

Krzysztof SUROWIEC¹

RUSSIA AND GERMANY AGAINST THE BACKGROUND OF THE THREE SEA INITIATIVE STATES FROM 1993 TO 2021 IN A POWERMETRICS PERSPECTIVE

This article presents the powers of Russia and Germany against the backdrop of a group of 12 countries that launched a new organization in Europe in September 2015 called the Three Seas Initiative. Member states try to create a counterbalance, and at the same time compete with two great countries: Germany and the Russian Federation (Russia). The members of the Three Seas Initiative are small and medium-sized entities on the European scene. The aim of the article was to indicate the power of the examined entities of the international relations of Russia and Germany against the background of the countries forming the Three Seas Initiative. The article uses the methodology developed by Professor Sulek to study the power of the indicated countries.

Keywords: Powermetrics, The Three Seas Initiative, power of states, Russia, Germany.

1. INTRODUCTION

International rivalries in the modern world are gaining momentum. This is evidenced by the wars of the Russian Federation against Georgia (2008), Ukraine over the Donbas and Crimea (2014) and the latest newly launched war against Ukraine from February 2022, the US-China rivalry, the militarization of the world and the increase in military spending among major geopolitical actors, the emergence of hybrid threats, competition for resources or attempts to gain an economic advantage over other states. States continue to play a central role in international relations. Despite the terms about the “end of history” of the early 21st century created by Francis Fukuyama, among others, changes in the balance of power in the world are progressing all the time. We can describe it as a struggle for power, which is characterized by cooperation, struggle or rivalry. The Cold War and changes in the world after 1991 led to the formation of new conditions of cooperation and rivalry, and sometimes struggle. The game of interests is leading to the formation of a new balance of power in Europe as well. Traditionally, Germany and Russia have been playing a large geopolitical role. They are trying to oppose them, especially the smaller Central European states, which are striving to improve their international position. This is fostered by participation in various international organizations that strengthen their states, economies or military

¹ Krzysztof Surowiec, PhD, Department of Humanities and Social Sciences, Faculty of Management, Ignacy Łukasiewicz Rzeszów University of Technology, ul. Podkarpacka 1, 35-082 Rzeszów; e-mail: ks@prz.edu.pl. ORCID: 0000-0002-6298-2260.

potential. Such a new alliance, which brings together more than a dozen Central European countries including Poland, is The Three Seas Initiative². It rivals the power of both Germany and Russia.

The statistical base of the paper was based on data from the World Bank, the International Monetary Fund (IMF). The data on the number of active duty troops and military spending in U.S. dollars were obtained in part from “The Military Balance” yearbooks published by the London-based International Institute for Strategic Studies (IISS) and World Bank data.

The purpose of the paper is to present the powermetrics position of Germany and Russia against the background of the individual states that make up the Three Seas Initiative, as well as nominally the entire Initiative. The calculations were based on Professor Mirosław Sułek's methodology for calculating the powers of states, which used synthetic measures of power. Few similar formal models currently exist in the world that allow calculating the power of states based on objective criteria. The subject of the study was the general, military and geopolitical power of the indicated states and the Three Seas Initiative as a whole. The subject matter of the article falls within the scope of security/geopolitics and, in particular, powermetrics. The growing importance of Central Europe in the current times, including interest in new political and economic initiatives that affect the geopolitical situation in the region are the main reasons for writing this article. In order to achieve the goal, the general, military and geopolitical power for the Three Seas Initiative countries, and Germany and Russia from 1993–2021 was calculated on the basis of statistical data. The structure of the paper is based on the following characteristics: The Three Seas Initiative, the role of Germany and Russia in this part of Europe, the balance of power, power and the Sułek's model, the dynamics of changes in power indicators.

2. ARRANGEMENT OF FORCES

In the international arena, the balance of power plays the most important role in relations between states, which thus has a major bearing on the security of the actors in international relations, and also influences the security strategies that states create. The balance of forces is the most important feature of any international system, as stated by Raymond Aron (Aron, 1995). If relations between actors have certain forces, then we can talk about the balance of power, which can be local, regional or global. Jerzy Stańczyk stated that the balance of power “constitutes a power and interest-based, dynamic system of international relations, determined by geopolitical conditions, in which rivalries, differences and contradictions of interests become particularly important” (Stańczyk, 2018). Actors in the balance of power can achieve growth, remain stable or decline. Estimates of the power relations within a given alignment strengthen and guide states to pursue profitable foreign policies vis-à-vis other actors, and in particular to gain more power from others, since the power game is a zero-sum game.

² The Three Seas Initiative (3M for short, as well as 3S, 3SI or TSI, and BABS (Baltic, Adriatic, Black Sea Initiative); Lat. Trimarium).

3. GERMANY, RUSSIA AND THE 3SI STATES – ACTORS OF INTERNATIONAL RELATIONS AND THEIR RELATIONS

In Europe, since the end of World War II, Germany (West Germany) (also within the European Union) and the Russian Federation, with its vast territory, energy resources and conventional and nuclear potential, have been very important. In between these two powers there is a number of smaller and medium-sized countries on a European scale, which are also involved in the struggle for power. International organizations also serve this purpose; participation in them by Central European countries strengthens them and multiplies their resources. Such a role is also played by the 3SI, which brings together 12 entities. All of them also belong to the European Union and, with the exception of Austria, to the North Atlantic Treaty Organization (NATO). Germany, too, is a member of the EU and NATO, having enjoyed the virtues of these organizations for many decades, and additionally has observer status in the 3SI. Russia has strengthened its position in recent years on the basis of rising energy commodity prices, the funds thus raised allowed it to launch the current attack on Ukraine. Moscow's position has also been strengthened by its contacts with China and other BRICS members. Vladimir Putin's economic dealings with Berlin had a big impact on his rise to prominence, which has only now been halted as a result of Russia's war with Ukraine. In this geopolitical situation, only cooperation between small and medium-sized countries in Europe can make the Trilateral countries more important. However, they must, especially in the current situation, cooperate within NATO and the EU.

