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BİRLİK Mİ AYRILIK MI? TÜRK DEVLETLER TEŞKİLATININ MAKROEKONOMİK GÜCÜ

UNITY OR SEPARATION? MACROECONOMIC POWER OF THE ORGANIZATION OF TURKIC STATES

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ÖZET
Sovyetler Birliğinin dağılmasıyla bağımsızlığını ilan eden Türk devletleri, bir Osmanlı bakiyesi olan Türkiye Cumhuriyeti devleti ile ilişki kurmaya başlamışlardı. Bu ilişki yıllar geçtikçe her alanda artarak gelişmiş ve Türkler, büyük bir coğrafyada artan bir güç ile tarih sahnesinde yerini yeniden almaya devam etmişlerdir. Ortak payda da buluşan birçok devlet farklı farklı teşkilatlanmaya gitmişler iken Türklerin de dünya siyasetinde daha güçlü olmaları her zamankinden daha çok gereklilik halini almıştır. Bu kapsamda, Türk Dili Konuşan Ülkeler arasında kapsamlı iş birliğini teşvik etmek amacıyla bir araya gelen Türk ülkeleri, Türk Dili Konuşan Ülkeler İş Birliği Konseyi'ni kurmuşlar ve günümüzde ise birlik, Türk Devletler Teşkilatı'na dönüşmüştür. Türk devletlerinin büyük bir birlik kurmasının dünya siyasetindeki ekonomik gücünün analiz edilmesi ve bu doğrultuda hala ayrılık mı yoksa birlik olmak mı sorusuna bilimsel bir cevap üretilmesi bir ihtiyaç haline gelmiştir. Bu çalışma, çok kriterli karar verme yaklaşımları ile Türk Birliği'nin makroekonomik gücünü analiz etmeyi amaçlamaktadır. Bu kapsamda, temel model ile G20 ülkeleri (AB hariç) içinde Türkiye'nin makroekonomik gücü belirlenmiş, birinci senaryo da Türk Devletler Teşkilatı'nın asil üyelerinden oluşan birliğin, ikinci senaryoda ise asil ve gözlemci üye ülkelerden (KKTC hariç) oluşan birliğin makroekonomik performans analizi yapılmıştır. Gayri safi yurtiçi hasıla, toplam rezerv, işgücü ve ihracatın ithalatı karşılama oranı ülkelerin makroekonomik gücünün değerlendirilmesinde kriter olarak kullanılmıştır. Öncelikle, kriterler CRITIC (Kriter Önemi Yoluyla Kriterler Arası Korelasyon) yöntemi ile ağırlıklandırılmış daha sonra ülkelerin performansları EDAS (Ortalama Çözüm Uzaklığına Göre Değerlendirme) yöntemi ile sıralanmıştır. Temel modelde, Türkiye 17. sırada yer alırken birinci senaryoda Türk Devletler Teşkilatı 12. sırada ve ikinci senaryo da ise 10. sırada yer almaktadır. Türk birliği, başta Birleşik Krallık, Kanada, Fransa, İtalya ve Güney Kore gibi güçlü ekonomiye sahip ülkelere göre daha büyük bir ekonomik güç haline gelmektedir. Bu çalışma, Türk Devletler Teşkilatının başta ekonomi olmak üzere birçok alanda güçlü ve müreffeh bir toplum inşa etme ve sürdürülebilir bir ekonomik güç olma yolunda Türk milletlerine bir fırsat sunduğunu ortaya koymaktadır.

Anahtar Kelimeler: Türk Devletler Teşkilatı, Makroekonomik Göstergeler, Çok Kriterli Karar Verme, CRITIC, EDAS.

