเสนอแนะมาตรการทางกฎหมายที่นำไปปฏิบัติได้เพื่อป้องกันเหตุฉุกเฉินด้านสุขภาพระดับโลกในอนาคต โดยเน้นถึงความจำเป็นของการบังคับใช้กฎหมายระหว่างประเทศ

บทความที่สามเพื่อทำการตรวจสอบความร่วมมือด้านความมั่นคงอินเดีย-อาเซียนในเชิงลึกจากมุมมองของซีกโลกใต้ เพื่อเน้นย้ำถึงความสำคัญในการกำกับดูแลความมั่นคงระดับภูมิภาคและระดับโลก บทบาทของซีกโลกใต้ที่มีความสำคัญมากขึ้นในประชาคมระหว่างประเทศ กิจกรรมของประเทศทางใต้ เช่น การยืนยันเอกราชทางยุทธศาสตร์และการปฏิเสธที่จะเข้าข้าง ได้เปลี่ยนโลกซีกโลกใต้ให้เป็นกำลังทางยุทธศาสตร์ที่สำคัญในการสร้างระเบียบระหว่างประเทศ อินเดียและอาเซียนในฐานะสมาชิกหลักของโลกใต้ มีประวัติศาสตร์อันยาวนานในการแลกเปลี่ยนทางวัฒนธรรมและข้อกังวลด้านความปลอดภัยร่วมกัน

บทความสุดท้ายเป็นบทความที่ใช้ตัวอย่าง เช่น แพลตฟอร์มการทำงานร่วมกัน สภาพแวดล้อมการเรียนรู้เสมือนจริง และแอปแบบโต้ตอบ เพื่อเจาะลึกว่าเทคโนโลยีดิจิทัลได้กลายมาเป็นส่วนสำคัญของวิธีการเรียนการสอนในศตวรรษที่ 21 ได้อย่างไร โดยช่วยยกระดับคุณภาพการศึกษา และเตรียมคนรุ่นต่อไปให้พร้อมสำหรับความสำเร็จในโลกยุคใหม่



ดังนั้นบทความในฉบับที่ 17 ที่มีจำนวนทั้งสิ้น 4 เรื่องเป็นบทความวิชาการ 2 เรื่อง และบทความวิจัย 2 เรื่อง โดยได้รับความร่วมมือจากนักวิชาการยูเครน สหราชอาณาจักร จีน ไทย จะเห็นได้ว่า วารสารวิชาการผลประโยชน์แห่งชาติได้คัดสรรบทความนำเสนอผ่านการประเมินจากผู้ทรงคุณวุฒิที่มีประสบการณ์ในสาขาที่เชี่ยวชาญจากต่างประเทศและในประเทศ

บรรณาธิการขอแจ้งให้ผู้อ่านผู้เขียนบทความรับทราบว่า วารสารวิชาการผลประโยชน์ได้ดำเนินการตามจรรยาบรรณว่าด้วยการแจ้งอัตราค่าธรรมเนียมการตีพิมพ์บทความ วารสารวิชาการผลประโยชน์แห่งชาติก่อนกองดำเนินการวารสารฯ จะส่งบทความให้ผู้ทรงคุณวุฒิพิจารณาบทความ (Peer Reviewers) จำนวน 3 ท่าน

ผู้เขียนที่สนใจที่จะถ่ายทอดผลงานวิชาการ และผลงานวิจัยเกี่ยวกับภูมิรัฐศาสตร์ ภูมิเศรษฐศาสตร์ นวัตกรรม และเทคโนโลยี สามารถที่จะศึกษาดำเนินการเขียนได้ในทำวารสารซึ่งทางเรายินดียิ่งที่จะพิจารณาผลงานด้านนี้ เนื่องจากเป็นแนวทางวิชาการที่มีความต้องการอย่างมาก และที่สำคัญมีการพัฒนาอย่างรวดเร็วจนทำให้แวดวงวิชาการปรับตัวอย่างมากในกระแสธารการเปลี่ยนแปลง โดยเฉพาะอย่างยิ่งในสถานการณ์การทหาร เศรษฐกิจแบบใหม่ อุดมการณ์ใหม่ เทคโนโลยีใหม่ทุกสาขาที่นำมาใช้ เพื่อให้เกิดการก่อกำเนิดในทางวิชาการอย่างสร้างสรรค์และใช้ฐานข้อมูลทางวิชาการของนักวิชาการจากยุโรปตะวันออก เอเชียโดยตรงในมุมมองที่แตกต่างกัน

ดร.จักรกฤษณ์ สิริริน

บรรณาธิการวารสารวิชาการผลประโยชน์แห่งชาติ

## สารบัญ (Table of contents)

### บทความวิจัย(Research Articles)

**How to formulate and execute policies that will ensure  
economic development on their own.**

Suwan-achariya Shinasak 1

**The Urgent Need for Global Pandemic Legislation to Protect from  
Future Pathogens**

Sanjay Pooran 21

### บทความวิชาการ(Academic Articles)

**Analysis of Security Cooperation between India  
and ASEAN in the Global South**

Jiang ,Changhong., & Fan ,Yucong 34

**The Impact of Digital Tools on the Development of Creative  
Thinking in Students: Methodological Approaches and Educational Strategies**

Boychuk,Maria., Leybyk,Lyudmyla.,&Hudzenko ,Olena 50

**How to formulate and execute policies that will ensure economic development on their own.**

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**ABSTRACT**

Russia's economic growth model has transitioned from a monetary liberal model to a greater emphasis on domestic consumption and the substitution of imported products and services. This shift occurred because Russia overestimated its dependence on foreign capital markets and the relatively small potential size of its GDP compared to Western scenarios. The new model is designed to address the structural imbalance between production and consumption, with a focus on high-tech companies and the establishment of self-accessible industrial infrastructure. This approach guarantees economic growth independently, regardless of external factors, thanks to the utilization of local labor and capital. The demand for a more streamlined economic system and the ineffective payment system in the United States further accelerated the change.

**KEYWORDS:** liberal development model of financial globalization, economic self-guarantee, geopolitical factors, inappropriate use of strategic assets

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**Introduction.** Before the crisis in Ukraine, the Russian economic growth strategy was consistently reliant on global basic supplies. Russia lacks a domestic industry to meet the population's needs, leading to a high dependency on imported consumer products. Meanwhile, Russia exports several natural resources like gas, oil, grain, and metal ores. The Russian economy heavily relies on exporting raw resources because of its shift towards purchasing rather than creating and focusing on its major strengths without governmental interference in the market. Contingent upon global market conditions, economic growth is expected to have continued to decelerate in the latter part of 2008. In the next few years, the growth rate is expected to diminish and fall below the average growth rate of the global economy, as predicted by several projections. An average growth rate of 1 percent is considered little economic growth and is primarily focused on expanding the raw material base within a constrained budget. 50% of the income is derived from oil and gas. In 2014, the economic development paradigm, which had been through a significant economic downturn, began to show clear limitations and could no longer guarantee high economic growth rates and real earnings for the populace. Europe is reducing its reliance on Russian gas by constructing LNG facilities. This will result in a decrease in income for Russia's budget. If the Russian economy's development is contingent on a yearly rise in global oil prices of \$20–\$30, it seems improbable that such oil prices will occur soon. The EU's economic well-being relies on affordable energy from Russia and entry into the Chinese market (Rossiya pobedit, 2023).

With less than 20% of Europe's manufacturing capital concentrated, the rest is flooding into the bubble, leading to fierce rivalry in sales markets and between various companies. To a greater degree, consumerism, and credit have taken over Western economies, and the paradigm for economic growth in the West is built on the unchecked printing of money, which has led to massive national indebtedness. Since private domestic demand accounts for 70–80% of GDP, this mechanism eventually stops working with rising inflation, which significantly lowers living standards. Abzats (2022) Resulting in a sharp decline in GDP and perpetuating a vicious cycle of restrictive monetary policy. When compared, Russia's debt-to-GDP ratio is 17.8%. With 128%, the US is second only to Japan with 266%. The United States and Europe are not seeing the emergence of a new middle class with actual buying power as the high-tech industrial industry migrates to other nations. Western economies are experiencing several problems as a result of this tendency. There will be a dramatic buildup of debt in the energy, food, transportation, and currency sectors, leading to the greatest financial catastrophe in a century. (Destroying faith in currencies used as reserves.) A "perfect storm," a rare occurrence of many unfavourable elements that have an unfavourable effect, is now raging across the globe. Negatives as a whole rose sharply (Spydell, 2022).

As a weak link in the geopolitical chain that the West uses to control resources, Russia has become a major geopolitical target for the US and Western powers. Russia's economic development has been stagnant and wasteful because it relies on export-oriented commodity growth models. Because of this, the



country's economy becomes even less stable. The precipitous decline in industrial production and Russia's heavy reliance on imported capital, technology, and consumer products have placed the country's economic stability in jeopardy. Since 2014, Western nations have begun making plans for hybrid warfare. After annexing the Crimean Peninsula, Russia started to rely on import substitution as a means of avoiding sanctions. There has been some fascinating growth in the agriculture industry. Several legislative shifts and economic developments have contributed to agriculture's recent boom (Nefedova, 2022). So, Russia can take advantage of all this without having to wait for the world economy to revive or for an investment environment to be created, all thanks to this global economic model. Russia must choose an economic development model that ensures its growth, independent of geopolitical considerations. The country must also take the necessary actions and make the necessary choices to adapt its economy as fast as possible to meet its set objectives.

### Study objective

1. How to leave the liberal development model of financial globalization.
2. Procedures and techniques for implementing new types of development

**Literatures review.** The quest for an economic development model will begin only if the conventional economic growth model is unable to ensure economic progress. If it does not shift to a new format, important indications of the final output will increase. Examples include gross domestic product (GDP), national income (NI), and per capita consumption. Economic progress after the Cold War is directly dependent on the exploitation of geopolitical assets. Adam Smith, an economist, believes that the only more effective technique for economic growth is to increase labor productivity via the introduction of the social division of labor and the market. The division of labor is therefore more significant than the market. Because it will become obvious in the future why the implementation of market procedures in other nations has not resulted in increased prosperity and well-being (Smith, 1776).

However, the integration of these nations into the global system of division of labor and market connections created by Western countries has resulted in the accumulation of high value-added production in these Western countries, rendering other countries reliant upon them. Western investment and borrowing The economic development model is seen as a geopolitical instrument for controlling emerging nations that need to build sectors based on unequal trade and forbids extortionate interactions. If resources are not supplied to developed nations, they will be denied access to industrial technologies.

The economic development model of the list Primarily prioritize the national economy's interests via a concentration on investing in the industrial sector. To foster industry growth, implementing rules is essential to safeguard against foreign competition that might potentially harm the sector. If the industry possesses resilience and is capable of competing with other nations, It is important to centralize economic activity under government control to develop national industry, ultimately improving living standards via the national political economy. Government authorities therefore implemented obligations to safeguard sophisticated industries. Certain items are not allowed to be imported. Some individuals promote piracy to hinder shipments and harm even the biggest manufacturers.

Marx's economic development model is based on the assumption of social reproduction, which Marx defines as value represented like the equilibrium micro-economy. These equalities' economic circumstances are simple reproduction for worker subsistence and capitalist consumption. This is the equilibrium point for simple reproduction. The extra value gained in the first part is used to purchase consumer products in the second part, so the expended production tools are returned to the same extent as before, at the same level of value. It indicates that the aggregate of capital production expenses can only be sustained if there is a clear quantitative link between the two branches of production. (Marx,1959) However, there is a shrinking profit margin. Even when output is perfectly proportionate, the fact that capital increases faster

Rosa Luxemburg's model is based on Marx's concept of reproduction, and capitalism follows the model of reproduction. If surplus value is generated and there is more capital accumulation, capitalism. It is vital to address the marginalized sectors of capitalism, as well as the labor reliance of pre-capitalist areas, in order to preserve the labor supply. Capital accumulation occurs only in connection with pre-capitalist modes of production. The same is true in settings where capital accumulation occurs in a continual interchange of matter with these forms, which may persist for as long as one observes such an environment(Luxemburg,2003) .The colonial divides of industrialized nations were one of the mechanisms that facilitated the replication of capitalism.

Kondratiev's model, or "long wave" hypothesis of market economic growth. Countries with developing market economies often experience periods of economic boom and collapse. This establishes a typical cycle that occurs every 40 to 60 years. Kondratiev's discovery demonstrates that time is an independent and essential economic category that must be considered while governing the economies of various nations. Large-scale cycles will result from breakthroughs in the industrial sector and upward mobility. It is often followed by several wars and other forms of political instability, including revolutions. The underlying material foundation of "long waves" is the replenishment of ultra-long-lasting manufacturing infrastructure and equipment, such as railways, bridges, canals, and dams.

The armed forces: In economic policy, the Keynesian model of development refers to the anti-crisis macroeconomic strategy of a state that aims to increase aggregate demand by significantly boosting military expenditure. The state allocates funds to the construction of military manufacturing facilities, as well as to a variety of other expenditures. Whether it is connected to the military, this leads to an increase in the amount of money that is available for the people and civilian manufacturing. Following the receipt of further orders

from the government, the economy will begin to recover and continue to expand. Using geopolitics to control the price of vital commodities on the global market by using U.S. dollars for transactions rather than depending on gold reserves is the concept that is referred to as Reaganomics. To stimulate public consumption, the government should be granted the authority to inject an infinite amount of money into the economy. This would enable the government to develop the economy, acquire resources, and buy other items from any nation in the world, even if the production base is not expanded. The United States of America can afford consumption, and it has done so for a significant amount of time (nine years), despite enormous budget deficits, which are often seen as the source of the neoliberal growth model .

The model of economic progress based on neoliberalism posits that the central banks of various nations are responsible for supplying the economy with the necessary amount of money. This amount should expand annually, slightly above the growth rate of the GDP, which is between 3 and 4 percent. The maintenance of this equilibrium is crucial to averting crises. To ensure that inflationary expectations are avoided and economic growth is achieved, there should be an establishment of a transparent and foreseeable mechanism for the regulation of the money supply. According to this viewpoint, the government should not possess any authority to control the economy. Instead, the state ought to forego the use of fiscal means to boost the economy and rely only on monetary means. To expand or shrink the availability of credit by the changes in the money supply entering the economy, the growth of the GDP should be somewhat quicker than the money supply entering the economy. The development model is based on the quantity theory of money, which establishes a strong link between prices and the amount of money in circulation. Therefore, according to this particular rationale, the extra money supply is the root cause of inflation.

It is clear that economic growth models disclose new components in the systematic conflicts of geopolitical and geoeconomic space, particularly post-Reaganomics, as the new order emerges. It is based on the categorization of individuals inside nations in the global economy, rather than comprehending broad economic theories such as Cobb-Douglas' production function analysis (Usim& Filippov,2018) or the assumption that innovation drives economic progress. The Solow model includes conditions for total market competition. It depicts how three major elements influence output growth. in particular, savings amounts, demographic shifts, and technological development. In order for the economy to be in a state of equilibrium, according to Solow's model, aggregate demand and supply must be equal (Solow ,1956). When the economy expands but labor and capital stay the same, Solow's model of development fails to account for other elements like growth. This strategy is beneficial for emerging countries because it encourages human capital development, institutional reform, economic stimulus from central banks, and, most importantly, the use of geopolitics as a tool to build national wealth. However, the unipolar international system has ensured that Western governing elites have not responded positively to it, ensuring it is aware of its geopolitical and economic interests.

## Methodology.

1. Apply the ideas of dialectical development theory to analyze the functioning of the international economic system. Predictions of economics may be established by analysing past developments and current tendencies in the realm of the humanities (Platonova ,2006). The evolution of the dialectical law of world states is based on standards of behavior as a criterion of truth and subject consideration, rather than as a tool to reassess its position in the global economy and provide guidelines for creating a world with several terminals(Rgru,2014). An in-depth analysis of the economic model of Russian growth in the post-Soviet period is essential for achieving the stated geopolitical objectives. This method benefits nations that seek to achieve independent development, fully realize their economic and geopolitical goals, secure stable lives, and assert their sovereignty.

2. Use procedures based on the requirements of the National Economic Policy that does not need economic theory. This is because the technique gives criteria and a set of instruments for preserving the country's economic sovereignty and ensuring economic stability in production sectors and areas of international economic policy. To accomplish the aim, mechanisms to drive economic and social policies in the nation are more essential than macroeconomic theory principles, which secure the country's long-term prosperity and political stability.

## Results .

### 1 .How to leave the liberal development model of financial globalization.

Russia, a nation with great potential and resources, finds itself on the periphery of capitalism. Neoliberal economic growth has failed to provide optimism and prosperity for the Russian economy. If they allow their own economy to expand freely and improve their living standards, The Russian economy has to break free from neoliberal development ideology by proposing the following economic development ideas.

**Table 1.** *Contrasts neoliberal financial practices with the self-guaranteed economy.*

Parameters	The new financial liberal approach	Guidelines for Economic Self-Guarantee
market demand	Demand is driven by Western foreign investment and imported commodities.	Domestic demand generation substitutes investment and importation of commodities from Western firms.
Rise in product prices	The current inflation is not a result of increased demand but rather of central bank QE, which raises prices as a result of geopolitical factors like divided geopolitical landscapes and	Inflation is not just related to money. The solution to the issue does not rest with the central bank, which is in charge of monetary policy. It may benefit manufacturers by reducing lending rates



	<p>rising food and raw material costs. Harvesting issues and supply chain interruptions have driven up the cost of raw materials.</p>	<p>specifically for the industrial sector. Interest rates are not contingent on inflation. It is essential to adjust the loan costs by expanding and reducing them without worrying about increasing inflation. It pertains to the correlation between the money supply's growth rate and consumer inflation. Furthermore, it contradicts national objectives and obstructs the increase of credit resources to mitigate inflation.</p>
Responsibilities of the central bank	<p>Central banks are tasked with ensuring low inflation and discouraging industrial investment.</p>	<p>The central bank encourages industrial investment and offers cheap borrowing rates to Solving the dilemma of self-access to technology and national economic demand</p>
Inflation rate	<p>Low inflation promotes market equilibrium, serving as a credible signal for investors and international rating agencies.</p>	<p>Economic development needs significant inflation and money invested in the producing sector's underlying capital rather than entering the market.</p>
Money supply on the market	<p>In accordance with the inflation goal framework, it is feasible to raise the money supply in the market.</p>	<p>It is dependent on a stable supply chain and industrial infrastructure.</p>
Economic Growth Rate	<p>The outcome is contingent on the global market conditions, particularly the economic status of the leading world power and its team.</p>	<p>Capable of ensuring its own expansion, regardless of worldwide market circumstances.</p>
Market Environment	<p>The state does not intervene in the market, allowing the economic mechanism to work freely, because the invisible hand of the market will cope with this better and will control the entire process itself. The private sector is the decision maker.</p>	<p>The state must intervene in the market because the economy lacks investment and lacks access to technology. The state is in the position of purchaser of essential industrial products.</p>

Conditions for printing money in the market.	There must be enough levels of gold and foreign currency reserves. (Gold and foreign currency reserves)	Depending on the need to purchase international goods and invest in the production sector, it will bring wealth and stability to the national economy.
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*Noted.* Summarized by the author

Russia's economy has grown at an average rate of 1 percent over the last two decades, indicating that not only has there been no progress in economic development, but there has also been no increase in citizens' incomes, which have fallen since the implementation of the inflation targeting policy, as a result of the central bank's policy of failing to accurately assess the amount of capital that the Russian economy requires. Many, unlike the US and EU economies, are freely accessible and over-invested, with the US being able to create an endless number of dollars without concern of inflation (Riamo,2023) Opposing inflation to the detriment of the local economy, the country's economy is mostly driven by the demand for raw commodities in international markets, and foreign investment is misled by the effectiveness of macroeconomic policies. The issues inside the nation's financial sector threaten economic stability. The absence of a well-rounded economic development model that ensures both economic growth and financial stability at the same time is a significant risk to the national economy. Businesses are compelled to look for external sources of capital. Foreign lenders now dominate as the primary source of the money supply.