The location of the 3SI between Germany (Western Europe), Russia and Turkey is its strength and makes it a geopolitical region. Globally, the area is of interest to both the US and China, as well as Germany and Russia. This is influenced by the rapid economic development of the countries in the region, the need for energy resources, as well as political ambitions to play an increasingly important role in this part of Europe, at the expense mainly of Russian and German interests (Zhigao, 2020). The 3SI countries also constituted a wedge separating Germany from the Heartland (Russia) after World War I and vice versa, hindering the expansion of these countries (Świder, 2018).

The formation of the 3SI in a new way created a horizon for looking at the countries of Central and Eastern Europe³ expanded to include the countries of Southern Europe, between the three seas of the Baltic, Adriatic and Black Sea. The first attempts to undertake such an Initiative were held on September 29, 2015 in New York, while the formal First Trilateral Summit was held on August 25–26, 2016 in Dubrovnik (Ukielski, 2018). The establishment of the organization was intended to strengthen ties in the wider Central European region, which would create a sustainable foundation for economic development in energy, transportation, digital communications, and the economy. The initiative creates a forum for cooperation between 12 countries: Austria, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. The area encompassing the countries of the Trilateral Initiative accounts for almost a third of the total area of the European Union.

The main goal of the new initiative is to focus on a coherent and well-integrated infrastructure, digitalization, and energy development in Central Europe, which will make

³ In Polish science, the concept of Oskar Halecki has been adopted, according to which Central and Eastern Europe is the eastern part of Central Europe, located between Sweden, Germany, Austria and Italy on the one hand, and Turkey and Russia on the other (Halecki, 2002).

up for the development backwardness resulting from the historical past. The next Three Seas Initiative Summits were held: July 6–7, 2017 in Warsaw (the summit was co-hosted by the presidents of Poland Andrzej Duda and Croatia Kolinda Grabar-Kitarović, and the special guest was US President Donald Trump); September 17–18, 2018 in Bucharest (declarations were signed on the establishment of the Network of the 3SI Chambers of Commerce, a letter of intent was signed on the establishment of the 3SI Fund); June 5 and 6, 2019. in Ljubljana (a declaration was adopted confirming the formal registration of the Trilateral Initiative Investment Fund); October 19–20, 2020 in Tallinn (a declaration of increased commitment to the 3SI Investment Fund was signed); and July 8–9, 2021 in Sofia (U.S. support was secured, implementation of the Via Carpatia road route, Estonian plan to build a joint cyber security system) (The 3 SI – The Ministry of Foreign Affairs – <https://www.gov.pl/web/dyplomacja/trojmorze>; Prezydent.pl – www.prezydent.pl/aktualnosci/wizyty-zagraniczne). On January 12, 2021, during Moldovan President Mai Sandu's foreign visit to Kiev, a declaration was signed with Ukrainian President Volodymyr Zelenskiy, in which the two countries declared their interest in participating in the Three Seas Initiative (Ukraine, Moldova willing to join Three Seas Initiative, www.ukrinform.net). After not long and in the face of Russian aggression in Ukraine, the next Trilateral Summit in Riga (June 20–21, 2022) decided that Ukraine would be a participating partner in the Initiative (Siódmy szczyt Inicjatywy Trójmorza w Rydze – <https://pism.pl/publikacje/siodmy-szczyt-inicjatywy-trojmorza-w-rydze>).

There is extensive literature on the Three Seas Initiative, which may extend the reader's knowledge to a different extent than the one presented in this article: (Lach 2020; Dobija, 2019; Baziur, 2018; Zenderowski, 2021; Soroka, Stępniewski, 2019; Pawłowski, Jakóbowski, 2020).

The geopolitical position of the Three Seas Initiative countries has a significant impact on ensuring security in the region. It has historically been a safety buffer for the powers and states in this part of Europe. Threats came mainly from Germany and Russia, and before the 19th century also from the Ottoman Empire. The remedy for this were the integration processes from the interwar period, which are particularly visible today with the accession to the European Union or NATO. The threat from Russia caused Poland and Romania to take action aimed at increasing the level of defense of the eastern flank of the North Atlantic Alliance and intensifying military cooperation, which was the basis for the establishment of the so-called The Bucharest Nine, which includes most of the Three Seas countries except Austria, Croatia and Slovenia. Energy, which is a basic, modern element of security policy, plays a large role in cooperation between states (Wojtaszak, 2020).