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ABSTRACT

The Turkish states that gained independence following the Soviet Union's collapse began fostering relationships with Turkey, the remnants of the Ottoman Empire. Over time, these connections have strengthened across various domains, allowing Turks to assert themselves historically over a vast region. As many nations with shared interests have restructured, it has become increasingly crucial for Turks to gain influence in global politics. To promote extensive cooperation among Turkish-speaking countries, these nations established the Cooperation Council of Turkic-speaking States, which has now evolved into the Organization of Turkic States. It is essential to evaluate the current economic power of the Turkish states in the context of global politics and to address whether they are still separated or united. This study seeks to evaluate the macroeconomic strength of the Turkish Union using multi-criteria decision-making methods. Initially, the macroeconomic power of Turkey within the G20 (excluding the EU) was assessed using a baseline model. The analysis included the macroeconomic performance of the full members of the Organization of Turkic States in the first scenario, and both full and observer member countries (excluding Turkish Republic of Northern Cyprus) in the second scenario. Key indicators such as gross domestic product, total reserves, labour force, and the export-to-import ratio were utilized to evaluate the macroeconomic power of these countries. The CRITIC (Criteria Importance Through Intercriteria Correlation) method was used to weight the criteria, followed by the EDAS (Evaluation based on Distance from Average Solution) method to rank the countries' performances. Turkey was positioned 17th in the baseline model, while the Organization of Turkic States placed 12th in the first scenario and 10th in the second scenario. The Turkish Union is emerging as a more significant economic force compared to strong economies like the United Kingdom, Canada, France, Italy, and South Korea. This study shows that the Organization of Turkic States presents an opportunity for Turkic nations to develop a robust and thriving society across various sectors, particularly in the economy, and to emerge as a sustainable economic force.

Keywords: The Organization of Turkic States, Macroeconomic Indicators, Multi Criteria Decision Making, CRITIC, EDAS.

1. INTRODUCTION

The Turkic Speaking Countries Summits process was established as a platform for nations with a shared language, comprising Turkey and Azerbaijan in the South Caucasus, as well as Kazakhstan, Uzbekistan, Turkmenistan, and Kyrgyzstan in Central Asia, after the Soviet Union's collapse. As part of this initiative, which began with Turkey's leadership in 1992, a series of "Turkic Speaking Countries Heads of State Summits" have been held over the years (Republic of Turkey Ministry of Foreign Affairs, 2024). At its 8th summit, this group changed its name to the Organization of Turkic States. The member countries of the Organization cooperate in over 30 areas, with a focus on sectors such as economy, politics, tourism, education, and health (The Organization of Turkic States, 2024).

Macroeconomic indicators are essential metrics that allow for a comprehensive assessment of countries, encompassing factors like economic growth, social welfare quality, employment rates, and cost of living. While each individual indicator provides valuable insights into a country’s macroeconomic performance, comparing multiple indicators together often leads to more meaningful conclusions. For instance, a country might have a high GDP but perform poorly in exports. When different countries excel in different indicators, it becomes difficult

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to determine which one offers the best overall macroeconomic performance. In such cases, optimization methods that consider multiple criteria are crucial for making more informed evaluations. Multi-criteria decision-making approaches are frequently employed to evaluate and compare the macroeconomic performance of different countries. Numerous studies have analyzed the fluctuations in the economic power of individual countries or groups of countries over various periods. For example, Al and Demirel (2022) examined Turkey's macroeconomic performance from 2002 to 2019, whereas Doğan (2022) focused on the 2010-2020 period. Pınar et al. (2023) assessed Turkey's economic situation during and after the COVID-19 pandemic, and Hokka and Bektaş (2024) investigated the macroeconomic performance of D8 countries for the years 2021-2022. Other researches have compared Turkey's economic performance with that of other nations, including Altay Topçu and Oralhan (2017)'s comparison with OECD countries and Yapa et al. (2020)'s comparison with EU countries. Some studies have analyzed the performance of entire country groups, such as Belke (2020)'s analysis of the G7 nations, Arsu (2022)'s comparison of BRICS and MINT countries, Coşkun (2022)'s comparison of BRICS-T countries, and Ersoy (2023)'s evaluation of OECD countries. In addition, Uludağ and Ümit (2020) explored the economies of countries in the Turkish World, with a focus on value-added production and macroeconomic indicators.