According to this idea, the new industry should be included in a categorization of all Russian economic activity. This is important for different industrial organizations to get funding from the state. Achieving the aim of guaranteeing technical sovereignty requires contemporary solutions to support the growing positive trends in economic growth. Monetary policy, primarily based on the supply of this work by the financial and economic groups, may promote the mechanism of domestic money accumulation, which impacts not only the development of banks' financial resources and lending to businesses. However, it also causes a rise in domestic demand. The economy's growth is determined by the increase of the real money supply, or how much money appears in the system. The rise will only accelerate, according to statistics on the expansion of the money supply. It computes GDP growth using coefficients. This mechanism has the potential to enhance living conditions. Government demand will stimulate growth in the real sector of the domestic economy. In reality, this does not occur, even with the implementation of an exhaustive set of regulatory actions. If the nation lacks a domestic production facility, prohibiting government entities from buying imported items is ineffective. The concept is to alter the vector from the market trajectory to the intended trajectory. Within the parameters of this approach, Russia's objective is for the government to provide resources so that manufacturing may begin. Scientific and technical initiatives that private firms lack the means or inclination to undertake There is little regard for the market's consistent pricing, high expenses, poor returns, and the significant danger of being replaced by adopting it. Purchasing pre-made things immediately is more cost-effective (Byl' kak nebylitsa: interesnyye stranitsy istori, 2022). As a result, money goes to offshore businesses, causing the economy to collapse. Without governmental intervention, it

is very difficult to enter a market, even domestically, because of the lack of access to technology. They do not have the assurance of enduring low interest rates to encourage investment, despite their superior alignment with the national interest compared to investing in U.S. bonds. The concept of economic growth based on raw materials makes no contribution whatsoever to the development of the nation. There is a lack of motivation to enhance output, improve scientific efficiency, or implement innovations. Earning money to purchase oil and gas, allocating a portion for budget needs, and investing another portion in foreign accounts is a straightforward process. This economic paradigm is inadequate for developing a national economy.

**Table 2.** *Contrasts future development perspectives.*

Parameters	Economic Development Concept	Geopolitical factors
The configuration of the reproduction	It is possible to create a global system of free commerce in which weaker nations' resources are controlled via geopolitics. In a world with one dominant economic power and entrepreneurs who care just about earning money and no one to look out for the country's best interests, the state must cut down on its own economic decision-making.	Promoting economic growth via autonomous trade transactions Financial, investment, and other arrangements based on the country's friendly or hostile production zone divide.
Embracing modernism	Economic growth must follow the processes of modernization from underdeveloped to developed countries.	Abandon the concept of achieving progress via the implementation of economic policy that is autonomous and sovereign.
Factors influencing capital accumulation and economic growth:	Expanding capital out of the nation and capturing new territories via the division of labour in a global trading system based on powerful institutions, a favourable investment climate, and free elections. Fair trial, asset protection, and economic circumstances for the hegemon and his crew.	The production zone's resource base, population, transportation routes, labor division, and transportation systems, as well as the proper financial, credit, and investment policies that support the industry, all contribute to the stability of the surrounding economy. Stimulate domestic demand.

Economic growth indicators	Overview of GDP(PPT)	Coverage for life's essentials Life necessities include sustenance, hydration, shelter, power, and precaution. The availability of healthcare and other essential infrastructure (such as schools, roads, and workplaces)
Tools for Exchange	Transactions involving dollars and bonds are conducted over the SWIFT network.	outside of the USD zone (locally agreed-upon currency) Stay away from SWIFT
Market operation mechanism	The market dominance of multinational corporations (monopolies) is a determining factor. In reality, all they desire is for the market to be opened freely.	Defence, aircraft, shipbuilding, and engine-building enterprises that are vital to the nation's economy should be returned to state control, including their production chains. Establishment of state organizations and establishment of businesses under state directives(Ruka Kremlya ,2023).
Prospects for the format	Consuming the economies of satellite nations (teams) in order to establish their businesses under circumstances that are favourable for investment.	"Restoring moral values in order to strengthen the state, economic growth, and guarantees" in the social sphere will be accomplished(Putin ,2002;2004).

*Noted.* Summarized by the author

It is clear that the most recent economic development model in the midst of global geopolitical shift is built on the contradiction of developing economic models in current geopolitical and economic spaces. This has resulted in a shift in the theoretical and methodological underpinnings of economic thought: the functional methodological notions that were previously employed to explain the evolution of the market economy and liberal globalization have lost their relevance and cannot be applied. It may be utilized to boost the national economy since it is an example of an open economy, functioning as a contrast to domestically regulated or structured economic systems. Analyzing the dilemma of deciding between economic stability and openness takes place in this setting. Reproduction of products is hindered by the national economy's free market model, which is at odds with society's fundamental objectives. As a result, the development model



differs from the original because it is not reliant on requirements and circumstances from outside. The way economic policy is strategically applied dictates how it will evolve. The domestic economy needs to react to the state of the market as well. It also generates a demand for itself, however. We are discussing the shift to a new degree of qualitative development, namely the emergence of a sovereign economy that reacts to demand and market circumstances. However, it also produces this thing (Abzats, 2022). In light of the shifting geopolitical environment, the new development model has reevaluated its place in the world economy to better suit Russia's economic and geopolitical objectives. The supply economy may become more of a focus for Russia's economy. The focus is on creating an independent economy that can adapt to changing market conditions. But it also independently creates demand. Supply-side economics focuses on boosting industrial capacity, enhancing the educational infrastructure, and using contemporary technologies. Nations with scientific potential concentrate on building advanced industrial skills through the establishment of new industries and employment in regions with high development potential. The growth of the domestic market is essential to the Russian economy. For both products and services, domestic manufacturing will take precedence over imports. As the size of the housing market grows, these changes will also affect living quality, which will begin to climb. Local goods will be strongly preferred by the populace over imports, and their independence won't be jeopardized by a reduced reliance on Western nations.

## 2.Procedures and techniques for implementing new types of development.

Changing the new model of economic growth to align with one's geopolitical objectives has the following effects.

**Table 3.** Contrasts different viewpoints on the effects of sanctions on the Russian economy.

Parameters	Russian viewpoint.	American and team viewpoint
Position	Production capacity is increasing quickly because of the industrial sector's rapid expansion. Set up a new manufacturing line using raw materials, research and technology equipment, skilled workers, and suitable places. It has already been introduced as an industrial mortgage tool (Ren TV, 2022). Confiscating assets in Russian accounts undermines the trustworthiness of Western currencies.	Since the West imposed price ceilings and suspended gold reserves in Western accounts, the petrol station economy was unable to self-insure and had to rely on income from exports of basic materials.
Affordability	Creating domestic supply to replace the retreat of Western firms produces jobs.	The Russian economy's lack of Western technology and capital results in shortages of products and

		unemployment, sparking riots across the nation.
Income Determinants	The economy can insure itself independently, therefore reducing its need for money from outside sources.	With a GDP of just 2% of the global total, a boycott would drive the currency to collapse and the political system to shift towards pro-Western policies.
Trade and transactions	Without Russian resources, Western economies could not operate. Russia was also able to reject Western currencies, establish an exchange system, and look outside of Europe for new economic partners.	Without orders, the Russian economy cannot find customers other than in the West. The worldwide transport logistics system disintegrated, resulting in isolation.
Economic power	The Russian economy relies on industry and has a crucial supply chain with no alternative providers.	Europe can decrease its energy consumption and dependence on American energy.
Inflation	By increasing production and offering credit at reduced interest rates, the issue can be resolved.	Inflation is an issue without a solution. The primary source of revenue for the Russian economy is the sale of resources and currency issuance, which is expected to result in increased inflation.

*Noted.* Summarized by the author

### **1) Inappropriate use of strategic assets.**

Once political leaders decide to utilize the dollar as a weapon for political conflict, freezing Russian funds in overseas accounts might allow Western nations to exploit their geopolitical assets. Russia's assault on American influence leads to the dollar losing its position as a stable currency because of liquidity concerns. Countries are worried that their acquisition of U.S. debt bonds may mirror Russia's situation. Another danger for the U.S. dollar is the intermittent fragmentation of the global economy, particularly in terms of global commerce, production, and economic growth being potentially hindered. Disrupting global political and military stability will also have an adverse impact. Additionally, the US economy is no longer the world's biggest. As a result, the US economy cannot exert control over other nations' resources and industries. Besides fostering industrial investment in your nation or absorbing foreign industry and relocating it to the United States. So far, the dollar needed to repay foreign debt has dropped from 50% to 13% of the Russian economy. Sanctions are often ineffective against nations that have large international trade

surpluses and low levels of external debt. The ruble may be used to acquire huge quantities of commodities required across the globe, particularly by selling vital resources in the product supply chain, raising the percentage of the national currency in the joint debt between Russia and other nations to **65%** by the end of **2023** (Mishustin projects that by **2023,2023**). It is anticipated that other payment methods, logistics, and transportation will be used. Because sanctions constraints have provided income possibilities, examining the effect of non-dollar transfers on the Russian economy is unrealistic given the scale of the economies in the United States and Western nations, with Russia preparing appropriately. The price of oil is **\$70**, and the conversion rate is **90** rubles to the dollar. This enables all expenditures to be funded. Russia's economy is supported by trade with China and India. Energy sources from Russia are distributed there. India and China are shifting focus from currencies because of the declining attractiveness of the dollar, with Russia playing a role in this trend. The creation of a different MIR payment system has impeded Western nations' ability to get affordable resources and redirect the focus of the Russian economy towards technologically superior industrial industries. It employs its own fiscal ideas rather than conventional budgeting regulations to boost the economy when necessary.

## **2) Making preparations to switch formats.**

Russia recognises that the transition to a new economic development model should be gradual. Russia has steadily moved to diversify its hydrocarbon resources and build accompanying infrastructure in the east. If Europe accounted for almost **70%** of our oil exports in **2010**, it will account for just **47%** by the end of **2021**. At the end of **2019**, the ESPO pipeline achieved design capability, ten years sooner than projected. (Ia Regnum,2024) Russia understands that transitioning to a new economic growth model should be a gradual process. The prior effort was undertaken in **2012** but did not yield results. Sudden implementation of the modification may result in future issues. Hence, the shift to its development model must occur at the appropriate moment and establish self-assurance. In **2014**, Russia quickly responded when the United States imposed sanctions because of the annexation of Crimea. Russia could draw suitable conclusions and implement necessary actions before the crisis in Ukraine started. Russia has used a strategy that has enabled it to retain significant money despite U.S. confiscation.

More than **20%** of the reserves may be converted to gold bullion, which is now kept in Moscow, at a cost of around **140** billion dollars. Russia not only benefits financially from Western sanctions. Furthermore, they will also be provided with financial instruments that are immune to geopolitical unrest. The Russian economy has built significant reserves and strives not to borrow much, indicating that Russia is carefully preparing its economy for potential sanctions. Russia estimates that during the Covid pandemic during the last two years, the US money supply increased by more than **38%** (**5.9** trillion dollars), while the EU's money supply increased by **20%** (**2.5** trillion euros) by the end of **2019**. Entry into the United States is projected at

\$250 billion every month, which is presently \$350 billion. It seems to have increased to 40%, corresponding to the large number of unsecured dollars that have surfaced in recent years. Kompas ekonomiki(2022) "With this amount, they wiped out all products from third-country markets."

The United States prints money that has no actual worth. Bondholders' faith in the consistency of interest payments is their only reliance. This proves that the US economy is not guaranteed to maintain livelihoods during the COVID-19 pandemic if it is not focused on manufacturing. The extent of inflation is uncertain relative to the size of the US gross domestic product (GDP), but it is at least partially caused by disrupted supply chains, which raise the prices of consumer products. An industry's output volume must form the basis of any GDP calculation that adheres to uniform standards. Everything needs to be crystal clear and correct if a war breaks out or enters a period of hostilities, given the circulation of products passing through customs in monetary and physical units. Consumers are more likely to be interested in things that provide concrete benefits to individuals than intangible items like energy, fuel, food, and consumables, which are mostly influenced by the portion of GDP designated for war. Various elements are involved, such as the significance of engaging in conflicts, mobilizing, and allocating substantial resources. It is seen as a valuable investment with an attainable aim, requiring a certain degree of dedication to achieve greatness. Increasing public awareness and educating others Several additional aspects that influenced success in battle were among the contributing components( It's not about GDP: Pushkov,2024). Russia has persistently disregarded the economic regulations established by liberals. In early 2020, Russia proposed constitutional revisions that would shift the emphasis from international problems to national legal matters. The postponement of the referendum on constitutional reforms raises the likelihood that Russia may unilaterally withdraw from international agreements on meddling in national policy to boost domestic investment. The major problem is a structural imbalance between production and consumption, which must be addressed. This will require a significant allocation of cash among various demographic groupings. This strategy requires meticulous and exact preparation based on the goals of the specific operation. The execution of directives from the national defence will be modified. Industry and business are being closely monitored by President Putin's newly formed Coordination Council for Organising Military Defence. The goal is to boost production of defence industrial items and medical supplies for the army, and labour mobilisation is picking up steam to achieve this goal. Organisations across are bolstering national defence capabilities. Russia is figuring out how to use its current strengths while simultaneously generating the required enterprise in a strategic way(Sovremennaya Armiya,2022) .The facility is now operational again. The state reserve's tangible assets were made available, and all the organization's personnel were actively involved. Efficiently attracting the civil industrial sector is a top priority to mobilise the economy and boost production capacity for the required goods.

### **3) Western countries tend to overestimate their power.**

Russia's reliance on foreign financial markets is not as strong as the West thinks. The voluntary or forced exodus of Western corporations from Russia encourages the expansion of Russian manufacturing. In addition, imports and alternative imports of items from other countries are developed concurrently, exposing the market to Russian manufacture. It also prevents consumer market shortages by enabling Russian authorities to swiftly ramp up local manufacturing to replace imports, which now account for **20%** of the market for Western corporations. Sanctions against Russia are based on the erroneous assumption that Russia lacks independence. Russia has developed and transformed in recent years, and the West is ignoring this reality. Sanctions limitations provide several obstacles for the government while also creating new possibilities. It is essential to operate methodically, with a focus on future outcomes. (Finmarket,2022) The economy will see tremendous growth because of Russia's self-sufficiency in key raw commodities such as oil, gas, coal, ferrous metals, non-ferrous metals, rare earth metals, fertilizers, and agricultural raw materials. The Russian economy should not experience an energy or food crisis unless it is caused by systemic faults or the incompetence of the authorities. **9/10** of the world's population (particularly in Europe and Japan) cannot afford it, yet Russia is fortunate in its geographic position. Inflation has been caused by sanctions that have enabled the Russian economy to attack Western economies. Industrial and agricultural output declines, for instance, because of the dependence of Western domestic production on Russian energy resources and products. Constantly priced, Germany's gross domestic product (GDP) decreased by **0.1%** in **2023**, confirming that the extent of Europe's reliance on Russian raw materials is grossly underestimated. Consequently, the European Union maintains its procurement of petroleum products manufactured in third countries using Russian crude oil, thereby securing a consistent revenue stream for the Russian economy (albeit at the expense of reduced export volumes and elevated prices).

### **4) Altering the function of the public sector**

Despite warnings from the International Monetary Fund that printing more money than the country generates may cause inflation and slow economic development, the Russian government ignored these concerns in **2020**. This is the tangible aspect of the economy. Because of this scarcity of funds, the amount of money set aside to assist enterprises has grown substantially. To build an economy that does not rely on imports is the primary responsibility of the government. Favoured tax treatment and preferential credit rates for American manufacturing A **5%** interest rate cut for businesses on industrial mortgages and a reduction in inspection requirements (Gustova, 2022). Priority will be given to high-tech companies with a substantial multiplier impact. It is critical to have a plan for the progress and use of technology, just as the machine tool industry is crucial. It is critical to develop a self-sufficient industrial infrastructure, including military-industrial production. Its influence on civil society expansion, economic mobilisation, and national development efforts, all of which contribute to economic growth. This is because, in the face of boycotts,

it is vital to target certain sectors that are disproportionately impacted. These include aircraft and shipbuilding, medicines, instrument manufacture, and, most importantly, companies that assist the military.

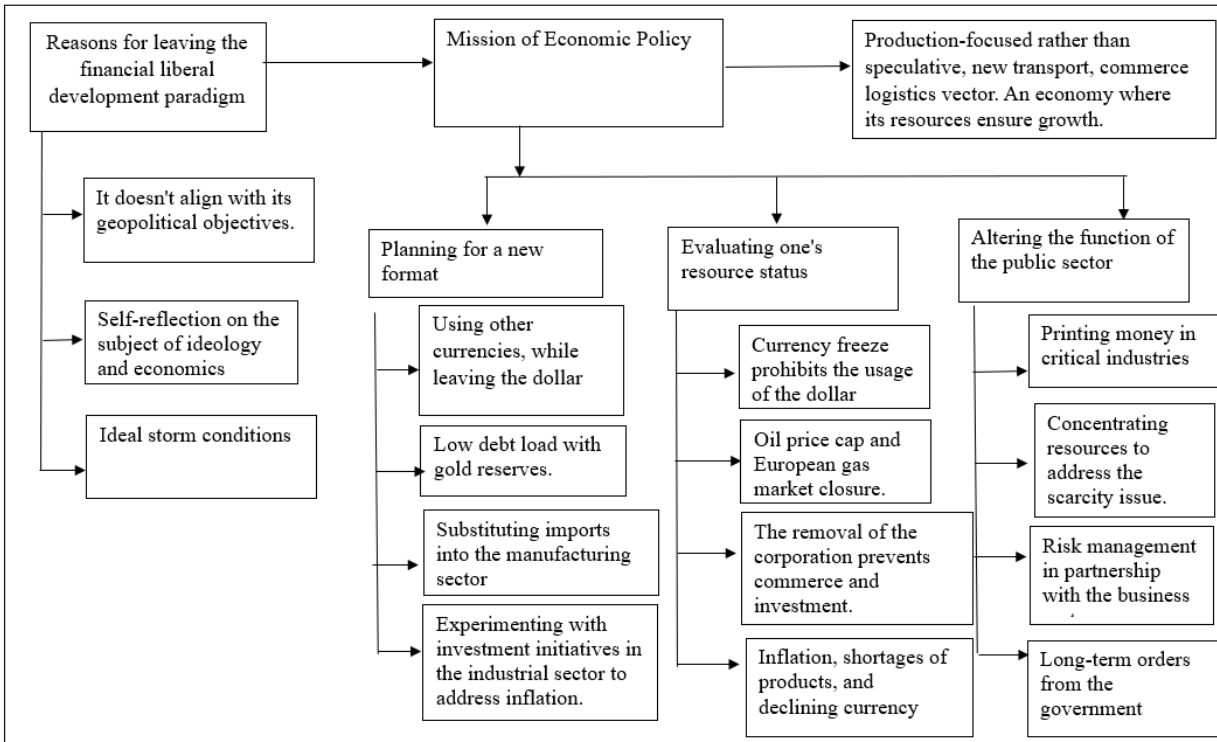


Diagram of how to formulate and execute policies that will ensure economic development on their own

Noted. Developed by the author

This is where economic mobilisation makes sense, since it allows the nation to swiftly satisfy its core vital demands while remaining based on market economic principles. The Russian economy has never been militarised in the usual sense. It remains a market economy, yet the war against NATO and sanctions will cause considerable change(InoSMI,2023). It has an impact on the expansion of the civil sector and the start of the economic mobilization and national development project, both of which are important supports for economic growth. Meanwhile, the Russian economy's production rate has not yet encountered an overheating point, as production capacity is only **60–70%**, and many industries could increase production by up to **30%**.Therefore, there is no need to worry about inflation or reduce credit lending, as the West advises central banks to do, and raising interest rates is just one method. However, this is not appropriate for a Russian economy that wants to expand its money supply when bank interest rates are high. Consequently, the money supply grows faster than prices, leading to economic expansion. Developing such a model requires a substantial financial investment. Since a rise in the money supply does not necessarily lead to inflation, there is no need to be concerned about printed money being used to generate domestic

commodities and national wealth. As money moves through the systems of production and consumption, society gains. As a result, increases in the value of goods and services will be closely linked to printing money, domestic labor, and domestic capital. As a result, the Russian economy has adjusted to the burden of unprecedented sanctions. The Russian economy has finished recuperating and adjusting to the new reality after the abandonment of liberal financial concepts. This must make up for the loss of commerce with the West. However, the policy of providing money to the real manufacturing sector, vital for national security, plays a significant role. Domestic capital drives economic growth, which boosts domestic demand. The role of governmental intervention, risk insurance, and the private sector in industrial growth focuses on people's fundamental needs, particularly consumer-oriented sectors that substitute for imported goods.