The multiplicity of entities forming the Three Seas Initiative also causes differences in the approach to certain matters. We can count the issues of energy, logistics, regional policy and the attitude towards the most important actors in international relations – Russia, the USA, Germany and China – as nothing. Some discrepancies have become apparent with Russia's war with Ukraine in recent months. Among the countries of the Three Seas Initiative, cooperation between Hungary and Austria in the field of energy with Russia is particularly visible. Also, Budapest, despite belonging to the Three Seas Initiative, is trying to develop its own regional projects in the field of e.g. communication in the Danube valley competitive to Poland (Zenderowski, 2021). The events related to Russia's aggression also made Germany aware that important geopolitical matters in Europe are moving to the East, Berlin realizes that it must have an impact on the development of events in this area, and the Three Seas Initiative threatens its interests on the one hand, but also participation in it

whether controlling it can reduce the negative political effects on Germany. Germany's observer status in the Three Seas Initiative makes Berlin try to increase its position in the Initiative at all costs (Dahl, 2018; Niemcy chciałyby kontrolować ideę Trójmorza – <https://congress.lubelskie.pl/niemcy-chcialyby-kontrolowac-idee-trojmorza>).

4. THE POWER OF GERMANY, RUSSIA AND THE THREE SEAS COUNTRIES IN THE SULEK'S MODEL (DYNAMICS OF CHANGES IN POWER INDICATORS)

When comparing the power of states, it should be considered on a general level, using constant and measurable parameters in a given time unit, a specific space and the people who create them.

A synthetic assessment of the balance of power in quantitative terms shows two categories of power: general and military, and economic (general) power consists of farming results (gross domestic product), demographic factors (population) and spatial components (territorial area). Military power consists of military-economic factors (military expenditures, which are part of GDP), demographic-military factors (number of soldiers in active service) and spatial factors (territorial area). Geopolitical power is calculated as the arithmetic average of the economic (general) power and the doubled military power (the role of the military factor in shaping the current balance of power was appreciated). Relations between political units are relations between the people who make them up and take the form of cooperation, struggle and rivalry.

The obtained data on the above-mentioned factors are divided by the appropriate global values, and the obtained fractional values are entered into the formula. After performing the operation, we will get the power of states as a fraction of the world power. In international relations, the most important feature is the balance of power.

- $P_e = PKB^{0,652} \times L^{0,217} \times a^{0,109}$
- $P_w = W^{0,652} \times S^{0,217} \times a^{0,109}$
- $P_g = \frac{P_e + (2 \cdot P_w)}{3}$

Symbols: P_e – economic power (general), P_w – military power, P_g – geopolitical power, GDP – *gross domestic product*, L – population, a – territory, W – military expenditure, S – number of soldiers in active service

The indicated model is a priori-deductive in nature. The power exponents used by Professor Sułek are related to the golden ratio of the segment⁴. Power in these three dimensions is also power – a stream of energy and means the amount of work done per unit of time (Sułek, 2004; Kiczma, Sułek, 2020). The obtained fractions can be multiplied by

⁴ “Golden section (Latin *sectio aurea*), harmonic division, golden ratio, divine proportion (Latin *divina proportio*) – division of a section into two parts so that the ratio of the length of the longer of them to the shorter one is the same as that of the entire section to the longer part. In other words: the length of the longer part is to be the geometric mean of the length of the shorter part and the whole segment. For more see: https://pl.wikipedia.org/wiki/Z%C5%82oty_podzia%C5%82#cite_note-1 (14.04.22); <https://encyklopedia.pwn.pl/haslo/4001815> (Access: 14.04.2022).

any numbers, if we multiply them by 100, we will get the results in percent of world power (then world power = 100). In our case, it will be more convenient to multiply them by 1000 (then the power of the world = 1000), which means that we will express it in millimirs (abbreviation mM), i.e. thousandths of the world power. The statistical base of the article is based on data from the World Bank, the International Monetary Fund (IMF). The data on the number of soldiers in active service and military spending in US dollars were obtained in part from the yearbooks “The Military Balance” published by the London-based International Institute for Strategic Studies (IISS) and data from the World Bank.

This subchapter will present the dynamics of the parameters needed to calculate the power of countries, i.e. GDP, population (I assumed the area of countries to be constant). They will be converted into world shares, because this is the only way to show the actual increases and decreases in parameters and powers. Then, the results regarding the increases and decreases in the general, military and geopolitical power of Germany, Russia and the Three Seas countries will be presented. Table 1 presents the GDP of the Russian Federation, Germany and the Three Seas countries.

Table 1. World share of the Russian Federation, Germany and the Three Seas countries in terms of GDP

Country	1993	2000	2010	2021
Austria in % of the world	0.737¹	0.582	0.589	0.507
Bulgaria in % of the world	0.042	0.039	0.076	0.082
Croatia in % of the world	0.050¹	0.065	0.091	0.067
The Czech Republic in % of the world	0.409	0.373	0.260	0.292
Estonia in % of the world	0.007¹	0.017	0.029	0.038
Lithuania in % of the world	0.029¹	0.034	0.056	0.066
Latvia in % of the world	0.011¹	0.024	0.036	0.039
Poland in % of the world	0.372	0.509	0.722	0.690
Romania in % of the world	0.102	0.110	0.250	0.303
Slovakia in % of the world	0.064	0.086	0.136	0.123
Slovenia in % of the world	0.064¹	0.060	0.072	0.064
Hungary in % of the world	0.155	0.140	0.199	0.191
Germany in % of the world	8.021	5.746	5.108	4.456

Table 1 (cont.). World share of the Russian Federation, Germany and the Three Seas countries in terms of GDP

Country	1993	2000	2010	2021
Russia in % of the world	1.685	0.768	2.294	1.735
The 3 Seas countries together in % of the world	2.043	2.039	2.517	2.461

Source: (own study based on data from the World Bank).