This study aims to evaluate Turkey's macroeconomic strength and explore the potential of a Turkish Union within the G20, employing multi-criteria decision-making techniques. Using 2022 data from the World Bank, the research analyzes a total of 19 G20 countries (excluding the EU) across four key criteria: Gross domestic product (GDP), total reserves, labor force, and the export-to-import ratio. The Criteria Importance Through Intercriteria Correlation (CRITIC) method was used to assign weights to these criteria, and the Evaluation based on Distance from Average Solution (EDAS) technique was applied to rank the alternatives. In the initial stage, Turkey's position was compared with other G20 nations. The first scenario examined the economic standing of the full member countries of the Organization of Turkic States within the G20 countries. The second scenario expanded this analysis by incorporating both full and observer member countries of the Turkic States, thereby evaluating the macroeconomic potential of a possible Turkish Union.

The following sections of the study provide an overview of the alternative countries and evaluation criteria used, along with a detailed description of the methods applied in the analysis. After that, the findings are discussed, followed by the conclusion of the study.

2. METHOD

2.1. Alternative countries and evaluation criteria

This study seeks to accurately assess the macroeconomic performance of Turkey and the Organization of Turkic States (OTS) in relation to G20 countries. In this context, all G20 countries (without the European Union) are regarded as alternative countries: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, South Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey (OTS), the UK, and the USA. The performance ranking of these countries is determined based on four criteria: Gross domestic product (GDP), total reserves (TR), labor force (LF), and the export-to-import ratio (EXP/IMP). Data for 2022 concerning G20 countries, OTS full members, and observer members were sourced from the World Bank database (World Bank Open Data, 2024). Since data for all the criteria analyzed in this study are not available for the European Union and the Turkish Republic of Northern Cyprus, these countries were excluded from the analysis.

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Furthermore, total reserves data for Turkmenistan is also lacking. The hierarchical structure related to the decision problem addressed in this study is presented in Figure 1.

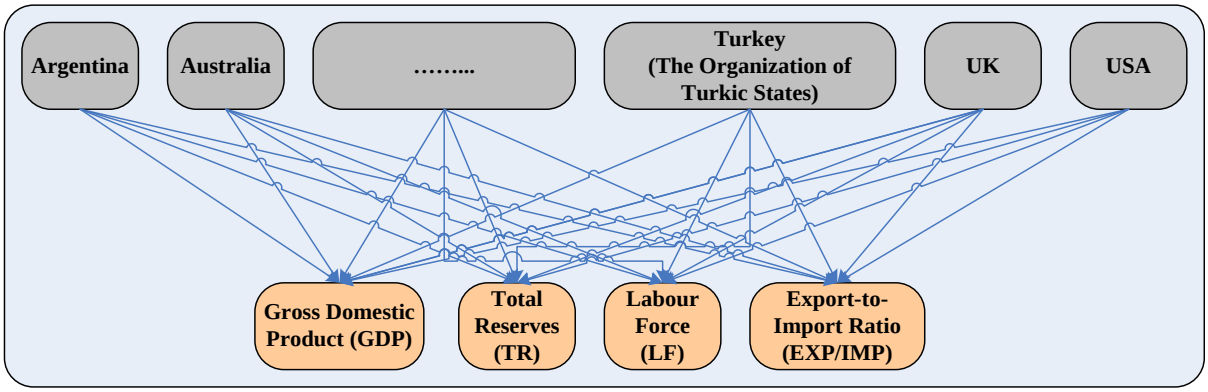

Figure 1: The Hierarchical Structure of the Decision Problem

2.2. Criteria importance through intercriteria correlation (CRITIC) method

Diakoulaki et al. (1995) proposed an objective method for assessing the importance of criteria through inter-criteria correlation (CRITIC), which is grounded in the standard deviation approach (Jahan et al., 2012). This method emphasizes calculating the correlation among the different criteria in a decision-making process, accounting for both direct and indirect relationships between them. It assesses their relative importance in the process. The CRITIC approach is particularly beneficial in scenarios where the criteria are complex and interconnected, facilitating a more thorough and objective evaluation of the decision's components (Işık et al., 2024). The steps of the CRITIC method are outlined below (Jahan et al., 2012):

Step 1: The normalization procedure is carried out by using Eq. (1) or (2) based on beneficial or cost-oriented criteria, respectively.

$$r_{ij} = \frac{x_{ij} - x_j^{min}}{x_j^{max} - x_j^{min}} \tag{1}$$

$$r_{ij} = \frac{x_j^{max} - x_{ij}}{x_j^{max} - x_j^{min}} \tag{2}$$

where x_{ij} is i. alternative value of j. criterion, r_{ij} means the normalized version of x_{ij}, x_j^{max} represents the maximum value of j. criterion and x_j^{min} is the minimum value of j. criterion.