**Conclusion** .The evolution of the Russian economic development model demonstrates its capacity to swiftly adjust its economy and its enduring growth potential beyond the open financial system. Nevertheless, there was a decrease in revenue because of the boycott. The shift in development pattern diverges from the theoretical argument among academics as it emphasizes the practical need to use financial resources for investment to facilitate swift economic adaptation. The import substitution sector and defence industry are the sectors that will provide the biggest investment rewards in Russia's geopolitical crisis environment, ensuring stability in the country's social economy. Investing in the real economy is often seen as a crucial element of economic progress. Investment is crucial, and the government is now overseeing it to transition from a consumer-based economy to a supply-based economy. Additionally, the government intends to promote a market economy and engage in commerce with nations globally

Applying theoretical principles to the practical implementation of altering the economic development paradigm. Without money, addressing social stability issues is unfeasible because of technical dangers that might undermine the economic framework. Utilization The budget must establish fundamental assets to facilitate genuine economic reform in the manufacturing sector. Exports of commodities must be aligned in the same direction, whether it involves industrial capital or transportation and logistics. Thus, selecting an economically viable development model is crucial for leveraging a nation's resources and capabilities to enhance its economy, showcasing that countries can progress more efficiently without relying on Western financial principles. Transitioning away from dependence on raw materials for producing revenue in the nation remains a crucial requirement, but it does not address import substitution. Shifting industrial sectors from foreign firms to Russian enterprises aims to ensure political and economic stability by boosting the local defence industry rather than focusing on the overall growth of the civilian economy. If these funds can stimulate economic growth while transitioning to a new development model independent of Western markets, it poses a challenge.



The Russian economy can determine for itself what it wants. And what would be the fundamental structure of a sovereign national economy? As experience has demonstrated, this must be restored. Russia will not give up its place in global markets. However, it aims to concentrate on growing the potential of the local economy. This policy move provides a chance to convert Russia into a stronger geopolitical economy, liberating it from its economic role as a tool for attaining Western interests for more than three decades. Russia is becoming the cradle of a new global paradigm, multipolarity. That is why Russia must prioritize its safety first. As a result, the expansion of the Russian military force ensures future success, necessitating a rethinking of the development paradigm. This promotes the growth of industrial investment in the real economy. It comprises programs aimed at speeding up the growth of transportation engineering and the aviation industry, expanding oil refining and gas processing, and totally revitalizing agriculture. These principles are vital not just to Russia, but to emerging nations all around the globe. Shifting from a consumer to a supplier economy might help nations become more self-sufficient and less reliant on imports. Simultaneously, it promotes the home economy. The approach also emphasizes new technologies and research and development as standalone drivers of economic growth.

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## References

- Abzats (2022,June 1) *What may be Russia's new economic model?* <https://dzen.ru/a/YpdSodnU2AQHOM85>
- Byl' kak nebylitsa: interesnyye strannitsy istori (February,July 19 ) *The Russian government has declared that it is leaving the market economy: breaking the law does not absolve one of responsibility.*<https://dzen.ru/a/YtXBdzjYkTxFfM8F>
- Finmarket(2022,March 1) *Mishustin: Imposing limits on the Russian Federation also creates fresh prospects for local investment.*<https://www.finmarket.ru/news/5664707>
- Gustova , Natalia(2022,June 6) *Industrial mortgages may arise in Russia.*  
<https://realty.rbc.ru/news/629dceec9a7947932b9272ec>
- Ia Regnum(2024,February 12) *The rapid expansion of the Russian economy has both astonished and unsettled Western nations.*<https://dzen.ru/a/ZcnEKzT9wzKNQqHm>
- InoSMI(2023,November)*Economist Sapir on the projections of Russophobes in the EU: they projected collapse but got growth (Valeurs Actuelles, France).* <https://vk.com/@inosmi-ekonomist-sapir-o-prognozah-rusofobov-iz-es-obschali-krah-p>
- It's not about GDP: Pushkov made fun of Cameron's ignorance of Vietnam and Afghanistan. *Eurasia Daily.*(2024,February 04) <https://dzen.ru/a/Zb-Bm r6MjbqtCmJ?sid=67528609061243628>
- Kompas ekonomiki(2022,June 19) *As there are no norms in the world, Russia will create its economy on new principles.* <https://dzen.ru/a/Yq8ZwUZmzG2vxbWX?sid=173644182321004801>
- Luxemburg ,Rosa (2003) *The Accumulation of Capital* .  
<https://files.libcom.org/files/luxemburg%20the%20accumulation%20of%20capital.pdf>
- Marx ,Karl. (1959)*Capital: A Critique of Political Economy, Vol. I. The Process of Capitalist Production.* [https://archive.org/details/capital-volume-i\\_202306/Capital-Volume-III/](https://archive.org/details/capital-volume-i_202306/Capital-Volume-III/)
- Mishustin projects that by 2023, national currencies will account for 65% of Russia's international commerce.*Tass*(2023,December 12) <https://tass.ru/ekonomika/19516011>
- Nefedova ,T. G.(2022) *Geoeconomic changes in the Russian agricultural complex in new geopolitical conditions* .<https://www.xn----7sbhacif1czadbcqseq.xn--p1ai/tpost/4ybkvict1-geoekonomicheskie-izmeneniya-agrokomplek>
- Platonova, E.D. (2006)*Accumulation and investment in a transformational economy: abstract.* dis. ... Doctor of Economics Sci. M.
- Putin, V.V.(2002)*Message to the Federal Assembly of the Russian Federation "Russia must be*

- strong and competitive. Rossiyskaya Gazeta. (2002, April 9)*
- \_\_\_\_\_. (2004) Message to the Federal Assembly of the Russian Federation . *Russian newspaper.* ( 2004, May 27)
- Ren TV. ( 2022, December 15 ) *Putin outlined Russia's six primary objectives for 2023. What is their identity?* <https://dzen.ru/a/Y5s3NbYPiOyvb13R?sid=132229228869217>
- RGRu. (2014) *The transcript of Putin's speech in Valdai on 10/24/2014.*  
<https://rg.ru/2014/10/24/putin.html> .
- Riamo (2023, March 17) *It's probable that the US banking system may fail very soon: the view of a financial expert.* <https://dzen.ru/a/ZBRLdqrZFBokO7Ev>
- Romanov , Evgeniy (2023, July 16) Putin suggested a new economic model for Russia.  
<https://vz.ru/politics/2023/6/16/1216982.html>
- Rossiya pobedit!! (2023). *Our success was built on a steady supply of cheap Russian energy and cheap Chinese labour. (Okay)* [https://dzen.ru/a/Y0hREogc7zmrl\\_nq?sid=161299049918878522](https://dzen.ru/a/Y0hREogc7zmrl_nq?sid=161299049918878522)
- Ruka Kremlya . (2023, May 31) *We are bringing our market back; without adversity, there would be no enjoyment.* <https://dzen.ru/a/ZHW5dP-ovxKmcFPV?sid=464655441147319297>
- Smith , A. (1776) *An Inquiry into the Nature and Causes of the Wealth of Nations*  
[https://tonywilliams1990.github.io/great\\_works/Smith/Wealth\\_of\\_Nations.pdf](https://tonywilliams1990.github.io/great_works/Smith/Wealth_of_Nations.pdf)
- Solow , Robert M. (1956) *A Contribution to the Theory of Economic Growth. The Quarterly Journal of Economics, 70(1) (Feb., 1956), pp. 65-94* URL:  
<http://www.jstor.org/stable/1884513>
- Sovremennaya Armiya (2022, December 28) *The future of the economy: mobilisation or militarization?* [https://dzen.ru/a/Y6xeAS8e\\_huALO1v](https://dzen.ru/a/Y6xeAS8e_huALO1v)
- Spydell, Paul (2022, May 30) *Spydell\_finance.* [https://t.me/spydell\\_finance/1007](https://t.me/spydell_finance/1007)
- Usim , V N., & Filippov, V. S. (2018) *Cobb-Douglas industrial function and managing and technological development .* <https://cyberleninka.ru/article/n/proizvodstvennaya-funktsiya-kobba-duglasa-i-upravlenie-ekonomiko-tehnologicheskimi-razvitiem>



## The Urgent Need for Global Pandemic Legislation to Protect from Future Pathogens

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### ABSTRACT

Pandemics have profound implications for global health, economies, and social structures, requiring urgent reforms in global health governance. The COVID-19 pandemic highlighted significant gaps in preparedness, inequity in resource distribution, and the limitations of voluntary frameworks like the International Health Regulations (IHR). This paper explores the necessity of implementing binding global pandemic legislation that addresses early detection, rapid response, equitable resource allocation, and legal enforcement mechanisms. Case studies of previous pandemics, including COVID-19, Ebola, and HIV/AIDS, provide lessons for crafting this legislation. By analyzing the deficiencies in current systems and proposing actionable legal solutions, this paper outlines how pandemic legislation can serve as a safeguard against future global health crises.

**KEYWORDS:** Global pandemic legislation, global health governance, pandemic preparedness, International Health Regulations (IHR), equitable resource distribution, global health security, COVID-19, Ebola, HIV/AIDS, legal enforcement mechanisms, international cooperation, vaccine nationalism, intellectual property rights, global surveillance systems, public health response, global pandemic treaty.

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**1. Introduction.** The history of pandemics reveals that infectious diseases do not respect borders. As the world becomes increasingly interconnected, the potential for pathogens to spread rapidly has increased, creating global health emergencies. Factors like climate change, urbanization, and increased human-animal interaction have created a perfect storm for emerging infectious diseases. Given these dynamics, the world faces an unprecedented need for coordinated, enforceable pandemic legislation that can preemptively address these risks.

The COVID-19 pandemic has sparked significant academic and political debate regarding the need for stronger global health governance. Scholars such as Gostin and Katz (2020) argue that the existing International Health Regulations (IHR) are insufficient due to their voluntary nature and lack of enforcement mechanisms. This perspective is echoed in political discussions where leaders have called for more binding international agreements to ensure global health security (World Health Organization, 2021).

In academic circles, there is a growing consensus on the importance of global pandemic legislation. Fidler (2020) emphasizes the necessity of legal frameworks that go beyond the IHR, advocating for a global treaty that mandates preparedness and equitable resource distribution. This view is supported by Kickbusch et al. (2021), who argue that global health diplomacy must evolve to break down barriers to collective action and establish legally binding commitments.

Politically, the idea of a global pandemic treaty has gained traction, particularly in the wake of the COVID-19 pandemic. The World Health Organization (WHO) and several member states have begun discussions on the potential structure and content of such a treaty, with a focus on ensuring that all countries are better prepared for future pandemics (WHO, 2021). These discussions have highlighted the need for a more robust international legal framework that can compel countries to take necessary actions in pandemic preparedness and response.

The reactive nature of past global health responses has proven insufficient, as demonstrated by the disparities during the COVID-19 pandemic in terms of access to healthcare, medical supplies, and vaccines. Without legally binding frameworks, global solidarity cannot be guaranteed, leaving many low- and middle-income countries (LMICs) vulnerable. Pandemic preparedness driven by global legislation becomes critical, focusing on strengthening health systems globally, ensuring surveillance for early detection, and establishing legal frameworks that compel equitable resource distribution.

Global legislation is not only about health; it is also an economic and social imperative. The interconnected nature of modern economies means that the effects of a pandemic in one part of the world can reverberate globally. Therefore, a pandemic treaty would serve to protect global economic stability, preserve human life, and maintain social cohesion across nations.

## **2. Background: Global Health Governance and Existing Legal Instruments**

### **2.1. The International Health Regulations (IHR)**

The IHR, adopted in 2005, were designed to prevent the international spread of diseases by creating a legal framework for reporting and responding to public health threats. The regulations oblige member states to report unusual disease events to the WHO within 24 hours of assessment, facilitate coordinated international responses, and ensure transparency. However, compliance with the IHR is voluntary and largely dependent on national goodwill.

During the COVID-19 pandemic, many countries either delayed reporting or underreported the extent of their outbreaks, undermining the IHR's effectiveness. For example, although China reported the outbreak of a novel coronavirus, questions remain about the timeliness and transparency of their reporting. This delay allowed the virus to spread internationally, highlighting the limitations of relying on self-reporting mechanisms without legal enforcement.

Additionally, many countries lack the core capacities required by the IHR, particularly in LMICs where surveillance systems and healthcare infrastructures are underfunded. According to the WHO, as of 2020, less than half of the 196 member states had met the minimum requirements of the IHR. This shortfall demonstrates the need for legally binding commitments to ensure that all countries are adequately prepared for pandemics. Without enforcement mechanisms, the IHR remains a set of aspirational guidelines rather than an effective legal framework for pandemic preparedness.

### **2.2. Existing Global Health Security Mechanisms**

The GHSA has been a valuable initiative in promoting collaboration between nations to strengthen health security. However, as a voluntary initiative, the GHSA lacks the legal authority to compel member states to take necessary actions. While it provides a platform for collaboration, it relies heavily on the political will of individual countries.

The PIP Framework, similarly, has made strides in ensuring that vaccines and other critical resources are available to countries in need during influenza outbreaks. However, the focus on influenza limits its utility in addressing other pathogens. Furthermore, the framework has not successfully resolved issues surrounding equitable access, particularly in ensuring that vaccines reach the most vulnerable populations during global health crises.

Both the GHSA and PIP framework illustrate the benefits of cooperation but underscore the need for a legally binding global agreement that extends beyond voluntary commitments. Such an agreement would provide the necessary structure and authority to ensure that all countries participate in pandemic preparedness and response efforts. Legislation could also address the systemic inequities that prevent the most vulnerable countries from accessing essential resources during pandemics.

## **2.3 Analysis of international legislation of the WHO**

The World Health Organization (WHO) plays a critical role in shaping international health legislation, primarily through the development and implementation of legal frameworks such as the International Health Regulations (IHR). The IHR (2005) is a binding international agreement among 196 countries that establishes protocols for reporting public health emergencies of international concern (PHEIC) and aims to prevent the cross-border spread of infectious diseases while respecting human rights (Fidler, 2005). This legal framework strengthens global health security by requiring states to develop core public health capacities, particularly in surveillance, reporting, and response. However, enforcing compliance with the IHR remains a significant challenge due to variations in national interests, resource constraints, and geopolitical considerations (Gostin et al., 2020). Beyond the IHR, the WHO also facilitates the harmonization of national health laws with global standards, particularly in areas such as pandemic preparedness, antimicrobial resistance, and non-communicable diseases (Hoffman, 2010). The success of WHO's legislative influence depends on its ability to foster international collaboration, while addressing the legal and political complexities inherent in global health governance.

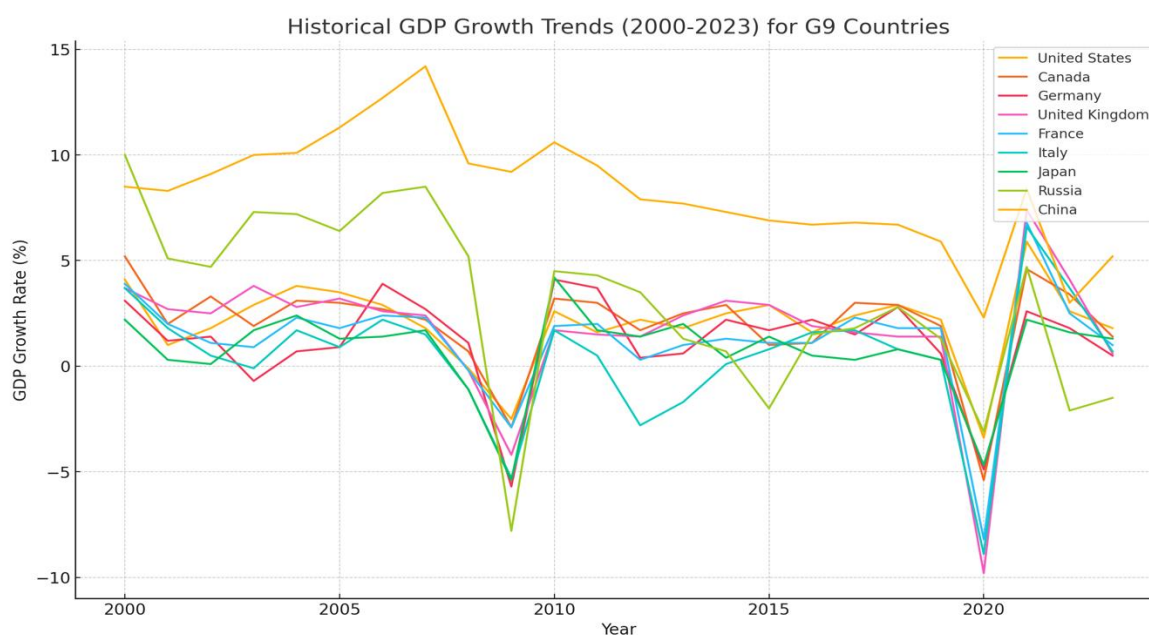
## **3. Case Studies: Lessons Learned from Past Pandemics**

### **3.1. COVID-19**

The COVID-19 pandemic exposed severe shortcomings in global health security, with the pandemic's impacts exacerbated by inequitable access to vaccines, lack of coordination in public health responses, and the politicization of health data. Countries with strong health systems were able to develop and distribute vaccines rapidly, while LMICs were left waiting for international aid or reliant on underfunded global initiatives like COVAX.

Vaccine nationalism became a significant obstacle to global equity. High-income countries (HICs) purchased vast quantities of vaccines, leaving LMICs with limited supplies. Despite the efforts of COVAX to distribute vaccines equitably, the initiative fell short of its goals due to underfunding and logistical challenges. Global legislation could have mandated a more equitable distribution of vaccines, preventing the hoarding of supplies by wealthier nations and ensuring that all countries had access to life-saving interventions. Data generated by Luminosity Consulting departemet of Global Helath .





Another lesson from COVID-19 is the need for transparency and rapid sharing of information. Early in the pandemic, conflicting information about the virus's transmission and severity led to inconsistent public health responses. A global pandemic treaty could mandate the sharing of epidemiological data and impose penalties for non-compliance, ensuring that all countries have access to the information needed to make informed decisions. Data from the office of global health, Luminosity Consulting.

### 3.2. Ebola Virus Outbreaks

The Ebola outbreaks in West Africa and the Democratic Republic of the Congo revealed significant gaps in global health systems, particularly in terms of the ability to mobilize resources quickly and coordinate international responses. The West African outbreak spread rapidly due to delayed detection and a lack of resources for early intervention. Moreover, the international response was hampered by logistical challenges, including the difficulty of deploying health workers to affected areas. One of the critical failures in the Ebola response was the lack of a global framework for deploying emergency aid and healthcare workers. Many countries imposed strict travel restrictions, limiting the ability of international organizations to send personnel to the affected regions. This delay contributed to the virus's spread and the high death toll.

A global pandemic treaty could address these issues by establishing legal frameworks for the rapid deployment of international aid during health crises. Such a treaty could also create protocols for easing visa restrictions and providing financial support to countries in need during pandemics. These provisions would ensure that resources can be mobilized quickly and effectively, preventing outbreaks from escalating into global health emergencies.