¹ Source: (www.countryeconomy.com/gdp?year=1993 [Access: 14.03.2022]).

Gross domestic product (GDP) as a qualitative parameter indirectly expresses the level of productivity, i.e. the scale of economic development. In 1993, the countries of the modern Three Seas Initiative had a GDP of USD 527 billion, Germany at that time had a four-fold advantage in this respect, Russian GDP was lower by USD 92 billion. Among the individual countries in 1993, Austria had the largest GDP – 190 billion, the Czech Republic – 105 billion and Poland – 96 billion. On a global scale, the German economy at that time had a share of 8%, the Three Seas countries as a whole 2%, and Russia 1.68%. Economic transformations in this part of Europe after the Autumn of Nations led in the following decades to large economic growth and GDP of the countries forming the Three Seas Initiative. It is worth mentioning here that the Three Seas Initiative countries maintained their percentage position in the world in the analyzed period, from 2% in 1993, through 2.52% in 2010 and 2.46% in 2021. During this period, global GDP increased 3.68 times. The share of German GDP in the world fell in the analyzed period from 8% to 4.46%. Russia's GDP as a percentage of the world ranged from 1.69% in 1993, through 0.77% in 2000, 2.29% in 2010, to 1.74% in 2021. For all years surveyed, GDP of Central European countries exceeded the GDP of Russia, the largest number in 2000 was 2.7 times. In relation to Germany's GDP, a constant upward trend can be observed in the share of the Three Seas' GDP - from 25.45% in 1993 to 55.22% in 2021. Over the next 30 years, the situation related to the development of economies in Europe has changed dramatically. Global GDP increased from USD 26 trillion in 1993 to USD 95 trillion in 2021, and the share of individual countries belonging to the Three Seas Initiative, as well as Russia and Germany, changed at that time. In 2021, the GDP of Germany was USD 4 trillion 230 billion, Russia USD 1 trillion 647 billion, and the Three Seas countries USD 2 trillion 336 billion.

In the historical development of countries, the number of people has always had a great influence on their economic and military power. In recent decades, both in Europe and in Russia, one can talk about a demographic crisis. Only some countries are excluded from this, for example Germany, which has improved its demographic situation mainly thanks to migrants. In the analyzed period (Table 2), a significant decrease in the population of Russia by 2.5 million can be indicated. Even greater losses were suffered by the Three Seas region as a whole, by as much as 7 million. Bulgaria, Croatia, the Baltic states, Romania and Hungary were among the most depopulated countries. Also, the demographic perspective for Poland does not look good for the coming decades. In order to maintain the position of its economy, Germany had to strengthen its demographics through successive influxes of migrants, also from Africa in the Middle East. The population potential of the Three Seas

Initiative is significant and is not inferior to the main players in this part of Europe. In 1993, the population advantage over Germany was 36 million, and in 2021 it was less than 27 million. It is, therefore, a large economic market where significant volumes can be achieved, inter alia, in terms of trade. Compared to Russia, the Three Seas Initiative has a smaller population between 1993 and 2021 by about 30 million, but one must remember about the much larger territory of Russia and the uneven distribution of its population. In terms of the percentage of the world, both Russia, Germany and the Three Seas Initiative are decreasing their share, which is related to the higher birth rate in other parts of the world in recent years, in Asia, Africa and South America.

Table 2. Population of the Russian Federation, Germany and the Three Seas countries in millions

Country	1993	2000	2010	2021 ¹
Austria	7.906	8.012	8.363	9.043
in % of the world	0.143	0.131	0.121	0.115
Bulgaria	8.472	8.170	7.396	6.897
in % of the world	0.153	0.134	0.107	0.088
Croatia	4.600	4.468	4.295	4.082
in % of the world	0.083	0.073	0.062	0.052
The Czech Republic	10.330	10.255	10.474	10.725
in % of the world	0.187	0.168	0.151	0.13
Estonia	1.494	1.397	1.331	1.325
in % of the world	0.027	0.023	0.019	0.017
Lithuania	3.683	3.500	3.097	2.690
in % of the world	0.067	0.057	0.045	0.034
Latvia	2.563	2.368	2.098	1.867
in % of the world	0.046	0.039	0.030	0.024
Poland	38.461	38.259	38.043	37.797
in % of the world	0.694	0.626	0.550	0.480
Romania	22.763	22.443	20.247	19.128
in % of the world	0.411	0.367	0.293	0.243
Slovakia	5.325	5.389	5.391	5.461
in % of the world	0.096	0.088	0.078	0.069
Slovenia	1.992	1.989	2.049	2.079
in % of the world	0.036	0.032	0.030	0.026
Hungary	10.358	10.211	10.000	9.634
in % of the world	0.187	0.167	0.144	0.122
Germany	81.156	82.212	81.777	83.900
in % of the world	1.465	1.345	1.181	1.066
Russia	148.459	146.597	142.849	145.912
in % of the world	2.681	2.398	2.064	1.853
The 3 Seas countries together	117.947	116.461	112.784	110.728
in % of the world	2.130	1.905	1.629	1.406
The world	5.538.000	6.114.000	6.922.000	7.874.000

Source: (own study based on data from the World Bank).

¹ Source: 2021 population (www.populationreview.com/countries).