Step 2: The correlations amongst criteria are calculated by using Eq. (3).

$$\rho_{jk} = \frac{\sum_{i=1}^{m}(r_{ij} - \bar{r}_j)(r_{ik} - \bar{r}_k)}{\sqrt{\sum_{i=1}^{m}(r_{ij} - \bar{r}_j)^2 \sum_{i=1}^{m}(r_{ik} - \bar{r}_k)^2}} \tag{3}$$

where ρ_{jk} is the correlation coefficient between j. and k. criteria.

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Step 3: The c_j values are calculated by using Eq. (4).

$$c_j = \sigma_j \sum_{k=1}^{n} (1 - \rho_{jk}) \tag{4}$$

where σ_j is the standard deviation of the j. criterion and n is the number of criteria.

Step 4: The criteria weights are calculated by using Eq. (5).

$$w_j = \frac{c_j}{\sum_{k=1}^{n} c_k} \tag{5}$$

where w_j is the weight of j. criterion.

2.3. Evaluation based on distance from average solution (EDAS) method

The EDAS approach was developed by Ghorabaee et al. (2015), which is especially effective in cases with conflicting features. This method evaluates the best alternative by measuring the distance of each option from an average value. Unlike other widely used distance-based multi-criteria decision-making (MCDM) methods like VIKOR and TOPSIS, EDAS simplifies the process by eliminating the need for complex calculations of positive and negative ideal solutions, making it a more efficient choice for decision-making in complex situations (Işık et al., 2024). The EDAS technique assesses various alternatives using the average solution as a reference. It includes two indicators: Positive Distance from Average (PDA) and Negative Distance from Average (NDA), which depend on whether the criteria are beneficial or detrimental. This method is especially useful when there are conflicting criteria. The ideal alternative will have a shorter distance from the optimal solution and a greater distance from the least favorable solution (Bulut et al., 2024). The steps of the EDAS approach are outlined as follows (Ghorabaee et al., 2015):

Step 1: The initial decision matrix has been developed.

Step 2: The average value (AV) is calculated for each criterion by using Eq. (6), where n means the number of criteria:

$$AV_j = \frac{\sum_{i=1}^{n} X_{ij}}{n} \tag{6}$$

Step 3: The positive distance (PDA) and negative distance (NDA) from the average are determined based on the classification of criteria as either benefit or cost types. Eq. (7) and (8) are applied for criteria focused on maximization, while Eq. (9) and (10) are used for those focused on minimization.

$$PDA_{ij} = \frac{\max(0, (X_{ij} - AV_j))}{AV_j} \tag{7}$$

$$NDA_{ij} = \frac{\max(0, (AV_j - X_{ij}))}{AV_j} \tag{8}$$

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$$PDA_{ij} = \frac{\max(0, (AV_j - X_{ij}))}{AV_j} \quad (9)$$

$$NDA_{ij} = \frac{\max(0, (X_{ij} - AV_j))}{AV_j} \quad (10)$$

Step 4: Eq. (11) and (12) are used to compute the weighted sums of the PDA and NDA for each alternative.

$$SP_i = \sum_{J=1}^{m} w_j PDA_{ij} \quad (11)$$

$$NP_i = \sum_{J=1}^{m} w_j NDA_{ij} \quad (12)$$

Step 5: The weighted sums of PDA and NDA are normalized for each alternative using Eq. (13) and (14).

$$NSP_i = \frac{SP_i}{max_i(SP_i)} \quad (13)$$

$$NSN_i = 1 - \frac{SN_i}{max_i(SN_i)} \quad (14)$$

Step 6: The appraisal scores (AS) for the alternatives are determined using Eq. (15). Following this, the alternatives are ranked in descending order based on their appraisal scores. The alternative with the highest AS is regarded as the optimal choice among the available options.