### 3.3. HIV/AIDS Pandemic

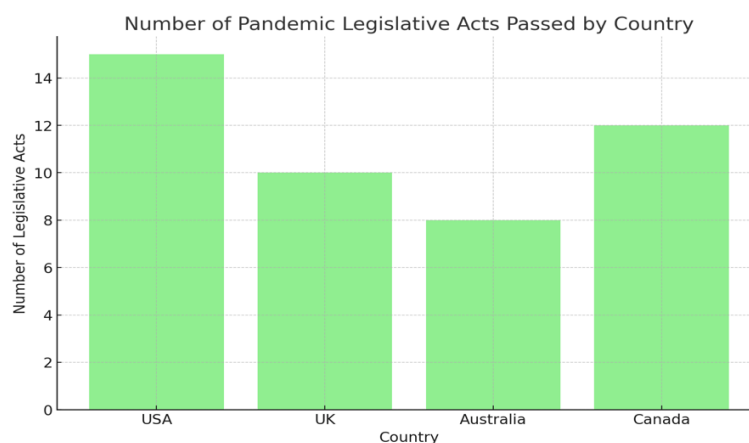
The global response to the HIV/AIDS pandemic provides valuable lessons for pandemic preparedness, particularly in terms of ensuring equitable access to treatments. In the early years of the HIV/AIDS crisis, ARVs were prohibitively expensive and inaccessible to most people in LMICs. This disparity in access led to millions of preventable deaths and prolonged the global impact of the pandemic. The establishment of the Global Fund and international trade agreements that allowed for the production of generic ARVs helped to bridge this gap, dramatically increasing access to life-saving treatments in low-resource settings. This response demonstrates the importance of legal frameworks in addressing global health inequities and ensuring that all countries have access to essential medicines. A global pandemic treaty could build on these lessons by including provisions for the equitable distribution of vaccines, treatments, and other medical resources during pandemics. It could also address issues related to intellectual property rights, ensuring that lifesaving interventions are available to all countries, regardless of their economic status.

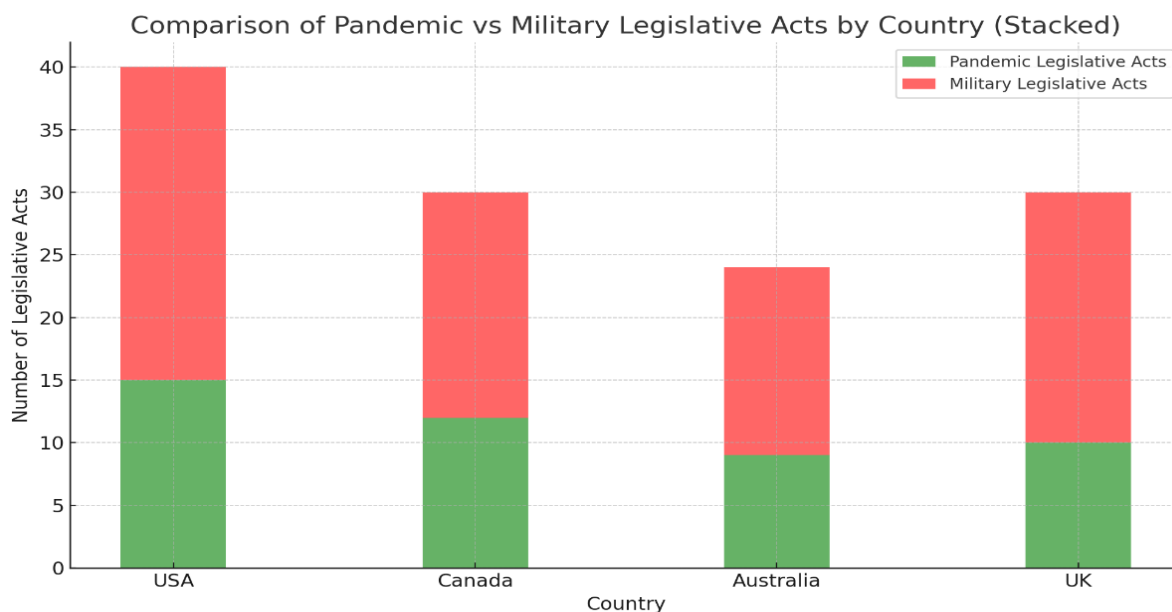
## 4. Rationale for Global Pandemic Legislation

### 4.1. Pandemic Preparedness

Preparedness is critical in preventing pandemics from spiraling out of control. Yet, the level of preparedness varies significantly between countries, with HICs generally having stronger health systems, while LMICs are often under-resourced and unprepared. Global pandemic legislation would require all countries to meet minimum standards for pandemic preparedness, including investments in healthcare infrastructure, training for healthcare workers, and the establishment of early warning systems.

The chart below illustrates the number of pandemic legislative acts passed by different countries. It shows that while countries like the USA have passed numerous legislative acts related to pandemic preparedness, other nations have not enacted as many, highlighting the disparities in legislative actions among countries. Data below in both graphs compiled by the office of Global Health, Luminosity Consulting,





#### 4.2. International Cooperation and Equity

International cooperation is the cornerstone of an effective pandemic response. Global pandemic legislation must mandate cooperation, ensuring that countries work together to develop vaccines, share epidemiological data, and coordinate public health responses. This cooperation must also be equitable, with resources distributed based on need rather than economic power.

Legal frameworks could be established to prevent vaccine nationalism and ensure that vaccines, treatments, and medical supplies are allocated according to criteria such as disease burden and population vulnerability. This would require binding commitments from wealthier nations to share resources with LMICs, ensuring that all countries can protect their populations during pandemics.

#### 4.3. Enforcement Mechanisms and Accountability

A key challenge in global health governance is the lack of enforceable mechanisms to ensure compliance. Global pandemic legislation must include robust enforcement mechanisms, such as international courts or arbitration panels, that can hold countries accountable for failing to meet their obligations. Penalties for non-compliance could range from financial sanctions to trade restrictions, depending on the severity of the violation.

Accountability mechanisms must also include transparent reporting and monitoring systems. Independent bodies could be established to audit countries' compliance with pandemic preparedness and response obligations, publishing regular reports that hold governments accountable to their commitments. These reports could be used to trigger penalties or rewards, encouraging countries to adhere to global standards.

## **5. Different Schools of Thought in Global Health Governance**

### **5.1. Realist Approach**

The realist school of thought emphasizes the importance of state sovereignty and national interests in global health governance. Realists argue that international cooperation is often hindered by states prioritizing their own security and economic interests over collective global health goals. This perspective highlights the challenges in implementing binding global pandemic legislation, as states may be reluctant to cede sovereignty to international bodies (Kamradt-Scott, 2018). The realist approach would suggest that any global pandemic legislation should include strong incentives for compliance and respect for state sovereignty to ensure broad adoption (Kickbusch et al., 2021).

### **5.2. Liberal Institutionalism**

Liberal institutionalism, in contrast, posits that international cooperation can be achieved through the establishment of institutions that foster cooperation and reduce the likelihood of conflict between states. From this perspective, global health governance can be strengthened through the creation of robust international institutions like a global pandemic treaty that enforces compliance and ensures equitable resource distribution (Fidler, 2020). Proponents of this view argue that international law and agreements, such as the proposed global pandemic treaty, are essential tools for managing global health crises effectively (Gostin & Katz, 2020).

### **5.3. Constructivist Approach**

The constructivist approach emphasizes the role of international norms, values, and identities in shaping state behavior. Constructivists argue that global health governance can be improved by fostering a shared understanding of the importance of pandemic preparedness and response (Moon et al., 2015). They advocate for the creation of global norms around health equity and solidarity, which can drive states to cooperate more effectively during pandemics. This school of thought would support the integration of these norms into global pandemic legislation, making equitable resource distribution and transparency key components of international cooperation (Horton, 2021).

### **5.4. Critical Theories**

Critical theories, including those informed by post-colonial and feminist perspectives, critique existing global health governance frameworks for perpetuating inequalities and marginalizing vulnerable populations. Advocates of this approach argue that global pandemic legislation must address the systemic inequities in global health systems, which have been highlighted during crises like COVID-19 and Ebola (Kamradt-Scott, 2018). This school of thought would call for the inclusion of provisions in the global pandemic treaty that specifically address the needs of low- and middle-income countries (LMICs) and marginalized communities, ensuring that global health governance is not just about control but also about justice and equity (United Nations General Assembly, 2020).

## **6. Proposed Elements of Global Pandemic Legislation**

### **6.1. Establishment of a Global Pandemic Treaty**

A global pandemic treaty should build on existing frameworks like the IHR and GHSA but go further by incorporating binding legal obligations and strong enforcement mechanisms. This treaty would address all aspects of pandemic preparedness, from surveillance and early detection to equitable resource distribution and response coordination.

One key element of the treaty should be the establishment of a global health security fund, supported by contributions from HICs, international financial institutions, and private sector partners. This fund would be used to support pandemic preparedness efforts in LMICs, ensuring that all countries have the resources they need to meet global health standards.

The treaty should also include provisions for regular review and revision to ensure that it remains relevant in the face of evolving health threats. This could include mechanisms for updating the treaty in response to new scientific developments or emerging pathogens, ensuring that it remains a dynamic and responsive legal framework.

### **6.2. Surveillance and Early Warning Systems**

Global pandemic legislation must mandate the establishment of standardized global surveillance systems that monitor potential health threats in real-time. These systems should be capable of detecting emerging pathogens quickly, allowing for rapid response and containment.

A key component of these systems would be the development of global databases that track outbreaks, enabling countries to share data on new and emerging pathogens. These databases would be managed by international bodies like the WHO, which would be empowered to coordinate global responses based on real-time data.

Technological innovation should also be a central focus of global pandemic legislation. The use of genomic sequencing, AI, and big data analytics could enhance the detection and monitoring of health threats, allowing for more targeted interventions. Legal frameworks should support the development and deployment of these technologies, ensuring that they are available to all countries, regardless of their economic status.

### **6.3. Global Supply Chain and Resource Allocation Mechanisms**

One of the most critical elements of global pandemic legislation is ensuring the equitable distribution of resources during health crises. This could include the creation of global stockpiles of vaccines, treatments, and medical supplies, with legally binding commitments from countries to contribute to these stockpiles.

Global pandemic legislation should also address intellectual property rights, particularly during health emergencies. Temporary waivers of IP rights could be mandated, allowing for the production of generic versions of vaccines and treatments to meet global demand. This would prevent the bottlenecks seen during the COVID-19 pandemic, where patent protections limited the availability of life-saving interventions in LMICs.

In addition, global legislation could establish protocols for the fair allocation of resources based on epidemiological data. This would ensure that resources are distributed according to need, rather than economic power, preventing vaccine nationalism and ensuring that all countries can protect their populations during pandemics.

## **7. Challenges to Implementation of Global Pandemic Legislation**

### **7.1. Sovereignty and National Interests**

The issue of national sovereignty is one of the most significant obstacles to implementing global pandemic legislation. Many countries are reluctant to cede control over their health policies to international bodies, particularly when these policies may conflict with national interests or political priorities.

One potential solution to this challenge is to frame global pandemic legislation as a mutual benefit for all nations. By ensuring that all countries are prepared for health crises, global legislation can protect the global economy and reduce the overall impact of pandemics. Countries that invest in pandemic preparedness are less likely to experience the economic disruptions caused by pandemics, making the case for international cooperation more compelling.

Incentives for compliance could also play a role in overcoming resistance to global pandemic legislation. Countries that comply with the legislation could be rewarded with access to funding, technical assistance, and other resources, while those that fail to comply could face penalties or other consequences.

### **7.2. Compliance and Enforcement**

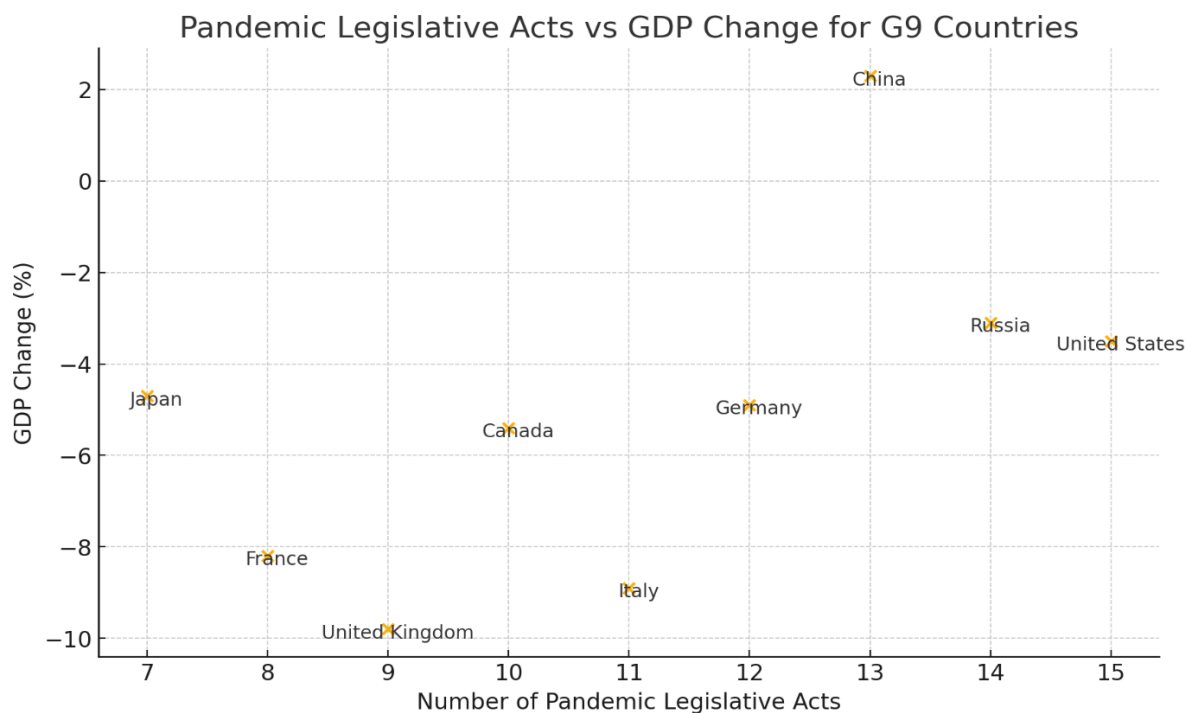
Ensuring compliance with global pandemic legislation is another significant challenge. Countries may be unwilling or unable to meet the requirements of global pandemic legislation, particularly if they lack the necessary financial resources or political will.

One potential solution to this challenge is the establishment of a system of incentives and penalties to encourage compliance. Countries that meet the requirements of the legislation could be rewarded with access to funding, technical assistance, and other resources, while those that fail to comply could face sanctions or other penalties.

International bodies like the WHO could also play a role in ensuring compliance by monitoring countries' progress and providing support where needed. This could include technical assistance to help countries strengthen their healthcare systems and meet the requirements of global pandemic legislation.

### **7.3. Financial and Logistical Barriers**

The implementation of global pandemic legislation will require significant financial and logistical resources. Countries will need to invest in strengthening their healthcare infrastructure, improving their surveillance systems, and building their capacity to respond to health crises.



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International financial institutions and high-income countries will need to play a critical role in supporting these efforts, providing the necessary funding and technical assistance to ensure that all countries can meet the requirements of global pandemic legislation.

One potential solution to this challenge is the establishment of a global pandemic preparedness fund, which could be used to provide financial support to low-resource countries. This fund could be supported by contributions from high-income countries, international financial institutions, and private sector partners, ensuring that all countries have the resources they need to comply with global pandemic legislation.

**8. Conclusion.** The COVID-19 pandemic has exposed the urgent need for global pandemic legislation that can ensure a coordinated, equitable, and effective response to future health crises. While existing frameworks like the IHR and the GHSA provide valuable tools for addressing global health threats, they lack the legal binding force and enforcement mechanisms needed to ensure that countries are adequately prepared for and can respond to pandemics.

A global pandemic treaty that mandates preparedness, ensures equitable access to resources, and includes enforceable compliance mechanisms is essential for protecting global health security. Such a treaty could help prevent future pandemics from causing the widespread devastation seen during COVID-19, saving lives and safeguarding the global economy.



The international community must act now to establish this framework, building on the lessons learned from past pandemics and addressing the challenges of sovereignty, compliance, and funding. By embedding these principles in a global pandemic treaty, the world will be better positioned to respond swiftly and effectively to future health emergencies.

The World Health Organization (WHO) operates within the framework of the **International Health Regulations (IHR)**, a legally binding instrument adopted by 196 countries to address and mitigate public health risks that have the potential to transcend national boundaries. Initially revised in 2005, the IHR constitutes the primary legal mechanism for coordinating international efforts to prevent and respond to global health emergencies. The regulations obligate member states to develop and maintain core public health capacities, ensure prompt reporting of public health events, and cooperate with the WHO in risk assessment and response. The WHO, in its capacity as the leading global public health authority, provides guidance, disseminates information, and supports the capacity-building efforts of member states in the management of transboundary health threats, including infectious disease outbreaks.

In the context of the COVID-19 pandemic, the IHR served as the legal foundation for the WHO's response efforts. Upon the emergence of the virus, the WHO declared COVID-19 a **Public Health Emergency of International Concern (PHEIC)**, thereby activating specific international legal mechanisms and obligations under the IHR. However, the pandemic highlighted several deficiencies in the current legal framework, particularly in areas such as timely reporting, enforcement of recommendations, and global preparedness. In light of these challenges, the WHO has initiated discussions on a **pandemic treaty**, aimed at addressing gaps in international law by enhancing global cooperation, improving transparency, and ensuring equitable access to medical resources in future pandemics. Such a treaty could serve to strengthen international legal frameworks and facilitate more effective and coordinated global responses to public health crises.

## References

- COVID-19 Challenge? Revisiting the International Health Regulations to Prepare for Future Threats. *JAMA*, 324(4), 327-328.
- Fidler, D. P. (2020). The Future of the World Health Organization: What Role for International Law? *The American Journal of International Law*, 114(3), 1-10.
- \_\_\_\_\_. Fidler, D. P. (2005). From International Sanitary Conventions to Global Health Security: The New International Health Regulations. *Chinese Journal of International Law*, 4(2), 325-392.
- Gostin, L. O., & Katz, R. (2020). "The International Health Regulations: The Governing Framework for Global Health Security." *JAMA*, 324(4), 1-2.
- Hoffman, S. J. (2010). Strengthening Global Health Diplomacy in Canada's Foreign Policy: Lessons from the International Health Regulations. *Global Health Governance*, 3(2), 1-20.
- Horton, R. (2021). COVID-19 and the Failure of Global Health Security. *The Lancet*, 397(10273), 393.
- Kamradt-Scott, A. (2018). The Politics of Global Health Security. *The Routledge Handbook of Global Health Security*, Routledge, 60-70.
- Kickbusch, I., et al. (2021). Global Health Diplomacy—Breaking Down Barriers to Collective Action. *Global Health Action*, 14(1), 1-5.
- Moon, S., et al. (2015). Will Ebola Change the Game? Ten Essential Reforms before the Next Pandemic. *The Lancet*, 386(10009), 2204-2221.
- United Nations General Assembly. (2020). *Transforming Our World: The 2030 Agenda for Sustainable Development*. UN, 23-24.
- World Health Organization. (2021). *WHO Director-General's Opening Remarks at the 148<sup>th</sup> Session of the Executive Board*. WHO, <https://www.who.int/director-general/speeches>



## **Analysis of Security Cooperation between India and ASEAN in the Global South**

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### **ABSTRACT**

In recent years, the intensification of great power games has led to an increasingly significant role for countries in the global South in the international community. A series of actions by southern countries, such as insisting on strategic autonomy and refusing to take sides, have made the global South an important strategic force in shaping the international order. India and ASEAN countries, as important members of the global South, have a long history of cultural exchange and common security concerns. This article aims to conduct an in-depth analysis of the security cooperation between India and ASEAN from the perspective of the global South, in order to reveal its important role in regional and even global security governance.