Table 3 presents the spatial potential expressed by the size of the territory.

Table 3. Area of countries in thous. km²

Country	Area
Austria	83.871
in % of the world	0.062
Bulgaria	110.879
in % of the world	0.082
Croatia	56.594
in % of the world	0.042
The Czech Republic	7.865
in % of the world	0.059
Estonia	45.227
in % of the world	0.034
Lithuania	65.300
in % of the world	0.048
Latvia	64.559
in % of the world	0.048
Poland	312.679
in % of the world	0.232
Romania	238.391
in % of the world	0.177
Slovakia	49.037
in % of the world	0.036
Slovenia	20.273
in % of the world	0.015
Hungary	93.028
in % of the world	0.069
Germany	357.114
in % of the world	0.265
Russia	17.098.242
in % of the world	12.690
The 3 Seas countries together	1.218.703
in % of the world	0,904
The world	134.740.000

Source: (own study based on data from the World Bank and <https://welearn.pl/najwieksze-panstwa-swiata-lista/>).

The Three Seas Initiative countries are small and medium-sized European countries. None of them is individually larger than Germany, while as a whole the Three Seas countries occupy 1 million 218 thousand km², which is 3.4 times more than Germany. Russia is currently the largest country in the world. Compared to previous centuries, the territory of states is no longer such a big factor of power. Globally, the Three Seas Initiative covers less than 1% of the land area, Germany 0.3% and Russia 12.7%.

Table 4 contains data on military spending in billions of US dollars at current prices.

Table 4. Military expenditures of the Russian Federation, Germany and the Three Seas countries in billions of US dollars

Country	1993	2000	2010	2021
Austria	2.115	1.926	3.218	3.680
in % of the world	0.303	0.259	0.195	0.192
Bulgaria	282	351	832	1.280
in % of the world	0.040	0.047	0.050	0.067
Croatia	1.169	659	1.016	1.070
in % of the world	0.167	0.089	0.062	0.056
The Czech Republic	815	1.157	2.498	3.970
in % of the world	0.117	0.156	0.152	0.207
Estonia	13	78	332	786
in % of the world	0.002	0.011	0.020	0.041
Lithuania	20	140	326	1.250
in % of the world	0.003	0.019	0.020	0.065
Latvia	17	70	260	835
in % of the world	0.002	0.009	0.016	0.043
Poland	2.123	3.146	8.790	13.400
in % of the world	0.304	0.424	0.534	0.698
Romania	722	936	2.086	5.610
in % of the world	0.103	0.126	0.127	0.292
Slovakia	267	342	1.138	2.010
in % of the world	0.038	0.046	0.069	0.105
Slovenia	230	222	772	670
in % of the world	0.033	0.030	0.047	0.035
Hungary	736	716	1.351	2.630
in % of the world	0.105	0.096	0.082	0.137
Germany	35.031	26.498	43.026	56.100
in % of the world	5.014	3.569	2.611	2.922
Russia	7.767	9.228	58.720	62.200
in % of the world	1.112	1.243	3.563	3.240
The 3 Seas countries together	8.510	9.743	22.609	37.191
in % of the world	1.218	1.312	1.372	1.937
The world	698.679	742.433	1.648.000	1.920.000

Source: (own study based on data from the World Bank and Military Balance).

The end of the Cold War and the end of the bipolar world did not stop the world arms race. Defense spending increased 2.7 times between 1993 and 2021, from \$698 billion to \$1,920 billion. In most of the countries surveyed, even the COVID-19 pandemic did not stop the increase in expenditure. Over the course of almost four decades, all countries in table 4 significantly increased their military spending, but one must also remember about

the increase in inflation during this period. Among the countries of the Three Seas Initiative, in individual decades, Poland was the leader in terms of the amount of military spending, although in 1993 it spent less than Germany 16.5 times, in 2000 – 8.4 times, in 2010 – 4.9 times, and in 2021 r. 4.2 times. This example shows a downward trend in this area and a decrease in Germany's advantage in defense spending. It is worth noting that Poland doubled and Romania and Russia tripled their world share measured in percentage terms. In the analyzed period, Russia systematically increased its spending, starting from 1993. However, the jump in this respect took place after Putin and Medvedev took power in Russia. Between 1993 and 2021, Russia increased its defense spending eight times. 2010 also saw the peak of Russia's percentage share in the world - 3.6%. However, the pandemic and the deepening crisis in the Russian economy interrupted this increase, in 2021 it decreased to 3.2% of the world share in defense spending. Despite the absolute increases, Germany's expenditure in this area is falling in terms of global shares from 5% in 1993 to 2.9% in 2021. The Three Seas Initiative countries also made up for the differences with the main powers of the region in this period. In 1993, they jointly spent nominally \$8.5 billion on the army, and in 2021, \$37 billion. The position of the Three Seas Initiative in the percentage share of the world is also gradually growing from 1.2% to almost 2% in 2021.

Table 5 contains data on soldiers in active service of the surveyed countries.