$$AS_i = \frac{1}{2}(NSP_i + NSN_i) \quad (15)$$

3. FINDINGS

Multi-criteria decision-making methods are widely recognized and effective techniques for addressing decision problems. In the first phase of these methods, alternatives and criteria relevant to the decision issue are identified, and the necessary data is collected. This leads to the development of an initial decision matrix, with alternatives listed in rows and criteria in columns. The decision matrix relevant to the problem discussed in this study is shown in Table 1. The alternatives being compared to Turkey from a macroeconomic perspective include all G20 countries, except for the European Union. The four evaluation criteria focused on maximization, as outlined in Table 1, are gross domestic product, total reserves, labor force, and the ratio of exports to imports.

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Table 1. Initial Decision Matrix

Alternatives	GDP	EXP/IMP	TR	LF
Argentina	631133384439.94	1.06	44795335171.52	21511126.00
Australia	1692956646855.70	1.29	56701901829.65	14079368.00
Brasil	1951923942083.32	1.02	324673449781.40	108750811.00
Canada	2161483369422.01	1.00	106952377364.74	21367763.00
China	17881783387000.90	1.18	3306839412813.78	781808304.00
France	2779092236505.85	0.90	242415618842.02	31616935.00
Germany	4082469490797.68	1.04	293913690186.80	44198105.00
India	3353470496885.95	0.87	567298153917.14	554145127.00
Indonesia	1319076267310.16	1.17	137222356128.23	138099490.00
Italy	2066972096553.70	0.96	224580577612.14	25342466.00
Japan	4256410760723.75	0.85	1227573263129.26	69113783.00
South Korea	1673916511799.71	1.00	423365991593.02	29339606.00
Mexico	1463323889036.56	0.94	201118689946.09	58718432.00
Russia	2266029240645.34	1.84	581709956946.21	73798702.00
Saudi Arabia	1108571466666.67	1.73	478231707665.70	16617140.00
South Africa	405270850098.74	1.06	60553113006.25	24366735.00
Turkey	907118435952.69	0.91	123735138185.00	34630319.00
UK	3088839763445.02	0.93	176409966646.61	34797067.00
USA	25744108000000.00	0.76	706644215998.89	168181985.00

3.1. Criteria weights

In this study, the CRITIC method, an objective weighting approach, is employed to weight the criteria. The initial decision matrix provided in Table 1 is utilized, and the criterion weights are determined using Eq. (1) to (5). The baseline model is systematically implemented and the results are summarized in Table 2 to 4. As the data is updated with the formation of a union among the full and observer member countries of the Organization of Turkish States in Scenarios 1 and 2, the criterion weights for each scenario were recalculated based on the new data, as detailed in Table 5.

Table 2. Normalized Decision Matrix for Weighting Criteria

Alternatives	GDP	EXP/IMP	TR	LF
Argentina	0.0089	0.2827	0.0000	0.0097
Australia	0.0508	0.4932	0.0037	0.0000
Brasil	0.0610	0.2471	0.0858	0.1233
Canada	0.0693	0.2293	0.0191	0.0095
China	0.6897	0.3954	1.0000	1.0000
France	0.0937	0.1331	0.0606	0.0228
Germany	0.1451	0.2628	0.0764	0.0392
India	0.1164	0.1030	0.1602	0.7035
Indonesia	0.0361	0.3815	0.0283	0.1615
Italy	0.0656	0.1863	0.0551	0.0147
Japan	0.1520	0.0887	0.3626	0.0717
South Korea	0.0501	0.2259	0.1161	0.0199
Mexico	0.0418	0.1667	0.0479	0.0581
Russia	0.0734	1.0000	0.1646	0.0778
Saudi Arabia	0.0278	0.8958	0.1329	0.0033
South Africa	0.0000	0.2847	0.0048	0.0134
Turkey	0.0198	0.1391	0.0242	0.0268
UK	0.1059	0.1576	0.0403	0.0270
USA	1.0000	0.0000	0.2029	0.2007

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Table 3. Correlation Values (r_i)