**KEYWORDS:** Global South, India, ASEAN, Security Cooperation

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1. Introduction. The global South mainly refers to developing countries in Africa, Asia, and Latin America, which have abundant natural resources and population advantages, but are relatively marginalized in politics, economy, and culture compared to developed Western countries, and have long been constrained and influenced by the Western dominated international order. Although the Global South is not a group of countries with clear strategic goals and well-established mechanisms, with the rise of emerging markets and the overall strength of developing countries, the Global South has become an important force that cannot be ignored in global affairs (Cogan & Mishra, 2020). As important members of the global South, India and ASEAN's geopolitical background and position in the global South cannot be ignored. As a major South Asian country with abundant resources and a significant demographic dividend, India has experienced rapid economic development in recent years and has become one of the most promising emerging markets in the world.

The ten ASEAN countries have a vast territory, a large population, and strong economic complementarity, making them an important platform for regional cooperation. India and ASEAN are geographically adjacent, with a long history of cultural exchange and shared security concerns, which have maintained close cooperative ties between the two in regional and international affairs. With the increasingly prominent non-traditional security threats such as terrorism, transnational crime, and cybersecurity, India and ASEAN are facing common security challenges. Through security cooperation, both sides can share information, coordinate actions, effectively threaten and challenge, and maintain regional peace and stability. In addition, security cooperation can also promote exchanges and cooperation between the two sides in political, economic, and cultural fields, promote unity and cooperation among the global South, and jointly address the challenges of the US Western dominant international order.

However, the security cooperation between India and ASEAN also faces some challenges and difficulties. Due to cultural, political, and economic differences and disagreements between the two parties, communication barriers and conflicts of interest may arise during the cooperation process. On the basis of respecting each other's sovereignty and interests, strengthening communication and coordination, and promoting the in-depth development of security cooperation are issues that both sides need to jointly consider and solve. Therefore, analyzing the security cooperation between India and ASEAN from the perspective of the global South has important practical significance and theoretical value. This article will delve into the historical evolution, strategic motivations, and effectiveness evaluation of security

cooperation between India and ASEAN through the review and analysis of relevant literature, in order to provide effective reference and inspiration.

## 2. The Historical Evolution of the Development of India ASEAN Relations.

From the perspective of the global South, the relationship between India and ASEAN has undergone profound historical evolution and development. The evolution of this process is not only influenced by multiple factors such as geopolitics, economy, and security, but has also gradually shown unique cooperation models and prospects in recent years with the rise and deepening of the strategic partnership between the two sides. Especially in the field of security cooperation, the close interaction and coordination between India and ASEAN have injected new vitality into the stability and development of the global southern region.

India's Eastward Expansion Policy and the Deepening of ASEAN Relations. India's "Eastward" policy originated from the "Eastward" policy in the 1990s. After the dissolution of the Soviet Union, India faced economic difficulties domestically, while the economies of Southeast Asian countries showed a thriving trend. In order to seek new diplomatic directions and opportunities for economic development, India has introduced the "Eastward" policy, aimed at achieving the fast track of Southeast Asian economic development, utilizing ASEAN's funds, technology, and markets to seek new economic development opportunities (Gill, 2024).

After entering the 21st century, India's "Eastward" policy has significantly expanded not only in scope but also in connotation. This policy originally focused mainly on economic cooperation, but gradually developed into a multi-level strategic cooperation that includes economic, political, and military aspects. Its geopolitical influence has also expanded from Southeast Asia to the entire Asia Pacific region.

After the Modi government came to power in 2014, it further strengthened this policy and upgraded it to the "Eastward Policy". At this stage, the prominent feature of India's "Eastward" policy is the continuous strengthening of foreign military cooperation around maritime security, counterterrorism, and other aspects (Gupta, 2021). With the continuous promotion of the "Eastward Expansion" policy, its relationship with ASEAN has significantly strengthened. In 2015, India appointed a special ambassador to ASEAN and established a delegation to the ASEAN and East Asia Summit in Jakarta.

To commemorate the 25th anniversary of the establishment of the dialogue partnership between India and ASEAN, the 15th anniversary of the summit exchange, and the 5th anniversary of the strategic

partnership, the two jointly held over 60 celebration activities in 2017. Subsequently, the India ASEAN Commemorative Summit held in New Delhi in January 2018 was themed "Shared Value, Shared Destiny" (Kipgen, 2020). Further deepened the cooperation and communication between the two. At the same time, India is also promoting economic development on both sides by strengthening trade and investment cooperation with ASEAN countries. In addition, India actively participates in infrastructure construction and cultural exchange projects among ASEAN countries. This has laid a solid foundation for cooperation between both parties.

The cornerstone construction of economic integration, security protection, and cultural progress. The relationship between India and ASEAN has undergone complex and profound historical evolution, and the cornerstone of economic integration, security cooperation, and cultural progress behind it is an important component of the historical evolution and development background of India ASEAN relations. These three aspects are intertwined and mutually reinforcing, providing strong support for the sustained development of bilateral relations.

Since India implemented its reform and opening-up policy in 1991, its foreign economic policy has undergone significant changes, especially towards ASEAN countries. The economic relationship between India and ASEAN was further strengthened after the signing of the Free Trade Agreement in 2009, involving multiple fields such as trade, investment, and services. In 2014, the two sides signed an agreement on trade in services and cross-border investment, deciding to open up sectors such as telecommunications, finance, and insurance services (Koga, 2022). These agreements greatly promote economic complementarity between the two sides, allowing India's information technology, pharmaceutical, and service industries to enter the ASEAN market, while ASEAN's natural resources and manufacturing products are also crucial to the Indian market. This economic integration brings interdependent economic benefits to both sides, laying the foundation for further political and security cooperation.

In addressing regional security challenges, India and ASEAN are working together to tackle various issues such as piracy, terrorism, and transnational crime. At the third ASEAN India Summit in 2004, India and ASEAN signed the Partnership Agreement for Peace, Progress and Common Prosperity, marking an important step towards strengthening regional cooperation and common development.

At the same time, both sides also emphasized their determination to jointly combat international terrorism

and other transnational crimes by signing a joint declaration, demonstrating a new path of cooperation between India and ASEAN in the global counterterrorism field (Manhas, 2024). Due to the fact that countries such as India, Indonesia, Malaysia, and the Philippines are all deeply affected by terrorist activities, the common security challenges have prompted India and ASEAN to increasingly focus on strengthening cooperation in this field.

Under the active promotion of the Indian government, India and ASEAN have signed multiple joint declarations on counter-terrorism, committed to protecting maritime connectivity, ensuring the security of energy supply lines, and working together to combat international terrorism. The theme of "Strengthening Cooperation between India and ASEAN Countries in Combating International Terrorism" was confirmed and strengthened at the Fourth India ASEAN Summit held in Colombo, Sri Lanka in December 2005. This indicates that security cooperation between India and ASEAN has become an indispensable part of their strategic partnership. By establishing a framework of mutual trust and cooperation, India and ASEAN provide solid support for regional stability and lay the foundation for addressing broader security issues.

Cultural exchange and cooperation are also important components of India ASEAN relations. There are profound cultural and religious connections between India and Southeast Asian countries, which provide natural channels for communication in India's relations with Southeast Asia. Religion and culture are not only important ways for India to communicate with Asian countries, but also play a crucial role in strengthening connectivity with Southeast Asia in India's Eastward Policy.

Through these cultural and religious ties, India can exert greater influence in regional cooperation and exchange, promoting cooperation and development in a wider range of socio-economic fields. Meanwhile, the rich and diverse historical and cultural heritage of ASEAN countries has also had an impact on Indian society. In India's "Eastward" policy, cultural exchange is seen as an important component in enhancing political and economic ties. India emphasizes strengthening its ties with Southeast Asian countries through cultural exchanges, such as visits between scholars and cultural groups, exhibitions of cultural relics and crafts, and joint hosting of traditional cultural festivals and sports and economic activities in both regions. This cultural exchange not only promotes mutual understanding and respect between the two sides, but also provides a solid social and cultural foundation for bilateral political and economic cooperation.



### 3. The Motivation of India ASEAN Security Cooperation from a Global Southern Perspective.

From the perspective of the global South, the security cooperation between India and ASEAN countries presents significant strategic importance. Geographic proximity, shared security threats, and the process of economic integration are all driving both sides to strengthen security exchanges and cooperation. This kind of cooperation not only helps to solve security challenges both inside and outside the region, but also promotes economic development and regional stability. In depth analysis of the motivations behind India ASEAN security cooperation from a global southern perspective, exploring from multiple dimensions such as regional security, economic integration, and strategic autonomy, can help us better understand and evaluate the significance and potential of bilateral cooperation.

Regional security dilemma and consideration of jointly resisting transnational threats. Currently, India and ASEAN countries face common challenges in the face of regional security challenges, mainly manifested in the increasing threats including terrorism, transnational crime, illegal drug trafficking, and piracy. These threats are no longer simple local issues, but increasingly highlight serious threats to the overall security and stability of the region.

In this context, it is particularly urgent for India and ASEAN countries to deepen security cooperation and jointly address these transnational threats. The core purpose of security cooperation is to acquire and share complementary resources, enabling both parties to obtain more heterogeneous information (Panda, 2022). Through security cooperation, India and ASEAN countries can timely obtain key information including the activity dynamics of terrorist organizations, the operation mode of criminal networks, and changes in drug trafficking routes.

The exchange and sharing of this information will provide strong support for both sides to formulate more effective policies and actions in counterterrorism, anticrime, and combating illegal drug trafficking. By sharing intelligence resources and experiences, India and ASEAN countries can learn from each other and work together to improve their intelligence analysis capabilities. This will help to have a more comprehensive understanding of the regional security situation, identify potential security risks, and take corresponding measures in a timely manner.

Integration of non-traditional security needs in the process of economic integration. With the deepening of economic integration, the economic ties between India and ASEAN countries are becoming increasingly close. Especially after the outbreak of the COVID-19 epidemic, promoting economic

recovery has become the main theme of the Indo Pacific region. At the India ASEAN Business Summit held in October 2021, Indian Foreign Subrahmanyam Jaishankar explicitly stated that India plans to launch new cooperation plans with ASEAN in multiple areas such as health security, digital economy, supply chain stability, and sustainable economic development, and further strengthen the bilateral cooperation relationship. However, economic integration has also brought a series of non-traditional security challenges.

Firstly, trade security has become an important issue. With the increase in trade volume, India and ASEAN countries are facing issues such as trade controls, illegal trade, and counterfeit products, which may have a serious impact on the regional economy. The Indian Ministry of Commerce has publicly expressed dissatisfaction with the complex regulatory procedures of ASEAN countries, pointing out that these non-tariff trade barriers prevent India's exported goods from enjoying true trade convenience, which further exacerbates the tension between the two sides in terms of trade security.

Secondly, energy security has also received significant attention. With the growth of energy demand, India and ASEAN countries have increased their dependence on energy, and the instability of energy supply and energy security threats may pose risks to regional stability and economic development.

Thirdly, network security issues are becoming increasingly prominent. With the acceleration of digitalization and informatization, network attacks, data breaches, and information security have become urgent challenges that need to be addressed. These security challenges not only threaten the information systems of individual countries, but may also have a negative impact on the network infrastructure and economic operations of the entire region. As important members of the global South, India and ASEAN countries bear the responsibility of maintaining regional stability and promoting common development.

Therefore, in order to ensure regional economic security, India and ASEAN countries need to integrate traditional security needs into the process of economic integration. This means that they need to jointly develop response measures, strengthen the detection and response to these security threats, promote peace and prosperity in the global South while ensuring regional economic security.

Strategic autonomy and demand linkage to resist external influences. India and ASEAN tend to seek a mechanism for mutual cooperation in the face of influences from other global powers and regional powers, in order to maintain their strategic independence and autonomy. Firstly, both India and ASEAN countries are facing influences from traditional and emerging powers, particularly in terms of geopolitics

and regional security. These impacts come from multiple fields including economy, military, and politics, posing challenges to maintaining their respective national interests and regional stability. Faced with increasing security challenges, security cooperation has become a common concern and new pillar of India ASEAN relations.

In this situation, establishing a security cooperation mechanism has become an inevitable choice, by sharing intelligence information and analyzing external threats, in order to enhance the ability to resist external influences.

Secondly, both India and ASEAN countries are pursuing greater voice and dominance in international affairs. As early as the period when India was striving for independence, leaders such as Nehru had set the goal of making India a "vibrant and influential power" and had it throughout India's development. As a regional integration organization, ASEAN has always adhered to the concept of "great power balance", taking the establishment of a "peaceful and free neutral zone" as its core mission, and striving for survival and development opportunities for member countries through collective action (Putra, 2019).

As representatives of the global South, they aspire to break free from the constraints of traditional powers and play a more active role in regional and international affairs. But this pursuit is limited and competitive by other regional powers. In this situation, through security cooperation, India and ASEAN countries can better understand the intentions and actions of external forces, thereby more effectively protecting their own interests and seeking more international support and recognition. In addition, in history, India has had close trade, cultural, religious, and personnel exchanges with Southeast Asian countries, and India's religion and culture have had a profound impact on the Southeast Asian region. The similarities and complementarity in social, cultural, and economic aspects provide a more solid foundation for security cooperation. By sharing information, India and ASEAN countries can better understand each other's needs and concerns, seek common solutions, and form closer cooperative relationships in regional affairs. This cooperation not only helps to cope with external influences, but also promotes regional development and prosperity.

Overall, in the context of the global South, India and ASEAN countries have realized that only through cooperation can they better maintain their strategic position and sovereignty, respond to external challenges, and play a more active role in international affairs. Therefore, establishing a security cooperation mechanism has become an inevitable choice, which helps to strengthen regional stability and

development, and promote the common interests of countries in the global South.

#### 4. Evaluation of the Effectiveness of Security Cooperation between India and ASEAN.

From the perspective of the global South, security cooperation between India and ASEAN is a crucial part of the regional security architecture, but there are also many risks and challenges, including political risks, technological security issues, economic impacts, and the sustainability of cooperation. By analyzing these risk factors in detail, we can gain a deeper understanding of the cooperation dynamics between India and ASEAN in maintaining regional security and promoting regional stability. At the same time, we can identify and propose strategic recommendations to address these risks, providing reference and guidance for future cooperation. In addition, the evaluation will also explore how to optimize cooperation outcomes through mechanism innovation and policy adjustments, ensuring the long-term effectiveness and efficiency of security cooperation.

Significant achievements: conflict prevention, regional stability, and enhanced security capabilities. The security cooperation between India and ASEAN is an important component of the regional security architecture, with the aim of enhancing mutual trust and coordination among participating countries in the political, economic, and security fields, thereby improving the overall security capabilities of the region. Through intelligence sharing, cooperative defense, and capacity building, India's cooperation with ASEAN has shown positive results in multiple aspects, mainly reflected in three key areas: conflict prevention, regional stability, and enhanced security capabilities.

Firstly, India's security cooperation with ASEAN has played a significant role in conflict prevention. With the implementation of the 'Eastward Action Policy', the relationship between India and ASEAN has further strengthened, and strategic cooperation has become closer. Through regular intelligence exchange and cooperation, both sides can more effectively identify and respond to potential security threats.

In terms of specific participation in the Western Pacific and South China Sea regions, the Indian Navy has established regular visiting arrangements, frequently docking at ports of neighboring countries in the South China Sea such as Vietnam, Singapore, and the Philippines, and conducting joint military exercises with these countries. India and ASEAN have enhanced their monitoring and early warning capabilities for illegal fishing, piracy, and unauthorized military operations in the region by sharing intelligence on maritime activities. The maritime interaction between India and ASEAN countries is gradually strengthening, India's activity in the South China Sea is constantly increasing, and an all-weather

partnership has been established between India and Vietnam.

In addition, India has further strengthened its cooperation and exchanges with ASEAN countries in combating terrorism and piracy (Sundararaman, 2004). By establishing joint working groups and specialized committees, India and ASEAN have strengthened their monitoring and crackdown on terrorist networks. This cooperation not only includes information sharing, but also involves joint training and capacity building, effectively blocking the channels for terrorists' cross-border activities and reducing the occurrence of terrorist attacks.

Secondly, security cooperation also helps to maintain and strengthen regional stability. The cooperation model between India and ASEAN has promoted mutual understanding of each other's political and security dynamics, enhancing mutual trust. This deepening mutual trust reduces the possibility of misjudgment and helps to quell potential regional conflicts.

In practical applications, India and ASEAN discuss and coordinate security issues of common concern through regular bilateral and multilateral meetings. This high-level dialogue and policy consultation provide a platform for both sides to resolve disputes and avoid confrontation, which is an important guarantee for regional stability. After the 2004 Indian Ocean tsunami, the Indian Navy not only participated in rescue efforts in Indonesia and Thailand, It has demonstrated its humanitarian concerns. At the same time, India and ASEAN have strengthened cooperation in disaster prevention and reduction, especially in providing emergency intelligence support for responding to natural disasters, significantly enhancing the region's ability to respond to emergencies, thereby helping to maintain long-term stability in the region. In terms of security capabilities, by sharing the latest technological information and collaborating to develop intelligence collection and analysis tools, both sides' intelligence agencies can more effectively handle complex security intelligence, improve their ability to warn and respond to rapidly changing security environments.

Overall, the achievements of India and ASEAN in security cooperation are not only reflected in specific security operations and technical aspects, but also in enhancing strategic mutual trust and cooperation capabilities between the two sides on the regional and international stage through cooperation. This cooperation model provides strong support and guarantee for regional and even global peace and stability. In the future, as cooperation deepens and technology advances, the potential for security cooperation between India and ASEAN will become even greater, and their role in maintaining regional security will

become more significant.

#### 5. Difficulties and Challenges: Discussion on Trust Building, Information Security, and Legal Differences.

In the field of security cooperation between India and ASEAN, a series of complex challenges have emerged, especially in trust building, information security, and differences in the rule of law. These challenges not only involve technical and strategic considerations, but also touch upon deep political and cultural factors. By delving into these core challenges and studying how they impact security cooperation between India and ASEAN, as well as exploring possible strategies to address these issues, the efficiency and effectiveness of bilateral cooperation will be significantly improved.

Firstly, building trust is one of the most critical non-technical challenges in secure cooperation. For India and ASEAN countries, historical doubts, political sensitivities, and cultural differences are all sources of trust deficiency. The lack of trust in the political and security fields has limited the deepening of India's strategic partnership with ASEAN. The historical background and increasingly complex geopolitical situation in the Indo Pacific region have led to insufficient political mutual trust between India and ASEAN (Yong & Mun, 2009).

Some countries in ASEAN remain wary of India's strategic intentions and are concerned that it may play an overly dominant role in regional security affairs, which undermines the possibility of deep intelligence sharing. To address this challenge, it is first necessary to establish trust through transparent policy communication and direct high-level dialogue. India can proactively share the true intentions of its regional security strategy to reduce misunderstandings and suspicions. In addition, trust can be gradually established through small-scale and specific cooperation projects, such as joint working groups and training programs in areas such as counterterrorism and maritime security.

Secondly, information security is a technical challenge in security cooperation. Seizing information advantage and making it the core resource and dominant factor of system confrontation is an important direction for major powers in the world to shift their military and intelligence strategies. Ensuring the security of information during transmission and processing is an important issue in the security cooperation between India and ASEAN.

The varying levels of technology and security standards among different countries increase the risk of information interception or misuse. India and ASEAN can jointly establish strict information security protocols and technical standards to ensure that all participating countries meet certain security requirements. In addition, establishing a regional information security oversight agency is also a feasible

option, which is responsible for supervising and reviewing intelligence sharing activities to ensure that all operations comply with established security guidelines.

In addition, legal differences are also a common issue encountered in cooperation between India and ASEAN. Legal differences are a common issue encountered in cooperation between India and ASEAN. The legal systems and enforcement efforts of different countries vary greatly in protecting data privacy, intelligence sharing authorization, and other aspects, which poses challenges to cross-border security cooperation. To overcome this difficulty, it is possible to establish bilateral or multilateral legal framework agreements to unify cooperation standards and operational procedures. These framework agreements should cover key areas such as legal responsibility for intelligence sharing, information security, data protection, as well as the application of international and regional laws that may be involved in intelligence operations. At the same time, establishing legal coordination agencies, such as intelligence cooperation legal advisory groups, can also help solve legal issues that arise in practical operations.