Table 5. Number of soldiers in active service of the Russian Federation, Germany and the Three Seas Initiative countries in thousands

Country	1993	2000	2010	2021
Austria	45	41	27	23.300
in % of the world	0.190	0.184	0.130	0.117
Bulgaria	52	80	35	37
in % of the world	0.219	0.360	0.169	0.186
Croatia	80	61	19	16.700
in % of the world	0.337	0.274	0.092	0.084
The Czech Republic	107	58	18	26.600
in % of the world	0.451	0.261	0.087	0.134
Estonia	5	5	5	7.200
in % of the world	0.021	0.022	0.024	0.036
Lithuania	10	13	9	23
in % of the world	0.042	0.058	0.043	0.116
Latvia	5	5	6	8.750
in % of the world	0.021	0.022	0.029	0.044
Poland	260	319	100	114.050
in % of the world	1.095	1.435	0.482	0.575
Romania	200	207	73	71.500
in % of the world	0.842	0.931	0.352	0.360
Slovakia	33	39	17	18
in % of the world	0.139	0.175	0.082	0.091
Slovenia	12	9	7	7
in % of the world	0.051	0.040	0.034	0.035

Table 5 (cont.). Number of soldiers in active service of the Russian Federation, Germany and the Three Seas Initiative countries in thousands

Country	1993	2000	2010	2021
Hungary	65	44	29	34.200
in % of the world	0.273	0.198	0.140	0.172
Germany	398	221	251	183.400
in % of the world	1.676	0.994	1.211	0.924
Russia	1500	1520	1027	900
in % of the world	6.318	6.835	4.953	4.536
The 3 Seas countries together	874	881	345	387.3
in % of the world	3.681	3.962	1.664	1.952
The world	23741	22237	20734	19843

Source: (own study based on data from Military Balance).

Among all the countries included in the list, there is a visible downward trend in terms of the number of soldiers in active service. After the Cold War period, countries maintained significant armies – Russia 1.5 million, Germany 398,000, the Three Seas countries 874,000. On a global scale, in 1993, the armies of the countries listed in the table accounted for 11.7% of all the armed forces of the globe. In 2021, it was already 7.5% of all soldiers worldwide. Germany reduced the number of its army in the period under review by almost 215,000, Russia by 600,000, and the Three Seas Initiative by 487,000. In 2021, the Three Seas countries overtook the German army in terms of the number of soldiers by almost 204,000, while Russia had a more than two-fold advantage over the Three Seas in terms of the number of soldiers in active service in 2021 – 900,000.

To determine the international balance of power, it is of great importance to estimate power indicators in three types: general, military and geopolitical (Tables 6–8).

Table 6 presents the economic (general) power of the surveyed countries in the years 1993–2021.

Table 6. Economic power (general) of the Russian Federation, Germany and the Three Seas Initiative countries in mm, i.e. the world = 1000

Country	1993	2000	2010	2021
Austria	4.394	3.696	3.662	3.282
Bulgaria	0.709	0.659	0.969	0.973
Croatia	0.647	0.744	0.897	0.706
The Czech Republic	3.152	2.900	2.240	2.360
Estonia	0.137	0.235	0.325	0.373
Lithuania	0.437	0.472	0.618	0.650
Latvia	0.210	0.341	0.426	0.427
Poland	4.576	5.490	6.700	6.320
Romania	1.707	1.750	2.843	3.092
Slovakia	0.773	0.921	1.209	1.102
Slovenia	0.569	0.532	0.589	0.531

Table 6 (cont.). Economic power (general) of the Russian Federation, Germany and the Three Seas Initiative countries in mm, i.e. the world = 1000

Country	1993	2000	2010	2021
Hungary	1.707	1.554	1.896	1.779
Germany	40.431	31.926	28.748	25.717
Russia	25.407	14.858	29.351	23.906
The 3 Seas countries together	20.547	20.0310	22.216	21.203
The world	1000	1000	1000	1000

Source: (own study based).

The presentation of the data in table 6, calculated on the basis of Professor Sułek's model, shows that the more developed countries in the years 1993-2021 decreased their economic power – Austria, the Czech Republic, Slovenia, Russia, and in particular Germany. On the other hand, the countries starting after the Cold War with economies more burdened by the years of subordination to the USSR and in many cases energy-intensive over the nearly thirty years under study gained - Bulgaria, Croatia, Estonia, Lithuania, Latvia, Poland, Romania, Slovakia, Hungary. The growth of the power of states was uneven, sometimes sinusoidal. It is worth noting that higher values occur in 2010 compared to 2021. This is related to the economic effects of the pandemic, which also affected all the countries surveyed. Only some countries improved their power values between this period, but by insignificant values. The largest countries, Russia, Germany and Poland, lowered their total power values. In the analyzed period, Germany recorded the largest decline in power, by as much as 36%, recording a decrease in each range. Russia reached the peak of its economic power in 2010, surpassing even Germany, but later a decline related to the wars, pandemic and sanctions was visible. Although the power of Russia and Germany is declining and subject to various fluctuations, the Three Seas countries nominally between 1993 and 2021 improved their power performance, which was growing. While in 1993 these differences were more visible, already in 2021 the overall power of Germany, Russia and the Three Seas Initiative does not differ much from each other, and the distance will probably decrease especially in relation to Russia in the following years. The balance of power in Central and Eastern Europe in 1993 in terms of overall power was characterized by a strong position of Germany and a similar position of Russia and the Three Seas countries. Over the last 30 years, the system has changed: the position of Germany and Russia has decreased, and the Three Seas countries have strengthened their position.

Table 7 presents calculations of the military power of the surveyed countries.