	GDP	EXP/IMP	TR	LF
GDP	1	-0.22809067	0.615232367	0.528827302
EXP/IMP	-0.228090669	1	0.073745672	-0.063388875
TR	0.615232367	0.07374567	1	0.807280808
LF	0.528827302	-0.06338887	0.807280808	1

Table 4. Criteria Weights (%)

1-ri				
	GDP	**EXP/IMP**	**TR**	**LF**
GDP	0	1.22809067	0.384767633	0.471172698
EXP/IMP	1.228090669	0	0.926254328	1.063388875
TR	0.384767633	0.92625433	0	0.192719192
LF	0.471172698	1.06338887	0.192719192	0
Total	2.084031	3.21773387	1.503741153	1.727280765
Standard Deviation	0.254537152	0.2572722	0.227342343	0.262930052
c_j	0.530463315	0.82783349	0.341864036	0.454154021
w_j	0.2462	0.3843	0.1587	0.2108

Table 5. Criteria Weights (%) based on Scenario

	GDP	EXP/IMP	TR	LF
Baseline Model	0.2462	0.3843	0.1587	0.2108
Scenario 1	0.2468	0.3832	0.1589	0.2111
Scenario 2	0.2467	0.3833	0.1589	0.2111

3.2. Baseline model (Comparison of current alternative countries)

Using the EDAS method, the macroeconomic performance of Turkey and the Potential Turkic Union against G20 countries are compared based on data from the baseline model, scenarios 1 and 2. In this regard, necessary calculations were conducted using Eq. (6) to (15), and the matrices derived at each stage are shown in Table (6) to (8).

Table 6. Positive Distances of Alternatives from the Average Solution

Alternatives	**GDP**	**TR**	**LF**	**EXP/IMP**	**P**
Weights	0.2467	0.1589	0.2111	0.3833	
Argentina	0	0	0	0	0
Australia	0	0	0	0.195628525	0.074984
Brasil	0	0	0	0	0
Canada	0	0	0	0	0
China	3.309740706	5.767015904	5.600519103	0.097332556	2.952469
France	0	0	0	0	0
Germany	0	0	0	0	0
India	0	0.16090174	3.678442884	0	0.802087
Indonesia	0	0	0.165923049	0.083362542	0.066979
Italy	0	0	0	0	0
Japan	0.025849957	1.512068703	0	0	0.246645
South Korea	0	0	0	0	0
Mexico	0	0	0	0	0
Russia	0	0.190393617	0	0.705096705	0.300517
Saudi Arabia	0	0	0	0.600365079	0.23012
South Africa	0	0	0	0	0
Turkey	0	0	0	0	0
UK	0	0	0	0	0
USA	5.204662465	0.446055297	0.419898457	0	1.443509

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3.3. Scenario analysis

This study compared the current macroeconomic performance of all G20 countries, excluding the EU. It found that China had the strongest performance, followed by the USA and India, while Argentina and South Africa showed the weakest results. According to the evaluation criteria used, Turkey ranked as the 17th largest economy based on the latest economic data. Additionally, the study aimed to assess how the Organization of Turkic States (OTS) would position itself within the G20 if it formed a significant economic union.

In Scenario 1, the economic union of the OTS's full member countries was analyzed, resulting in a dramatic rise to 12th place, surpassing major economies like France, Mexico, Italy, Canada, and Australia. The second scenario considered the inclusion of observer member countries in the economic union, allowing the OTS to advance to 10th place, overtaking South Korea and the UK.

However, the study faced limitations, particularly regarding data availability. Total reserves data for Turkmenistan, an observer member, was missing from World Bank records, and data from the Turkish Republic of Northern Cyprus was excluded. If this data had been included, the OTS might have ranked even higher than 10th in the G20. Additionally, the study's evaluation was based on four specific criteria; incorporating more comprehensive macroeconomic criteria could enhance the analysis significantly. The findings from the baseline model, along with Scenario 1 and 2, are displayed in Table 9 and depicted in Figures 2 to 4.