The security cooperation between India and ASEAN is a complex multilateral relationship that involves a wide range of political, security, and technological issues. Trust building, information security, and legal differences are the three core issues that must be taken seriously in cooperation. Only through continuous efforts and innovative solutions can these challenges be effectively managed, ensuring the stability and effectiveness of cooperation and promoting regional peace and security. In addition, both India and ASEAN should recognize that security cooperation is not only a tool for addressing current security threats, but also a bridge for building long-term strategic partnerships. Therefore, while strengthening cooperation, it is also necessary to continuously adjust and optimize cooperation mechanisms to cope with new security challenges and technological changes.

#### 6. The impact and inspiration on the construction of regional and global southern order.

The security cooperation between India and ASEAN has had a significant impact on the political and security order of the region and even the global South. This cooperation not only reflects the interaction of forces within the region, but also embodies the efforts of countries in the global South to maintain their own security and promote regional stability.

The security cooperation between India and ASEAN directly affects the regional security environment, especially in anti submarine warfare and counterterrorism activities. On September 24, 2021, the Indian Navy and Singapore Navy conducted a three-day military exercise in the South China Sea, aimed at



strengthening India's anti submarine warfare capabilities in the Indo Pacific waters. On February 25, 2022, the Indian Navy held the "Milan-2022" joint military exercise, attracting navies from over 40 countries worldwide. ASEAN countries such as Brunei, Thailand, Singapore, Indonesia, Malaysia, Vietnam, Myanmar, and Cambodia were important participants in this exercise.

Through these joint exercises and regular intelligence exchanges, India and ASEAN countries have made significant progress in improving the synergy and efficiency of counterterrorism operations. More importantly, security cooperation promotes the ability of countries to handle regional tensions, especially in the South China Sea dispute, where sharing maritime activity intelligence enables countries to more effectively manage and avoid potential conflicts. This cooperation not only enhances the regional security environment, but also effectively prevents and responds to transnational crime and terrorism activities, providing solid support for regional stability.

Security cooperation has also promoted coordination between India and ASEAN at a broader policy and strategic level. Under the new international situation, the relationship between India and ASEAN is undergoing profound changes, gradually shifting from traditional economic and cultural exchanges to strengthened security and defense cooperation. Indian Prime Minister Modi has repeatedly expressed India's importance to ASEAN in diplomatic occasions, stating that "ASEAN is the center of India's policy in the Indo Pacific region.

Security cooperation has become an important pillar in the relationship between the two regions, not only enhancing ASEAN's security benefits, but also significantly increasing India's influence and voice in Southeast Asia. Through regular exchanges, India and ASEAN have maintained consistency in the security field, while also reaching more consensus in the economic and political fields. This deep level of cooperation promotes the practice of multilateralism, especially in addressing regional and global challenges such as climate change and public health crises, where intelligence and data sharing strengthen response measures and resource allocation within the region (Wei, 2024). The security cooperation between India and ASEAN not only broadens the channels of cooperation, but also strengthens the coordination between the two sides at a broader policy and strategic level, laying a solid foundation for the long-term stability and development of the region.

The security cooperation between India and ASEAN is not limited to both sides, but also influences broader international relations by promoting strategic dialogue with other countries in the global South.

For example, India has strengthened its connections with African and Latin American countries through cooperation bridges with ASEAN, which also face dual challenges of security and development. Through this approach, India and ASEAN have jointly promoted a more inclusive and mutually beneficial global southern order.

In the current era of deepening globalization, the security cooperation between India and ASEAN reflects how regions can respond to the security challenges brought by globalization through cooperation. Security cooperation enables countries to better understand the economic, social, and technological changes in the process of globalization, and how these changes affect regional security.

The security cooperation between India and ASEAN provides important insights for countries in the global South, that strengthening cooperation and building trust are effective ways to address common challenges. In the future, with the development of technology and changes in the global political and economic situation, security cooperation will need to constantly adapt to new security threats and opportunities for cooperation. In addition, strengthening legal construction, information protection, and transparency in cooperation will be key to promoting the long-term sustainability and deepening of such cooperation.

**7. Conclusion.** This paper explores the current situation and challenges of security cooperation between India and ASEAN from the perspective of the global South, and analyzes its impact on regional security and political stability.

Security cooperation, as an important field in international relations, plays an irreplaceable role in promoting regional stability, addressing global challenges, and enhancing multilateral cooperation. The security cooperation between India and ASEAN has played an important role in enhancing regional security and strengthening strategic partnerships, especially in demonstrating significant strategic significance in the stability of the Indo Pacific region.

However, issues such as trust building, information security, and legal differences still pose major challenges in cooperation, affecting the depth and quality of cooperation. In addition, this cooperation has also promoted coordination between the two sides at a broader policy and strategic level, particularly demonstrating the value of multilateralism in global issues such as climate change and public health crisis management. To further strengthen this cooperation, it is recommended to establish a more systematic trust mechanism, including regular high-level exchanges and joint exercises, as well as an intelligence

mechanism jointly supervised by both parties. At the same time, India and ASEAN should jointly develop unified information security standards, coordinate legal and policy frameworks, and ensure the legitimacy and effectiveness of cooperation. In addition, in the broader context of the global South, both sides should strengthen policy cooperation on regional and global issues such as climate change, economic development, and technological innovation to cope with the increasingly complex international environment.

In the future, with the evolution of the global political and economic landscape, the security cooperation between India and ASEAN will face new development opportunities and challenges. In the context of the global South, this cooperation is expected to become an important force in promoting regional and global stability. The advancement of technology and the dynamic changes in international relations will drive India and ASEAN to explore new models and paths in security cooperation, especially with the help of modern technologies such as artificial intelligence and big data, the cooperation between the two sides will be more precise and efficient. By comprehensively utilizing intelligence resources, India and ASEAN can not only better respond to common security threats, but also play a more active role in the political and economic development of the global South, jointly promoting the establishment of a more peaceful, stable, and prosperous world.

## References

- Cogan, M. S., & Mishra, V. (2020). India–Thailand Security Cooperation: Strengthening the Indo-Pacific Resolve. *Journal of Asian Security and International Affairs*, 7(1), 36–56. <https://doi.org/10.1177/2347797020906651>
- Gill, D. M. (2024). The Rise of the Indo-Pacific and the Theoretical Foundations of India–Indonesia Defence Cooperation. In S.Singh& R. Marwah. (Eds.), *India and ASEAN in the Indo Pacific*. Palgrave Macmillan, Singapore. [https://doi.org/10.1007/978-981-99-7309-5\\_11](https://doi.org/10.1007/978-981-99-7309-5_11)
- Gupta, S. (2021). ASEAN–India trade and commerce ties: Issues, prospects and challenges. *ASEAN and India–ASEAN Relations*, 181–208. <https://doi.org/10.4324/9781003177173>
- Kipgen, N. (2020). India–ASEAN relations: the initiatives, successes, and challenges. *India Review*, 19(3), 207–222. <https://doi.org/10.1080/14736489.2020.1754012>
- Koga, K. (2022). Institutional Strategies of ASEAN/ASEAN-Led Institutions. *Managing Great Power Politics. Global Political Transitions*. Palgrave Macmillan, Singapore. [https://doi.org/10.1007/978-981-19-2611-2\\_4](https://doi.org/10.1007/978-981-19-2611-2_4)
- Manhas, N. S. (2024). Maritime Security Cooperation Between India and ASEAN. In S.Singh& R .Marwah (Eds), *India and ASEAN in the Indo Pacific*. Palgrave Macmillan, Singapore. [https://doi.org/10.1007/978-981-99-7309-5\\_3](https://doi.org/10.1007/978-981-99-7309-5_3)
- Panda, J. P. (Ed.)(2022). *India–Japan–ASEAN Triangularity: Emergence of a Possible Indo-Pacific Axis?* (1<sup>st</sup> ed.). Routledge. <https://doi.org/10.4324/9781003216766>
- Putra, B. A. (2019). ASEAN Political–Security Community: Challenges of establishing regional security in the Southeast Asia. *Journal of International Studies*, 12(1). <http://dx.doi.org/10.14254/2071-8330.2019/12-1/2>
- Sundararaman, S. (2004). Politics and Security in South-East Asia: Prospects for India–ASEAN Cooperation. *International Studies*, 41(4), 371–385. <https://doi.org/10.1177/002088170404100402>
- Wei, Z. (2024). The Evolution of the ‘QUAD’: Driving Forces, Impacts, and Prospects. *Horizons: Journal of International Relations and Sustainable Development*, 25, 82–99. <https://www.jstor.org/stable/48761182>
- Yong, T. T., & Mun, S. C. (2009). The Evolution of India–ASEAN Relations. *India Review*, 8(1), 20–42. <https://doi.org/10.1080/14736480802665170>



## **The Impact of Digital Tools on the Development of Creative Thinking in Students: Methodological Approaches and Educational Strategies**

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### **ABSTRACT**

The article examines the influence of digital technologies on the cultivation of creative thinking, an essential ability for the 21st century. It addresses collaborative platforms, virtual learning environments, and interactive apps that augment student participation and foster innovation. The study emphasizes the significance of incorporating these tools into educational methodologies, including active learning, project-based learning, gamification, and augmented and virtual reality technologies. The paper highlights the pragmatic elements of executing these tactics, taking into account individual student traits and degrees of digital literacy. It asserts that digital technologies improve educational quality and equip the younger generation for the contemporary world.

**KEYWORDS:** digital tools, creative thinking, educational strategies, interactive learning, methodological approaches, project-based learning, gamification.

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## 1. Formulation of the problem.

The problem of using digital tools to develop creative thinking in students is to find effective methodological approaches that promote a harmonious combination of innovative technologies and traditional pedagogy. In the modern educational process, digital tools such as interactive platforms, virtual environments, and gamification elements have become widely used to improve the learning experience. However, the issue of their impact on the development of students' creative thinking remains insufficiently researched.

Teachers often face difficulties in choosing the best digital resources and adapting them to learning objectives, which can significantly affect the overall quality of the educational process. This underscores the need to identify key pedagogical strategies that would maximize the use of digital tools to develop students' creative abilities. In addition, it is important to study how these digital resources can increase student motivation and engagement in the learning process. Research suggests that with the effective integration of digital technologies, it is possible to create more dynamic and interactive learning environments that stimulate critical and creative thinking. Therefore, finding ways to bridge the gap between digital innovation and pedagogical effectiveness will be essential to maximize the potential of digital tools in education.

The impact of digital tools on the development of students' creative thinking is of key national interest in the areas of education, technology, and global competitiveness.

Educational development as a national interest: improving teaching methods that use digital tools to stimulate creativity is important for building the innovative potential of society. Countries that invest in such approaches increase their prospects for economic growth and cultural influence.

Competitiveness and global challenges: in a global economy, the development of creative thinking among students directly affects the country's ability to adapt to rapid changes in technology and international competition, which is an important component of the national strategy.

The impact of digitalization on national security and culture: understanding how digital technologies are shaping the way the new generation thinks is a key issue for every country. The formed creative generation is able not only to create innovations but also to be ready for modern challenges, which is important for ensuring national stability and cultural development.

The topic of the article is consistent with the concept of *National Interest*, as it highlights the educational and technological strategy as a priority national interest that has a long-term impact on the country.

**2. Analysis of recent research and publications.** Recent research and publications on the impact of digital tools on the development of creative thinking in students are interesting. In particular, M. Bajúzová, & R. Hrmo discuss how digital tools influence students' creativity in education. The authors emphasize the importance of integrating technology into the learning process to stimulate creativity. M. Barajas, F. Frossard, A. Trifonova examine strategies of digital creative pedagogies in modern education, focusing on the adaptation of teaching practices to digital conditions. M. Gonzalez-Mohino explores the role of digital tools

in the development of critical thinking and civic engagement, which is essential for modern education. A. Meirbekov, I. Maslova, Z. Gallyamova analyze the use of digital tools to develop critical thinking in the educational process. These and similar publications demonstrate the growing interest in integrating digital technologies into teaching strategies to develop students' creative thinking.

**3. The purpose of the article.** The purpose of the article is to study the impact of digital tools on the development of creative thinking in students and to identify effective methodological approaches for their integration into the educational process. The article aims to analyze modern digital technologies used in education and their role in shaping students' creative abilities, as well as to develop recommendations for optimizing pedagogical practices to increase the creativity and innovative potential of young people.

**4. Presenting main material.** Digital tools play an important role in all spheres of modern life, including education, as they provide new opportunities for engaging students and pupils in the learning process. Scientists note that thanks to technologies such as social media, online platforms, and mobile applications, students are able to express their opinions more actively, participate in discussions, and influence the learning process. Research shows that these tools not only facilitate access to information, but also promote active learning, which in turn can improve learning outcomes.

However, in order for digital tools to be effective in the educational process, it is important to ensure that they are accessible to all learners, including different social groups. In addition, challenges associated with the use of digital technologies include the risks of information manipulation, cybersecurity issues, and unequal access to technology. This requires educational institutions to develop strategies to overcome these barriers and ensure equity in the use of technology. Thus, the integration of digital tools into the educational process has significant potential, but requires a comprehensive approach to ensure their effectiveness and accessibility (Gonzalez-Mohino et al., 2023).

When discussing the impact of digital tools on the development of creative thinking in students, researchers emphasize that the integration of digital technologies into the educational process creates new opportunities for the development of critical and creative thinking. In particular, the use of online discussion platforms, interactive simulations, and educational applications encourages students to actively participate in learning and develops their ability to analyze, synthesize, and evaluate information. Methodological approaches include project-based learning, collaborative exercises, and the use of data visualization tools to help students better understand and structure their ideas. This, in turn, contributes to the development of their creativity. However, the author also notes that in order to achieve maximum results, it is necessary to take into account the learning needs of students and provide access to digital technologies. Not only the tools themselves are important, but also teaching strategies that adapt to different learning styles, which in turn increases the effectiveness of the learning process (Hudzenko, 2022), (Hudzenko, 2024).

The impact of digital tools on students' creativity is the subject of many studies that highlight the significant potential of technology in education. Digital tools such as Adobe Creative Cloud, Zoom, and Google Classroom foster creativity, especially in the field of art and design. These platforms not only allow students to express their ideas, but also improve critical thinking and problem-solving skills. For example,



Adobe Spark is used to create multimedia content that stimulates both creative expression and critical analysis. Overall, the integration of technology into education has changed traditional approaches to learning, shifting the emphasis from rote memorization to interactive and student-centered learning.

Virtual field trips and online collaboration platforms provide students with more opportunities for creative engagement in the learning process. In addition, digital tools help to combine physical and virtual spaces, giving students the opportunity to experiment and create new solutions. Adobe research shows that **76%** of Generation Z students and **75%** of teachers believe that creativity is key to future success, and digital tools play an important role in its development in the educational process. Thus, digital tools, when used appropriately, can be powerful tools for fostering creative thinking, allowing students to discover new approaches to self-expression and learning (Bajúzová &Hrmo, 2024).

The impact of digital technologies on the teaching and learning of creative design at the university is clear. The authors argue that digital tools, such as computers, projectors, and online platforms, increase the level of student interaction and provide an opportunity to apply more dynamic and practical approaches in the design curriculum. The author notes that digital tools help to make abstract concepts more accessible to students, allowing them to visualize and practically apply theoretical knowledge. Lack of access to digital tools, insufficient teacher training, and high equipment costs are the main obstacles to the full implementation of ICT in the educational process. The use of ICTs improves students' skills in creative design and prepares them for modern technology-oriented industries. Thus, according to the scientist, digital tools play a key role in transforming educational practices in creative disciplines such as design (Kalu, 2022).

Digital tools are increasingly integral to modern education, offering innovative ways to engage students and enhance the learning experience. These technologies facilitate active participation, allowing students to express their ideas, engage in discussions, and influence their educational processes. The research indicates that when effectively integrated, digital tools not only improve access to information but also foster active learning, which can lead to better educational outcomes.

However, the effective utilization of digital tools in education hinges on their accessibility for all students, including those from diverse social backgrounds. The challenges posed by digital technologies, such as information manipulation, cybersecurity threats, and unequal access, highlight the need for educational institutions to develop comprehensive strategies that promote equity in technology use.

Moreover, the potential of digital tools to enhance creativity in students is supported by various studies, which emphasize the transformative impact these technologies have on traditional educational approaches. Platforms such as Adobe Creative Cloud and Google Classroom encourage creativity and critical thinking, reshaping the learning experience to be more interactive and centered around student engagement.

Additionally, digital technologies facilitate innovative teaching methodologies, particularly in creative disciplines like design. By making abstract concepts more tangible through visualization and practical application, these tools prepare students for technology-driven industries. However, obstacles such as inadequate access to digital resources and insufficient teacher training must be addressed to fully realize the benefits of integrating ICT into the educational framework.

In summary, while the integration of digital tools in education presents significant opportunities for enhancing creativity and learning outcomes, it also necessitates a thoughtful and inclusive approach to ensure their effective and equitable application.

According to scientists, virtual technologies have a significant impact on the development of students' creative abilities. The results of the meta-analysis show that the introduction of virtual tools in educational processes improves not only cognitive skills but also stimulates creativity and innovative thinking. In particular, the use of technologies such as virtual reality, simulations, and interactive platforms allows students to expand their creative expression and generate new ideas. In addition, the author emphasizes the importance of individualization of learning, which virtual technologies allow by creating personalized learning environments. This allows students to solve creative tasks at their own pace and in accordance with their interests. The interactivity of virtual tools increases student engagement in the educational process, making learning more dynamic and motivating them to actively participate in creative tasks. Thus, virtual technologies not only modernize education, but also open up new opportunities for the development of students' creative potential, which meets the modern requirements of an innovative educational system (Wang et.,2024).

It is noteworthy that digital tools play a key role in the formation and development of critical thinking among students, as they promote active engagement in the learning process. Digital platforms create an interactive learning environment that allows students to analyze information, question data, and develop logical thinking and reflection skills. Tools such as virtual laboratories, interactive assignments, and simulations encourage students to solve problems, which promotes deeper comprehension of the material. Digital technologies not only provide access to a large amount of information, but also allow students to learn at their own pace. This, in turn, contributes to a more effective development of critical thinking, as students can focus on those aspects of the learning material that require additional reflection. It is also important to include collaborative tools that encourage group work where students can exchange ideas, argue their views and question the opinions of other participants, which enhances critical thinking. Thus, digital educational tools act as a powerful tool in enhancing students' cognitive skills, in particular their ability to critically analyze and reflect, which is extremely important for professional development and successful learning in the modern context (Meirbekov et al, 2022).

It is also worth noting that the introduction of digital technologies in education has a significant impact on the learning process and student outcomes. They emphasize that technology not only increases the accessibility of education, but also contributes to the personalization of learning, providing students with individual development paths. Digital tools make it possible to adapt educational approaches to the needs of each student, which in turn increases motivation to learn and improves overall performance. However, the process of digital transformation of educational institutions depends on many factors. Not only technical resources are important, but also the level of teacher training in the use of the latest technologies, as well as support from the management of educational institutions. The key factors that influence the success of digital transformation are the availability of infrastructure, pedagogical strategies, and access to resources for teachers and students. So, while digital technologies can significantly improve the educational process, challenges such

as the digital divide, lack of technical support, and unequal access to digital tools need to be taken into account (Timotheou et al., 2022).

Virtual technologies have a significant impact on the development of students' creative abilities, improving not only cognitive skills but also stimulating creativity and innovative thinking. The use of tools such as virtual reality and interactive platforms allows students to expand their capacity for creative expression and generate new ideas. In addition, these technologies facilitate individualized learning, which increases student engagement and creates a dynamic environment. It is also important that digital tools contribute to the development of critical thinking, allowing students to analyze information, develop logical thinking and interact in groups. However, for the effective implementation of digital technologies, various factors need to be taken into account, including the level of teacher training and access to resources. So, despite the challenges, digital technologies open up new opportunities for modernizing education and developing students' creativity.