Table 7. Military power of the Russian Federation, Germany and the Three Seas Initiative countries in mm, i.e. the world = 1000

Country	1993	2000	2010	2021
Austria	2.615	2.350	1.811	1.750
Bulgaria	0.748	0.923	0.818	1.002
Croatia	1.928	1.220	0.758	0.697
The Czech Republic	1.683	1.806	1.397	1.879
Estonia	0.054	0.172	0.267	0.463

Table 7 (cont.). Military power of the Russian Federation, Germany and the Three Seas Initiative countries in mm, i.e. the world = 1000

Country	1993	2000	2010	2021
Lithuania	0.088	0.323	0.312	0.840
Latvia	0.068	0.167	0.246	0.523
Poland	4.427	5.831	5.348	6.619
Romania	2.010	2.338	1.898	3.292
Slovakia	0.598	0.711	0.784	1.052
Slovenia	0.396	0.354	0.456	0.380
Hungary	1.439	1.266	1.056	1.545
Germany	30.644	21.919	18.659	18.938
Russia	23.334	25.527	47.300	43.612
The 3 Seas countries together	16.516	17.618	15.023	19.475
The world	1000	1000	1000	1000

Source: (own study).

Calculations of military power according to the Sułek model indicate that the largest military power in all the years indicated, except for 1993, was Russia, which reached its peak in 2010 – 4.7% of the world share. Germany's position in this respect shows a downward trend, as does Russia's between 2010 and 2021. On the other hand, the power of the Three Seas countries is increasing, except for 2010, when there was a slight decrease compared to previous years. In 2021, the Three Seas Initiative overtook Germany in terms of military power for the first time, while Russia this year had a two-fold advantage in this respect over the Three Seas Initiative and over Germany. Among the countries of the Three Seas Initiative, Poland has the greatest military power, it also recorded an increase of as much as 49% in the analyzed period. In terms of the balance of power based on military power, we are dealing with a two-fold advantage of Russia, and therefore one can say that a unipolar system has developed in the region of Central and Eastern Europe.

Table 8 presents the third type of power according to Professor Sułek's model, namely the geopolitical power.

Table 8. Geopolitical power of the Russian Federation, Germany and the Three Seas countries in mm, i.e. the world = 1000

Country	1993	2000	2010	2021
Austria	3.208	2.799	2.428	2.260
Bulgaria	0.735	0.835	0.868	0.992
Croatia	1.501	1.061	0.804	0.700
The Czech Republic	2.172	2.170	1.678	2.039
Estonia	0.082	0.193	0.286	0.433
Lithuania	0.204	0.373	0.414	0.776
Latvia	0.115	0.225	0.306	0.491
Poland	4.477	5.717	5.798	6.520
Romania	1.909	2.142	2.213	3.225

Table 8 (cont.). Geopolitical power of the Russian Federation, Germany and the Three Seas countries in mm, i.e. the world = 1000

Country	1993	2000	2010	2021
Slovakia	0.656	0.781	0.926	1.069
Slovenia	0.454	0.413	0.501	0.430
Hungary	1.529	1.362	1.336	1.623
Germany	33.906	25.255	22.022	21.198
Russia	24.025	21.971	41.317	37.043
The 3 Seas countries together	17.860	18.422	17.421	20.051
The world	1000	1000	1000	1000

Source: (own study).

This type of power is built on general and military components. Therefore, the military one has been included as a double product in the presented model. Most countries improved their position in the world share, although only Russia and Poland significantly. In the rest of the countries, the increase was insignificant. The Three Seas Initiative also improved its global share in this respect by 12% between 1993 and 2021. In the same years, a significant decrease in the geopolitical importance of Germany is visible, from 33.9 mm to 21.2 mm, i.e. by as much as 37%. The balance of power in terms of geopolitical power is characterized by the predominance of Russia in this part of Europe, but with the equal power of Germany and the Three Seas countries. Individual countries that are part of the Three Seas Initiative do not play a major role in terms of geopolitical power in relation to Germany and Russia.

5. CONCLUSIONS

The aim of the paper was to present the powermetric position of Germany and Russia against the background of individual countries forming the Three Seas Initiative, as well as nominally the entire Initiative. The calculations were based on the model of Professor Mirosław Sułek, who used synthetic power measures. The indicated model takes into account the values of GDP, population, territory, military expenditure and the number of soldiers in active service.

In terms of GDP, the Three Seas countries strengthened their position both in terms of quantity and percentage of the world. The end of the Cold War and the regaining of full independence by the countries of Central and Eastern Europe resulted in reforms that led to the strengthening of the position of the countries of this part of Europe. The Three Seas Initiative as a whole maintained a global share of 2% in terms of GDP. There is a noticeable decrease in the percentage of Germany in world shares by almost half. After falling at the turn of the century to 0.77% in terms of its position in the global economy, Russia reached a peak of over 2% in 2010, and has recorded a decline in recent years. In 2021, the GDP of Germany was USD 4 trillion 230 billion, Russia USD 1 trillion 647 billion, and the Three Seas countries USD 2 trillion 336 billion.

The demographics of most of the surveyed countries in the period 1993-2021 indicate absolute and percentage decreases in their global share. Population declines are particularly noticeable in Russia and the Three Seas Initiative as a whole, although many countries

forming this initiative are depopulating to varying degrees. Also Germany, despite accepting immigrants, is decreasing its global share expressed as a percentage.

The Three Seas Initiative countries are small and medium-sized European countries, individually each of them is smaller than Germany, but as a whole they create great geopolitically and economically opportunities in this part of Europe.