Table 7. Negative Distances of Alternatives from the Average Solution

Alternatives	**GDP**	**TR**	**LF**	**EXP/IMP**	**N**
Weights	0.2467	0.1589	0.2111	0.3833	
Argentina	0.847888704	0.908332184	0.818389499	0.015948368	0.5324
Australia	0.591975587	0.883966947	0.88113309	0	0.4725
Brasil	0.529561125	0.335598097	0.081857021	0.051699695	0.2211
Canada	0.479054596	0.781135898	0.81959986	0.069612051	0.4420
China	0	0	0	0	0.0000
France	0.330202884	0.503928028	0.733069881	0.166394456	0.3801
Germany	0.016072135	0.398543937	0.626851704	0.035972042	0.2134
India	0.191770306	0	0	0.196640608	0.1227
Indonesia	0.682085586	0.719192331	0	0	0.2826
Italy	0.501833034	0.540425116	0.786042908	0.112824511	0.4189
Japan	0	0	0.416497826	0.210953286	0.1688
South Korea	0.596564505	0.133636672	0.75229653	0.073081954	0.3552
Mexico	0.647320047	0.588436811	0.50426194	0.132581714	0.4105
Russia	0.453857691	0	0.376944783	0	0.1915
Saudi Arabia	0.732819961	0.021361134	0.859707617	0	0.3657
South Africa	0.902324492	0.876085946	0.794280645	0.013942001	0.5348
Turkey	0.781372743	0.746792165	0.707628992	0.160306683	0.5223
UK	0.25554973	0.638999993	0.7062212	0.141686153	0.3680
USA	0	0	0	0.300141886	0.1150

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Table 8. Parameter Values

Alternatives	P	N	A
Argentina	0.00000	0.00458	0.00229
Australia	0.02540	0.11652	0.07096
Brasil	0.00000	0.58666	0.29333
Canada	0.00000	0.17356	0.08678
China	1.00000	1.00000	1.00000
France	0.00000	0.28937	0.14469
Germany	0.00000	0.60098	0.30049
India	0.27167	0.77061	0.52114
Indonesia	0.02269	0.47170	0.24719
Italy	0.00000	0.21684	0.10842
Japan	0.08354	0.68442	0.38398
South Korea	0.00000	0.33581	0.16790
Mexico	0.00000	0.23253	0.11627
Russia	0.10179	0.64187	0.37183
Saudi Arabia	0.07794	0.31630	0.19712
South Africa	0.00000	0.00000	0.00000
Turkey	0.00000	0.02351	0.01176
UK	0.00000	0.31198	0.15599
USA	0.48892	0.78490	0.63691