The use of educational technologies has a significant impact on the development of creative thinking in students. They emphasize that digital tools contribute to creating an environment where students are more free to experiment with new ideas and solve problems in non-standard ways. Educational technologies allow combining traditional teaching methods with interactive ones, encouraging students to actively search for new solutions. Data analysis shows that the introduction of technology in education significantly improves critical and creative thinking skills, as technology platforms offer a wide range of tools for visualizing, modeling, and interacting with information. A methodical approach to the use of technology is important, as not all educational tools are equally effective in stimulating creativity. Based on a meta-analysis, researchers have found that interactive educational environments and technologies that provide opportunities for independent research and collaborative learning have the greatest impact on the development of creative thinking (Zaremohzzabieh et al , 2024).

Scientists note that the effective use of digital technologies in pedagogy requires the implementation of strategies that stimulate students' creativity. Teachers should integrate digital tools into the learning process not only as a means of transferring knowledge, but also as tools for developing critical and creative thinking. Important aspects include creating a learning environment that encourages experimentation and collaboration, as well as using various forms of assessment that allow students to show their creativity. The researchers emphasize that teachers should be prepared for the changes that come with digitalization and adapt their teaching methods to new technologies.

In addition, the researchers point out the need to develop digital literacy in both teachers and students, as this creates the basis for the successful integration of creative pedagogical strategies into modern education. They offer a number of practical recommendations, including the use of interactive platforms for collaboration, the introduction of project-based learning, and the creation of conditions for students' creative expression through digital media (Barajas et al., 2019).

According to scientists, modern education requires new approaches to stimulate creative thinking in students. The researchers emphasize that traditional teaching methods often do not meet the needs of

modern society, where creativity is a key competency for successful professional activity. One of the main aspects emphasized is the importance of interactive and student-centered methods that stimulate active student participation in the learning process. For example, approaches such as project-based learning, which involves working in teams on real-world tasks, promote critical thinking and creativity. This allows students not only to learn theoretical knowledge but also to apply it in practice, which leads to a deeper understanding of the material.

The authors also emphasize the use of digital technologies as a tool to increase the level of students' creativity. They believe that the integration of digital resources into the learning process allows for dynamic and adaptive learning environments that encourage students to experiment and express themselves. The use of online platforms, interactive simulations, and multimedia resources helps to develop new ideas and approaches to solving problems. In addition, it is important to take into account the individual learning styles of students. Teachers need to be flexible in their approaches, adapting teaching methods to meet the needs and abilities of students. This helps to create a supportive environment in which students can feel comfortable and confident in their ideas. In general, scientists call for the active use of innovative pedagogical strategies that promote the development of creativity and critical thinking in students. The use of interactive approaches, digital technologies, and individualized learning can significantly improve the quality of education and prepare young people for the challenges of the modern world (Revenko et al., 2024).

The use of educational technologies has a significant impact on the development of creative thinking in students, creating an environment where they can experiment with new ideas and find innovative solutions. The integration of traditional and interactive teaching methods promotes active search for new solutions and improves critical and creative skills. Research emphasizes the importance of strategies that stimulate creativity, as well as the need to develop digital literacy among teachers and students. Adapting teaching methods to new technologies, in particular through project-based learning and the use of interactive platforms, helps prepare young people for modern challenges and improve the quality of education. Thus, the active use of innovative pedagogical strategies has significant potential for the development of creative thinking in modern education.

## **5. Conclusions.**

To summarize, digital tools play a crucial role in shaping and developing students' creative thinking. They open up new opportunities for learning, make the educational process more flexible, accessible and inclusive, and stimulate innovative approaches to problem solving. One of the key aspects of digital technologies is their ability to broaden thinking horizons and foster creativity, as students are able to work with different resources, participate in project activities, exchange ideas, and create new solutions.

Methodological approaches that take into account the use of digital tools are effective in enhancing students' creativity, as they provide a multifaceted learning process. The combination of traditional teaching methods and innovative digital technologies contributes to the formation of complex thinking, integration of knowledge from different fields, and the ability to generate new ideas. In particular, the introduction of tools

such as educational platforms, interactive applications, project creation and data visualization programs creates space for experimentation and encourages students to express themselves creatively.

One of the key findings of the study is that digital tools significantly increase the level of student engagement in the learning process, which is an important factor in the development of their creativity. The use of interactive tasks, group projects, and game elements in teaching increases students' motivation to learn, helps them overcome barriers to learning new material, and develops their ability to adapt to a rapidly changing digital environment.

However, it has been found that the successful implementation of digital tools in the educational process requires careful training of teachers and the creation of favorable conditions for the use of technology. This involves having a sufficient technical base, professional development for teachers on how to work with digital resources, and adapting curricula to meet new requirements. It is also necessary to provide students with support and access to the necessary technologies to avoid inequality in educational opportunities.

Therefore, we have confirmed the importance of integrating digital tools into modern education and demonstrated that such technologies can be an effective means of developing students' creative thinking, provided they are properly adapted to the educational process.

## References

- Bajúzová, M., & Hrmo, R. (2024). Digital tools in education: The impact of digital tools in education on students' creativity. In *Sonderausgabe 1 Pedagogical Diplomacy II* (Vol. 11). R&E-SOURCE. <https://doi.org/10.53349/resource.2024.is1.a1236>
- Barajas, M., Frossard, F., & Trifonova, A. (2019). Strategies for digital creative pedagogies in today's education. *IntechOpen*. <https://doi.org/10.5772/intechopen.80695>
- Gonzalez-Mohino, M., Rodriguez-Domenech, M., Callejas-Albiñana, A., & Castillo-Canalejo, A. (2023). Empowering Critical Thinking: The Role of Digital Tools in Citizen Participation. *Journal of New Approaches in Educational Research*, 12(2), 258-275. doi:<https://doi.org/10.7821/naer.2023.7.1385>
- Hudzenko, O. (2024). Modern approaches to teaching logic and formation of critical thinking: methodological aspects. *National Interest*, 3(14), 36-44. Retrieved from <https://sc01.tci-thaijo.org/index.php/NIT/article/view/240738>
- Hudzenko, O. (2022). Modern educational technologies in teaching logic and critical thinking: methodological aspect. *Bulletin of Science and Education* (Series "Philology", Series "Pedagogy",

- Series “Sociology”, Series “Culture and Art”, Series “History and Archeology”), (2(2)), 128-140.  
[https://doi.org/10.52058/2786-6165-2022-2\(2\)-128-139](https://doi.org/10.52058/2786-6165-2022-2(2)-128-139).
- Kalu, P. (2022). Impact of digital tools in teaching and learning of creative design in the University of Nigeria, Nsukka. <https://doi.org/10.13140/RG.2.2.15753.01121>
- Meirbekov, A., Maslova, I., & Gallyamova, Z. (2022). Digital education tools for critical thinking development. *Thinking Skills and Creativity*, 44, 101023.  
<https://doi.org/10.1016/j.tsc.2022.101023>
- Revenko, I., Hlianenکو, K., Sosnova, M., Vlasenko, R., & Kolodina, L. (2024). The exploration of pedagogical approaches and methods that are designed to stimulate the creative thinking of students. *Brazilian Journal of Education, Technology and Society (BRAJETS)*, 17(1), 137-146.  
<http://dx.doi.org/10.14571/brajets.v17.n1.137-146>
- Timotheou, S., Miliou, O., Dimitriadis, Y., Villagr  Sobrino, S., Giannoutsou, N., Cachia, R., Mart nez Mon s, A., & Ioannou, A. (2022). Impacts of digital technologies on education and factors influencing schools’ digital capacity and transformation: A literature review. *Education and Information Technologies*, 28(6), 6695-6726. <https://doi.org/10.1007/s10639-022-11431-8>
- Wang, Y., Liu, W., Yu, X., Li, B., & Wang, Q. (2024). The impact of virtual technology on students’ creativity: A meta-analysis. *Computers & Education*, 215, 105044.  
<https://doi.org/10.1016/j.compedu.2024.105044>
- Zaremohzzabieh, Z., Ahrari, S., Abdullah, H., Abdullah, R., & Moosivand, M. (2024). Effects of educational technology intervention on creative thinking in educational settings: A meta-analysis. *Interactive Technology and Smart Education*. <https://doi.org/10.1108/ITSE-11-2023-0224>

## **รายนามผู้ทรงคุณวุฒิพิจารณาบทความ(Peer Review)**

Professor . Dr. Valentin Yakushik . (Ukrainian Institute of Politics – think tank) Ukraine (Kyiv,Ukraine)

Associate Professor . Dr. Shinasak Suwan-achariya ,Thaksin University (Songkhla, Thailand)

Sofiia Dombrovska ,PhD .Odesa National Economic University(Odesa, Ukraine)

Assistant Professor.Ivan Savchuk , senior researcher, UMR 8504 Géographie-cités (Paris, France)

Dr. Apichart Thongyoo, Foundation for Thailand 21 century, Thailand(Chonburi,Thailand)

บทความทุกเรื่องที่ตีพิมพ์เผยแพร่ได้ผ่านการพิจารณาทางวิชาการโดยผู้ทรงคุณวุฒิในสาขาวิชา (Peer review) ในรูปแบบไม่มีชื่อผู้เขียน (Double-blind peer review) 3ท่าน

บทความที่ตีพิมพ์เป็นข้อค้นพบ ข้อคิดเห็นและความรับผิดชอบของผู้เขียนเจ้าของผลงาน และผู้เขียนเจ้าของผลงาน ต้องรับผิดชอบต่อผลที่อาจเกิดขึ้นจากบทความและงานวิจัยนั้นต้นฉบับที่ตีพิมพ์ได้ผ่านการตรวจสอบคำพิมพ์และเครื่องหมายต่าง ๆ โดยผู้เขียนเจ้าของบทความก่อนการรวมเล่ม



## Title

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E-mail

Name or Academic position, Institute, Address

## ABSTRACT

Abstract is a summary of a research work in which each of its component must be briefly. The contents of an abstract are extracted from the main research work. The components of the abstract in order are 1) Statement of problem 2) Aim / Objective of the study 3) scientific novelty 4) Results . In all abstract could contains 250 words

**KEYWORDS:**geopolitic,geoeconomic,innovation

3-5words

**(Introduction)**(Text).....

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**(Literature Review )**( Text).....

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**(Methodology) )**( Text).....

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**(Results)** ( Text).....

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**(Discussion)**( Text).....

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## In-Text Citations

In-text citations identify quoted or paraphrased work within papers by noting the author and year. The reader can then turn to the reference list to find all the information to look up the work if needed.

- Although page numbers are encouraged for all source material, they are only required for direct quotes (word-for-word).

- In-text citations can be narrative (part of the text of the sentence) or parenthetical (in brackets).

**Note:** The following are examples of commonly used formats. Please consult APA's Publication Manual, **7th Edition** for more rules and examples. This is available at the bookstore and the library. Resources are also available at APA's official website: <https://apastyle.apa.org/blog/>.

APA uses an author-date citation system in the body of the paper. Provide the author last name or the group name, plus the year (Name, year).

For a direct quotation, include the page number (Name, year, p. 5) or the page range if it continues onto a second page (Name, year, pp. 55-56). If there are no page numbers, cite the paragraph number (Name, year, para. 2)

## II. General rules for referencing

<b>BOOK</b>	Author Surname, Initial. (Year). <i>Title of book</i> (Edition.). Publisher
<b>Source with one author</b>	Fathollah-Nejad, A. (2021) <i>Iran in an emerging New World order: From Ahmadinejad to Rouhani</i> . Palgrave Macmillan.
<b>Source with two authors</b>	Ehteshami, A., & Molavi, R. (2012) <i>Iran and the International System</i> . Routledge.
<b>Source with three or more authors</b>	Held, D., McGrew, A. G., Goldblatt, D., & Perraton, J. (2000) <i>Global transformations: politics, economics and culture</i> . Cambridge; Oxford: Polity Press.
<b>With a URL</b>	Jason, L. A., Glantsman, O., O'Brien, J. F., & Ramlan, K. N. (Eds.). (2019). <i>Introduction to community psychology: Becoming an agent of change</i> . Rebus Community. <a href="https://press.rebus.community/introductiontocommunitypsychology/">https://press.rebus.community/introductiontocommunitypsychology/</a>

<b>Organization/Group as Author</b>	NorQuest College. (2016). <i>In the community: An intermediate integrated skills textbook</i> . <a href="https://globalaccess.bowvalleycollege.ca/OER/NQC/In-the-Community/">https://globalaccess.bowvalleycollege.ca/OER/NQC/In-the-Community/</a>
<b>Chapter in an Online or E-Book</b> <b>Chapter in a Print Book</b>	Zaccara,L.(2016) Iran's permanent quest for regional power status in Braveboy- Wagner, J.(Ed.) <i>Diplomatic Strategies of Leading Nations in the Global South: Asia, Africa, Latin America, and the Middle East</i> . (pp. 181-211.) New York: Palgrave Macmillan.
<b>Report by a government agency or other organization</b>	Department of Energy, USA. (2017). <i>U.S. Energy and Jobs Report</i> <a href="https://www.energy.gov/sites/prod/files/2017/01/f34/2017%20US%20Energy%20and%20Jobs%20Report_0.pdf">https://www.energy.gov/sites/prod/files/2017/01/f34/2017%20US%20Energy%20and%20Jobs%20Report_0.pdf</a>
<b>Institute</b>	Russtrat Institute (2020, November 2) <i>The strategic survival of the Russian economy will ensure the creation of a closed</i> <a href="https://zen.yandex.ru/media/russtrat/strategicheskoe-vyjivanie-rossiiskoi-ekonomiki-obespechit-sozdanie-zakrytogo-klastera-5f9fa45fb09e797cebbd07de">https://zen.yandex.ru/media/russtrat/strategicheskoe-vyjivanie-rossiiskoi-ekonomiki-obespechit-sozdanie-zakrytogo-klastera-5f9fa45fb09e797cebbd07de</a>
<b>Translated book</b>	Author, A. (Year). Title (A. Translator, Trans.). Publisher. (Year original work was published)
	Smith ,A(2017) <i>An Inquiry into the Nature and Causes of the Wealth of Nations</i> (L. Klukin, Trans) Classics of Political Economy (Original work published 1776)
<b>Book in a language other than English</b>	Author, A. (Year). Title [Title in English]. Publisher.
	Zucmann, G.(2013) <i>La richesse cachée des nations: enquête sur les paradis fiscaux</i> . (The Hidden Wealth of Nations The Scourge of Tax Havens). Paris : Seuil
<b>Classical works</b>	Author, A. (Year). Title (E. Editor, Ed./ T. Translator, Trans.). Publisher. (Year original work was published)

	Marx,K(1959). <i>Economic and Philosophic Manuscripts of 1844</i> (M. Milligan Ed.) Progress Publishers, Moscow(Original work published 1844)
<b>Edited book</b>	Editor Surname, Initial. (Ed.). (Year). <i>Title of book</i> (Edition.). Publisher.
	Crampton, J., & Elden,S.,(Eds.).(2007). <i>Space, Knowledge and Power</i> . Aldershot: Ashgate Publishing, Ltd.
<b>Journal</b>	Author(s) of journal article – surname and initials, [use “&” for multiple authors]. (Year of publication). Title of journal article. Journal name – in italics, Volume – in italics (Issue or number), Page number(s).
	Chase, R.,Hill, E. B.,& Kennedy,P.(1996) Pivotal states and U.S. strategy. <i>Foreign Affairs</i> , 75(1),33–51
<b>Online article with no DOI</b>	Author, A. (Year). Article title. Journal Title, volume(issue), page range. URL
	Acharya, A.(2016)Studying the Bandung conference from a Global IR perspectiv. <i>AustralianJournal of International Affairs</i> , 70 (4), 342–357,2016 <a href="https://doi.org/10.1080/10357718.2016.1168359">https://doi.org/10.1080/10357718.2016.1168359</a>
<b>Articles in a language other than English</b>	Author, A. (Year). Article title [Translated article title]. Journal Title, volume(issue), page number. DOI
	Chaves–Morillo, V., Gómez Calero, C., Fernández–Muñoz, J. J., Toledano–Muñoz, A., Fernández–Huete, J., Martínez–Monge, N., Palacios–Ceña, D., & PeñacobaPuente, C. (2018). La anosmia neurosensorial: Relación entre subtipo, tiempo de reconocimiento y edad [Sensorineural anosmia: Relationship between subtype, recognition time and age]. <i>Clínica y Salud</i> , 28(3), 155–161. <a href="https://doi.org/10.1016/j/clysa.2017.04.002">https://doi.org/10.1016/j/clysa.2017.04.002</a>
<b>Newspaper Article</b>	Author, A. (Year, Month Day). Article title. Newspaper. DOI/URL
	Jardine,B.(2019, October 16) Why are there anti-China protests in Central Asia? <i>The Washington Post</i> . <a href="https://www.washingtonpost.com/politics/2019/10/16/why-are-there-anti-china-protests-central-asia">https://www.washingtonpost.com/politics/2019/10/16/why-are-there-anti-china-protests-central-asia</a>
<b>Organisation as author</b>	Organisation. (Year, Month Day). Title of webpage. Title of Website. URL
	OECD.(2020, April 1) Policy Responses to Coronavirus (COVID–19): Women at the core of the fight against COVID–19 [Online]. Available: <a href="https://www.oecd.org/coronavirus/policy-responses/women-at-the-core-of-the-fight-against-covid-19-crisis-553a8269/">https://www.oecd.org/coronavirus/policy-responses/women-at-the-core-of-the-fight-against-covid-19-crisis-553a8269/</a>