In the years 1993–2021, the economic power of the surveyed entities underwent changes, which also had an impact on the existing balance of power in this region. The overall power of Germany at that time fell from 40 mM to 26 mM, similarly Russia decreased its global share despite the increase in its position, for example, in 2010 from 25 mM to 24 mM. Against this background, the Three Seas Initiative maintained similar global power values of 20–22 mM throughout the entire period. Approaching in 2021 both to Russia and Germany in this respect. The resulting balance of power is characterized by instability and striving to increase its own position among Germany, Russia and the Three Seas Initiative, which has a chance to play an increasingly important role in Europe, but not only in economic terms.

In terms of military power, there is a significant decrease in Germany's military power, almost halving between 1993 and 2021 from 31mM to 19mM. Russia, on the other hand, strengthened its military position during the rule of Vladimir Putin, especially since 2010, almost doubling its percentage share globally. The Three Seas Initiative maintains its position in the world, which increased from 17 mM to 19 mM, i.e. in 2021 it oscillated around 2% of the world's military power. In terms of military power, the balance of power can be described as unipolar with a large predominance of Russia.

The balance of power in terms of geopolitical power is characterized by the predominance of Russia in this part of Europe, but with the equal power of Germany and the Three Seas countries. This should be considered a great success of the Three Seas Initiative countries, whose economic transformations and military reforms allowed them to raise their position, also in terms of geopolitical power.

REFERENCES

- Aron, R. (1995). *Pokój i wojna między narodami (teoria)*. Warszawa.
- Baziur, G. (2018). *Trójmorze jako koncepcja bezpieczeństwa i rozwoju ekonomicznego Europy Wschodniej*. „Przegląd Geopolityczny”, 23.
- Dahl, M. (2018). *Inicjatywa Trójmorza z perspektywy niemieckiej*. „Studia Europejskie”, 2.
- Dobija, M. (2019). *Geopolityczne czynniki innowacyjnego rozwoju Polski i krajów Trójmorza*. „Nierówności Społeczne a Wzrost Gospodarczy”, 59(3/2019).
- Halecki, O. (2002). *Historia Europy – jej granice i podziały*. Instytut Europy Środkowo-Wschodniej. Lublin.
- Kiczma, Ł., Sułek, M. (2020). *Potęga państw 2020. Rankingi potęgometryczne*. Warszawa.
- Lach, Z. (2020). *Dylematy rozwoju i bezpieczeństwa państw Europy Środkowo-Wschodniej*. „Przegląd Geopolityczny”, 31.
- Niemcy chcieliby kontrolować ideę Trójmorza* [Access: 20.07.2022]. Access on the internet: <https://congress.lubelskie.pl/niemcy-chcialyby-kontrolowac-idee-trojmorza>.
- Pawłowski, K., Jakóbowski, J. (2020). *Trójmorze jako odpowiedź Europy Środkowej na globalne i unijne wyzwania / The Three Seas Initiative as a response of Central Europe to global and European Union's challenges*. „Sprawy Międzynarodowe”, t. 73, nr 2.

- Prezydent.pl [Access: 1.05.2022]. Access on the internet: www.prezydent.pl/aktualnosci/wizyty-zagraniczne.
- Siódmy szczyt Inicjatywy Trójmorza w Rydze [Access: 20.07.2022]. Access on the internet: <https://pism.pl/publikacje/siodmy-szczyt-inicjatywy-trojmorza-w-rydze>.
- Soroka, G., Stępniewski, T. (2019). *The Three Seas Initiative: Geopolitical Determinants and Polish Interests*. „Rocznik Instytutu Europy Środkowo-Wschodniej”, z. 3.
- Stańczyk J. (2018). *Globalne stosunki sił, 1992–2016*. „Rocznik Bezpieczeństwa Międzynarodowego”, Wrocław, Vol. 12/2.
- Sułek, M. (2004). *Badania i pomiar potęgi państw po Zimnej Wojnie – metody i wyniki*. „Zeszyty Naukowe AON”, nr 1(54).
- Świder, K. (2018). *Europa Środkowa jako obszar projektowania geopolitycznego*. „Studia Europejskie”, nr 2.
- Trójmorze [Access: 1.05.2022]. Access on the internet: <https://www.gov.pl/web/dyplomacja/trojmorze>.
- Ukielski, P. (2018). *Inicjatywa Trójmorza w polskiej polityce zagranicznej*. „Studia Europejskie”, nr 2, Warszawa.
- Ukraine, Moldova willing to join Three Seas Initiative [Access: 1.05.2022]. Access on the internet: www.ukrinform.net.
- Wojtaszak, A. (2020). *Inicjatywa Trójmorza a perspektywy rozwoju państw regionu Europy Środkowo-Wschodniej w drugiej dekadzie XXI wieku*. „Sprawy Międzynarodowe”, t. 73, nr 2, Warszawa.
- Zenderowski, R. (2021). *Geopolityka Trójmorza. Przestrzeń – Historia – Dawne idee i współczesne koncepcje*. Warszawa.
- Zhigao, H. (2020). *America's Return to Central and Eastern Europe and its Implications*, „China International Studies”, No. 82, May/June.
- Złoty podział [Access: 14.04.2022]. Access on the internet: <https://encyklopedia.pwn.pl/haslo/4001815>.

DOI: 10.7862/rz.2022.hss.29

The text was submitted to the editorial office: November 2022.

The text was accepted for publication: December 2022.