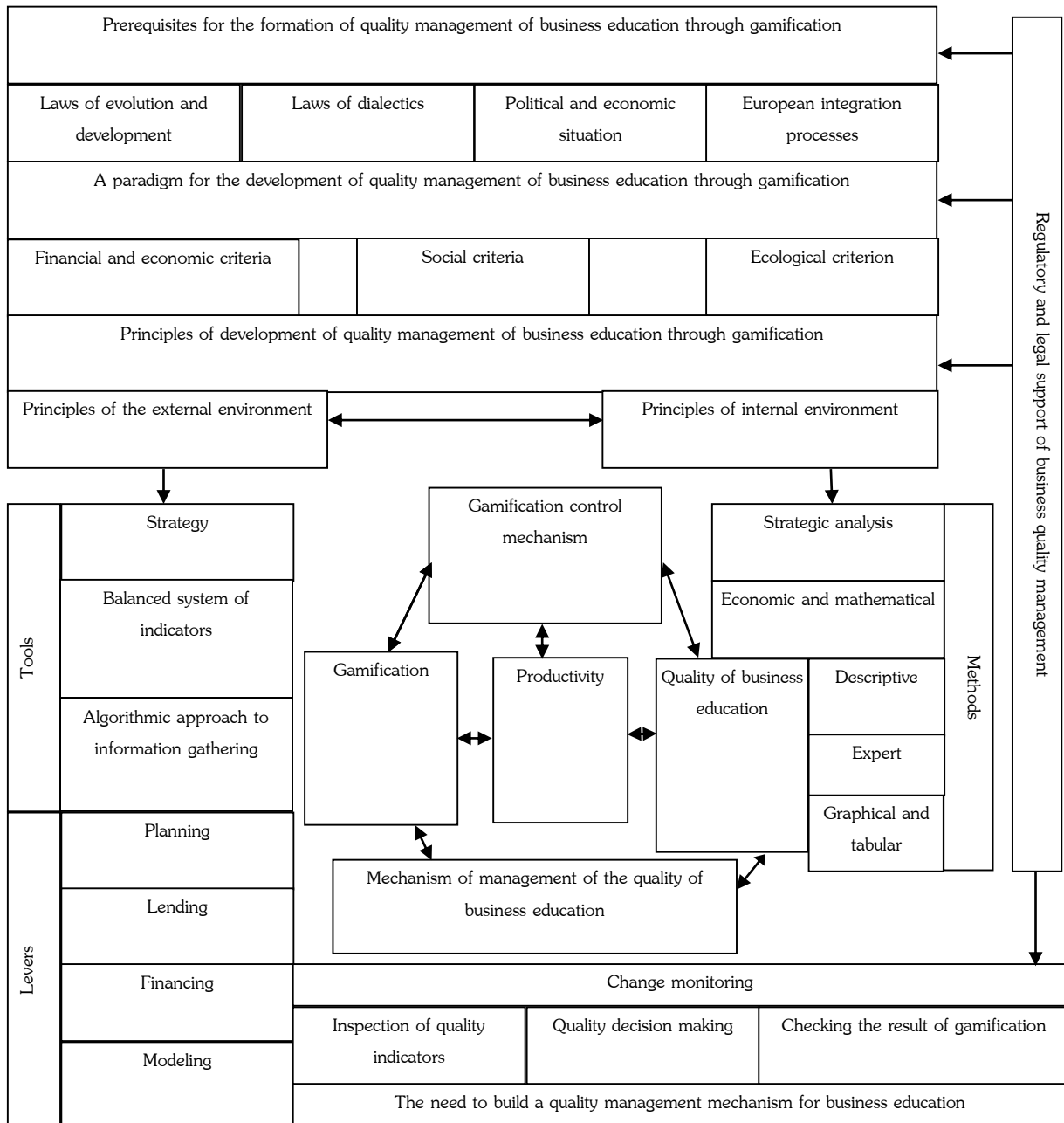
<b>Magazine article online</b>	Author Surname, Initial. (Year, Month Date). Article title. Magazine title, volume number(issue number). URL
	O'Connor,T.(2021,September 16). <i>China, Russia bring Iran, Pakistan into the fold to face the Afghanistan crisis jointly. Newsweek.</i> <a href="https://www.newsweek.com/china-russia-bring-iran-pakistan-fold-face-afghanistan-1629992">https://www.newsweek.com/china-russia-bring-iran-pakistan-fold-face-afghanistan-1629992</a>
<b>Facebook post</b>	Author, A. (Year, Month Day). Text of post [Status Update]. Facebook. URL
	Gaiman, N. (2018, March 22). <i>100,000+ Rohingya refugees could be at serious risk during Bangladesh's monsoon season. My fellow UNHCR Goodwill Ambassador Cate Blanchett is [image attached]</i> [Status Update]. Facebook. <a href="http://bit.ly/2JQzPAD">http://bit.ly/2JQzPAD</a>
<b>Dissertation</b>	Author, A. (Year). Title [Type of Publication, Name of Institution]. Database/Archive. DOI/URL
<b>Thesis</b>	Asawai ,S.(1978) <i>The development of irrigation systems in Thailand from 1888 to1950.</i> [ Master's thesis Chulalongkorn University] Chulalongkorn University. Hollander, M. (2017). <i>Resistance to authority: Methodological innovations and new lessons from the Milgram experiment</i> (Publication No. 10289373) [Doctoral dissertation, University of Wisconsin-Madison].ProQuest Dissertations and Theses Global
<b>Thesis Database/Online</b>	Albor, C. (2011). <i>Are poor people healthier in rich or poor areas?: The psychosocial effects of socioeconomic incongruity in the neighbourhood</i> [PhD thesis, University of York]. <a href="http://etheses.whiterose.ac.uk/1595/">http://etheses.whiterose.ac.uk/1595/</a> Hutcheson, V. H. (2012). <i>Dealing with dual differences: Social coping strategies of gifted and lesbian, gay, bisexual, transgender, and queer adolescents</i> [Master's Thesis, The College of William & Mary]. William & Mary Digital Archive. <a href="https://digitalarchive.wm.edu/bitstream/handle/10288/16594/HutchesonVirginia2012.pdf">https://digitalarchive.wm.edu/bitstream/handle/10288/16594/HutchesonVirginia2012.pdf</a>
<b>Conference papers</b>	Author, A. (Year, Month Date Range). Title [Paper Presentation]. Conference Name, City, State, Country.
	Haji-Yousefi, A. M.(2010, June2-3) <i>Iran's Foreign Policy during Ahmadinejad: From Confrontation to Accommodation.</i> [Paper Presentation ] the Annual Conference of the Canadian Political Science Association June 2-3, 2010, Concordia University, Montreal, Canada.

## Example figure



Figure 1. Figure title

**large chart (JasmineUPC 12) medium chart (JasmineUPC 14)**



**Fig. 2.** Mechanism of quality management of business education through gamification (Polinkevych & Kuzmak, 2023, p. 35).



**Table 1.** Table name. **large table**(JasmineUPC 12) ,**medium table**(JasmineUPC 16)

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### Writing formulas

The formulas used in this article should be either MathType or Microsoft Equation objects. They are JusmineUPC 14 in size. All formulas must be numbered in parentheses, right-aligned, and One line should be left before and after the formula

$$a = b + c \quad (1)$$

To describe the variables specified in the equation, use the JusmineUPC character size 14.

a means ....., b means ..... and c means .... .....

### Instructions for Writing and Typing

#### General Instructions: g

Articles must be 7–20 A4 pages long, printed with Microsoft Word for Windows page settings, and have 2.5 cm top and bottom borders, 2.5 cm on the left and right, and 1 cm between. About 7 letters, then type the 8th character (1.52 cm) in the order of the topics. The first topic in the writing should be the opening, and if there are subtopics, they should be named using the decimal method.

## Title

Name1

E-mail

Name or Academic position, Institute, Address

Name2

E-mail

Name or Academic position, Institute, Address

Name3

E-mail

Name or Academic position, Institute, Address

## ABSTRACT

The study's aims and objectives. The main novelty of the concepts the author suggests

**KEYWORDS:** geopolitic, geoeconomic, innovation

3-5 words

**(Introduction)** (Text).....

.....

**(Main part )** ( Text).....

.....

**(last part )** ( Text).....

.....

**(Conclusion and Discussion)** ( Text).....

.....

## References

### In-Text Citations

In-text citations identify quoted or paraphrased work within papers by noting the author and year. The reader can then turn to the reference list to find all the information to look up the work if needed.

- Although page numbers are encouraged for all source material, they are only required for direct quotes (word-for-word).
- In-text citations can be narrative (part of the text of the sentence) or parenthetical (in brackets).

**Note:** The following are examples of commonly used formats. Please consult APA's Publication Manual, **7th Edition** for more rules and examples. This is available at the bookstore and the library. Resources are also available at APA's official website: <https://apastyle.apa.org/blog/>.

APA uses an author-date citation system in the body of the paper. Provide the author last name or the group name, plus the year (Name, year).

For a direct quotation, include the page number (Name, year, p. 5) or the page range if it continues onto a second page (Name, year, pp. 55–56). If there are no page numbers, cite the paragraph number (Name, year, para. 2)

### II. General rules for referencing

<b>BOOK</b>	Author Surname, Initial. (Year). <i>Title of book</i> (Edition.). Publisher
<b>Source with one author</b>	Fathollah-Nejad, A. (2021) <i>Iran in an emerging New World order: From Ahmadinejad to Rouhani</i> . Palgrave Macmillan.
<b>Source with two authors</b>	Ehteshami, A., & Molavi, R. (2012) <i>Iran and the International System</i> . Routledge.
<b>Source with three or more authors</b>	Held, D., McGrew, A. G., Goldblatt, D., & Perraton, J. (2000) <i>Global transformations: politics, economics and culture</i> . Cambridge; Oxford: Polity Press.
<b>With a URL</b>	Jason, L. A., Glantsman, O., O'Brien, J. F., & Ramlan, K. N. (Eds.). (2019). <i>Introduction to community psychology: Becoming an agent of change</i> . Rebus Community. <a href="https://press.rebus.community/introductiontocommunitypsychology/">https://press.rebus.community/introductiontocommunitypsychology/</a>
<b>Organization/Group as Author</b>	NorQuest College. (2016). <i>In the community: An intermediate integrated skills textbook</i> . <a href="https://globalaccess.bowvalleycollege.ca/OER/NQC/In-the-Community/">https://globalaccess.bowvalleycollege.ca/OER/NQC/In-the-Community/</a>

<b>Chapter in an Online or E-Book</b> <b>Chapter in a Print Book</b>	Zaccara,L.(2016) Iran's permanent quest for regional power status in Braveboy– Wagner, J.(Ed.) <i>Diplomatic Strategies of Leading Nations in the Global South: Asia, Africa, Latin America, and the Middle East</i> . (pp. 181–211.) New York: Palgrave Macmillan.
<b>Report by a government agency or other organization</b>	Department of Energy, USA. (2017). <i>U.S. Energy and Jobs Report</i> <a href="https://www.energy.gov/sites/prod/files/2017/01/f34/2017%20US%20Energy%20and%20Jobs%20Report_0.pdf">https://www.energy.gov/sites/prod/files/2017/01/f34/2017%20US%20Energy%20and%20Jobs%20Report_0.pdf</a>
<b>Institute</b>	Russtrat Institute (2020, November 2) <i>The strategic survival of the Russian economy will ensure the creation of a closed</i> <a href="https://zen.yandex.ru/media/russtrat/strategicheskoe-vyjivanie-rossiiskoi-ekonomiki-obespechit-sozdanie-zakrytogo-klastera-5f9fa45fb09e797cebbd07de">https://zen.yandex.ru/media/russtrat/strategicheskoe-vyjivanie-rossiiskoi-ekonomiki-obespechit-sozdanie-zakrytogo-klastera-5f9fa45fb09e797cebbd07de</a>
<b>Translated book</b>	Author, A. (Year). Title (A. Translator, Trans.). Publisher. (Year original work was published)
	Smith ,A(2017) <i>An Inquiry into the Nature and Causes of the Wealth of Nations</i> (L. Klukin, Trans) Classics of Political Economy (Original work published 1776)
<b>Book in a language other than English</b>	Author, A. (Year). Title [Title in English]. Publisher.
	Zucmann, G.(2013) <i>La richesse cachée des nations: enquête sur les paradis fiscaux</i> . (The Hidden Wealth of Nations The Scourge of Tax Havens). Paris : Seuil
<b>Classical works</b>	Author, A. (Year). Title (E. Editor, Ed./ T. Translator, Trans.). Publisher. (Year original work was published)
	Marx,K(1959). <i>Economic and Philosophic Manuscripts of 1844</i> (M. Milligan Ed.) Progress Publishers, Moscow(Original work published 1844)
	Editor Surname, Initial. (Ed.). (Year). <i>Title of book</i> (Edition.). Publisher.

<b>Edited book</b>	Crampton, J., & Elden, S., (Eds.). (2007). <i>Space, Knowledge and Power</i> . Aldershot: Ashgate Publishing, Ltd.
<b>Journal</b>	Author(s) of journal article – surname and initials, [use “&” for multiple authors]. (Year of publication). Title of journal article. Journal name – in italics, Volume – in italics (Issue or number), Page number(s).
	Chase, R., Hill, E. B., & Kennedy, P. (1996) Pivotal states and U.S. strategy. <i>Foreign Affairs</i> , 75(1), 33–51
<b>Online article with no DOI</b>	Author, A. (Year). Article title. Journal Title, volume(issue), page range. URL
	Acharya, A. (2016) Studying the Bandung conference from a Global IR perspective. <i>Australian Journal of International Affairs</i> , 70 (4), 342–357, 2016 <a href="https://doi.org/10.1080/10357718.2016.1168359">https://doi.org/10.1080/10357718.2016.1168359</a>
<b>Articles in a language other than English</b>	Author, A. (Year). Article title [Translated article title]. Journal Title, volume(issue), page number. DOI
	Chaves-Morillo, V., Gómez Calero, C., Fernández-Muñoz, J. J., Toledano-Muñoz, A., Fernández-Huete, J., Martínez-Monge, N., Palacios-Ceña, D., & Peñacoba Puente, C. (2018). La anosmia neurosensorial: Relación entre subtipo, tiempo de reconocimiento y edad [Sensorineural anosmia: Relationship between subtype, recognition time and age]. <i>Clínica y Salud</i> , 28(3), 155–161. <a href="https://doi.org/10.1016/j.clysa.2017.04.002">https://doi.org/10.1016/j.clysa.2017.04.002</a>
<b>Newspaper Article</b>	Author, A. (Year, Month Day). Article title. Newspaper. DOI/URL
	Jardine, B. (2019, October 16) Why are there anti-China protests in Central Asia? <i>The Washington Post</i> . <a href="https://www.washingtonpost.com/politics/2019/10/16/why-are-there-anti-china-protests-central-asia">https://www.washingtonpost.com/politics/2019/10/16/why-are-there-anti-china-protests-central-asia</a>
<b>Organisation as author</b>	Organisation. (Year, Month Day). Title of webpage. Title of Website. URL
	OECD. (2020, April 1) Policy Responses to Coronavirus (COVID-19): Women at the core of the fight against COVID-19 [Online]. Available: <a href="https://www.oecd.org/coronavirus/policy-responses/women-at-the-core-of-the-fight-against-covid-19-crisis-553a8269/">https://www.oecd.org/coronavirus/policy-responses/women-at-the-core-of-the-fight-against-covid-19-crisis-553a8269/</a>
<b>Magazine article online</b>	Author Surname, Initial. (Year, Month Date). Article title. Magazine title, volume number(issue number). URL
	O'Connor, T. (2021, September 16). <i>China, Russia bring Iran, Pakistan into the fold to face the Afghanistan crisis jointly</i> . <i>Newsweek</i> .

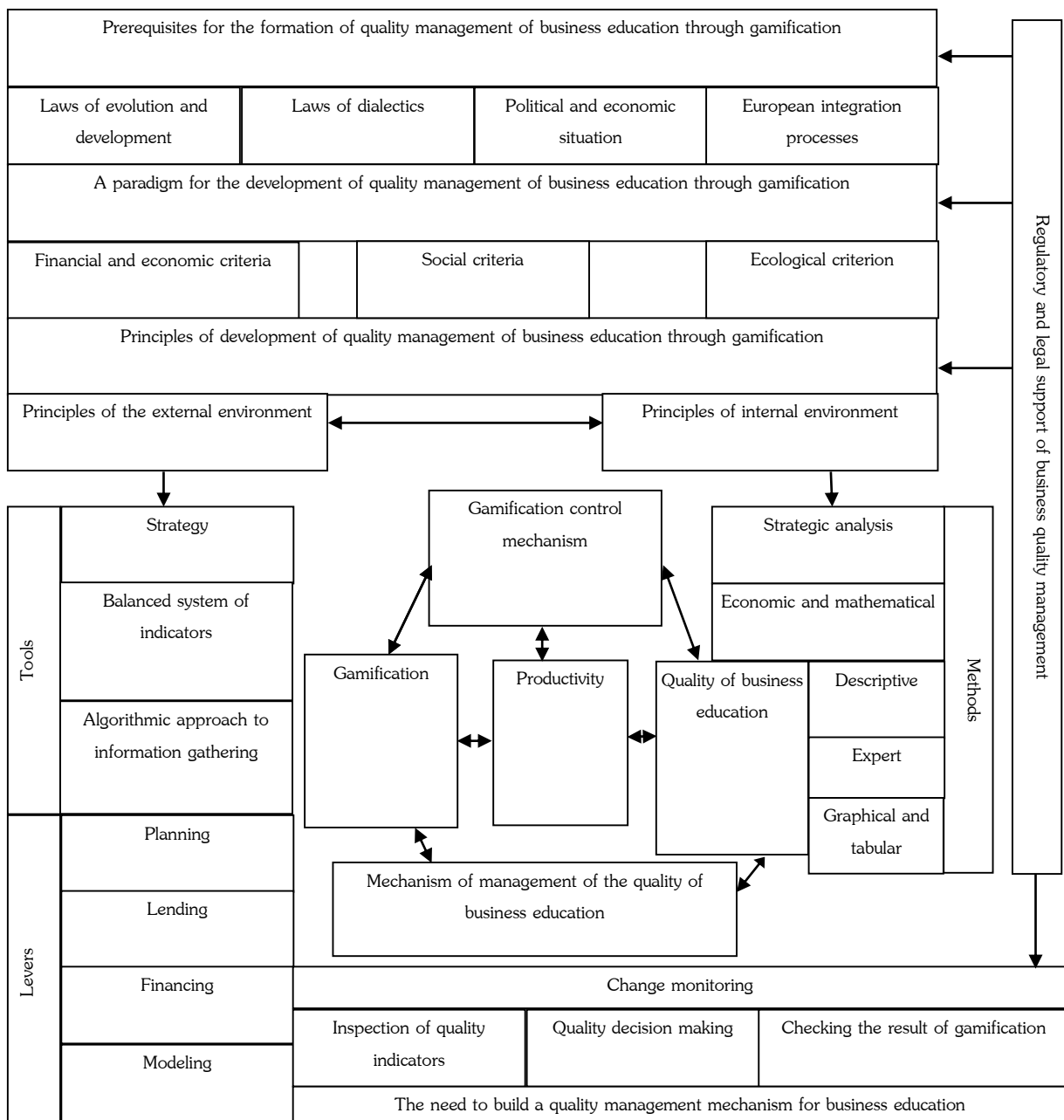
	<a href="https://www.newsweek.com/china-russia-bring-iran-pakistan-fold-face-afghanistan-1629992">https://www.newsweek.com/china-russia-bring-iran-pakistan-fold-face-afghanistan-1629992</a>
<b>Facebook post</b>	Author, A. (Year, Month Day). Text of post [Status Update]. Facebook. URL
	Gaiman, N. (2018, March 22). <i>100,000+ Rohingya refugees could be at serious risk during Bangladesh's monsoon season. My fellow UNHCR Goodwill Ambassador Cate Blanchett is [image attached]</i> [Status Update]. Facebook. <a href="http://bit.ly/2JQzPAD">http://bit.ly/2JQzPAD</a>
<b>Dissertation</b>	Author, A. (Year). Title [Type of Publication, Name of Institution]. Database/Archive. DOI/URL
<b>Thesis</b>	Asawai ,S.(1978) <i>The development of irrigation systems in Thailand from 1888 to1950.</i> [ Master's thesis Chulalongkorn University] Chulalongkorn University. Hollander, M. (2017). <i>Resistance to authority: Methodological innovations and new lessons from the Milgram experiment</i> (Publication No. 10289373) [Doctoral dissertation, University of Wisconsin-Madison].ProQuest Dissertations and Theses Global
<b>Thesis Database/Online</b>	Albor, C. (2011). <i>Are poor people healthier in rich or poor areas?: The psychosocial effects of socioeconomic incongruity in the neighbourhood</i> [PhD thesis, University of York]. <a href="http://etheses.whiterose.ac.uk/1595/">http://etheses.whiterose.ac.uk/1595/</a> Hutcheson, V. H. (2012). <i>Dealing with dual differences: Social coping strategies of gifted and lesbian, gay, bisexual, transgender, and queer adolescents</i> [Master's Thesis, The College of William & Mary]. William & Mary Digital Archive. <a href="https://digitalarchive.wm.edu/bitsream/handle/10288/16594/HutchesonVirginia2012.pdf">https://digitalarchive.wm.edu/bitsream/handle/10288/16594/HutchesonVirginia2012.pdf</a>
<b>Conference papers</b>	Author, A. (Year, Month Date Range). Title [Paper Presentation]. Conference Name, City, State, Country.
	Haji-Yousefi, A. M.(2010, June2-3) <i>Iran's Foreign Policy during Ahmadinejad: From Confrontation to Accommodation.</i> [Paper Presentation ] the Annual Conference of the Canadian Political Science Association June 2-3, 2010, Concordia University, Montreal, Canada.

### Example figure



Figure 1. Figure title

large chart (JasmineUPC 12) medium chart (JasmineUPC 14)





**Fig. 2.** Mechanism of quality management of business education through gamification(Polinkevych & Kuzmak, 2023, p. 35).

**Table 1.** Table name. *large table(JasmineUPC 12) ,medium table(JasmineUPC 16)*

....	.....	.....	.....
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11	.....	.....	.....
12	.....	.....	.....

### Writing formulas

The formulas used in this article should be either MathType or Microsoft Equation objects. They are JusmineUPC 14 in size. All formulas must be numbered in parentheses, right-aligned, and One line should be left before and after the formula

$$a = b + c \quad (1)$$

To describe the variables specified in the equation, use the JusmineUPC character size 14.

a means ....., b means ..... and c means .... ..

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