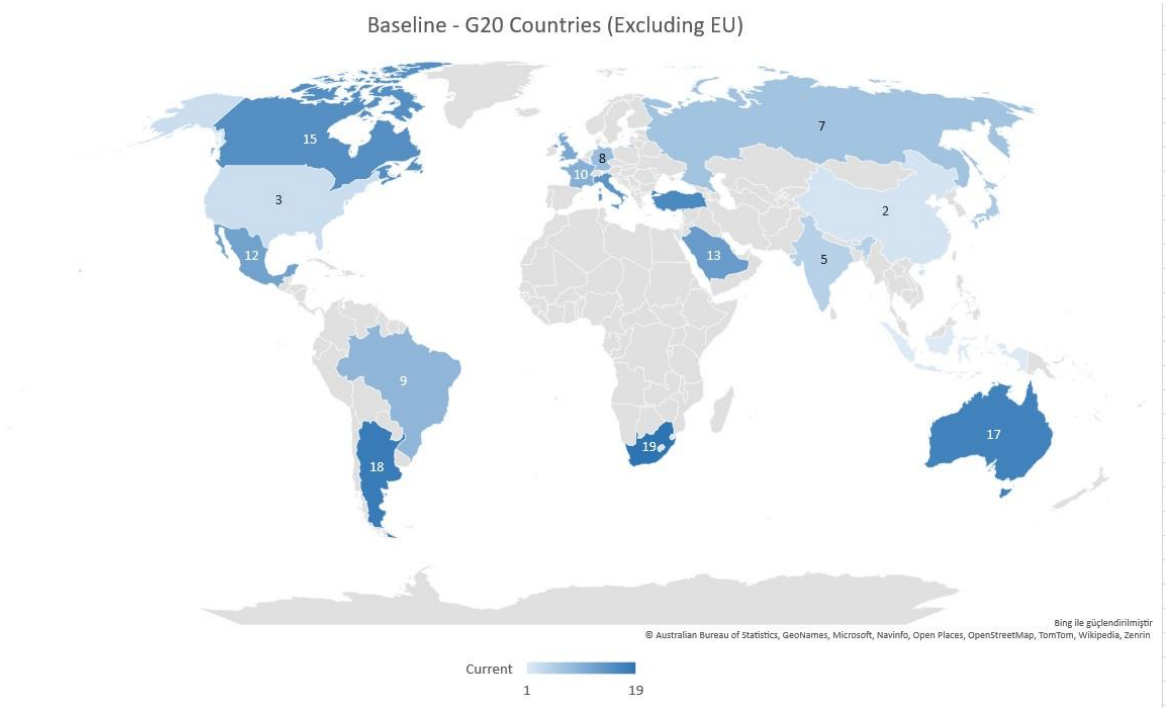

Figure 2: Comparison of the Macroeconomic Performances of Countries Based on Baseline Model

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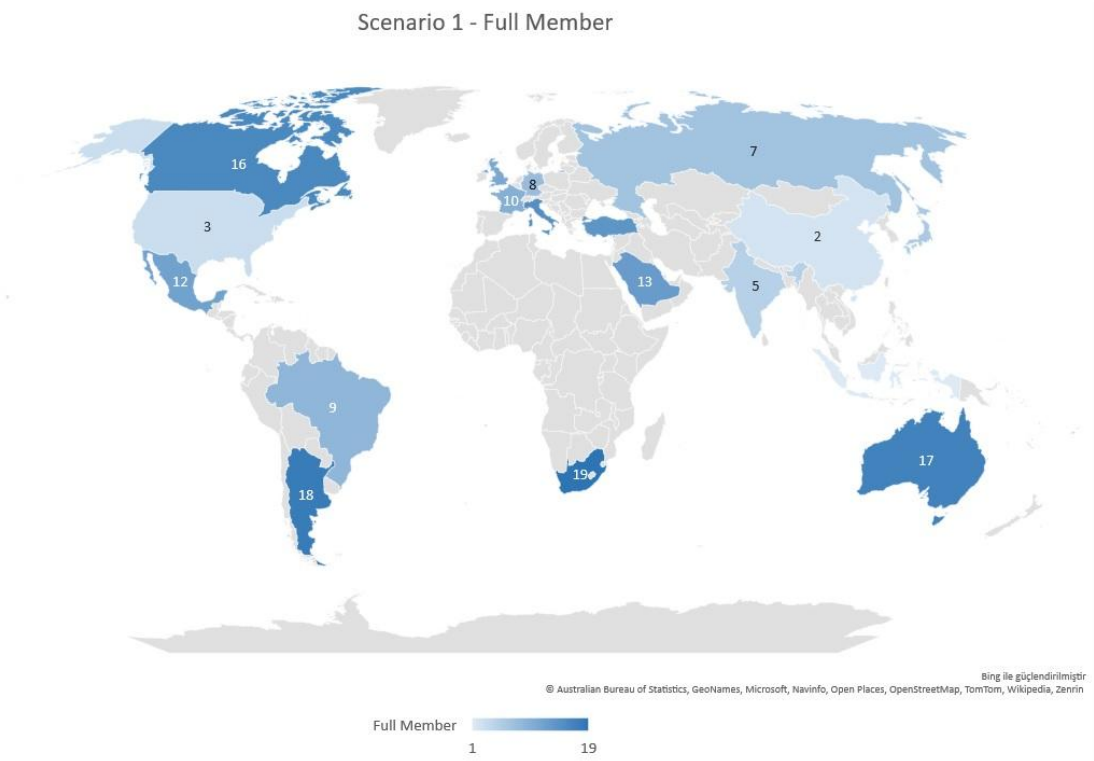

Figure 3: Comparison of the Macroeconomic Performances of Countries Based on Scenario 1

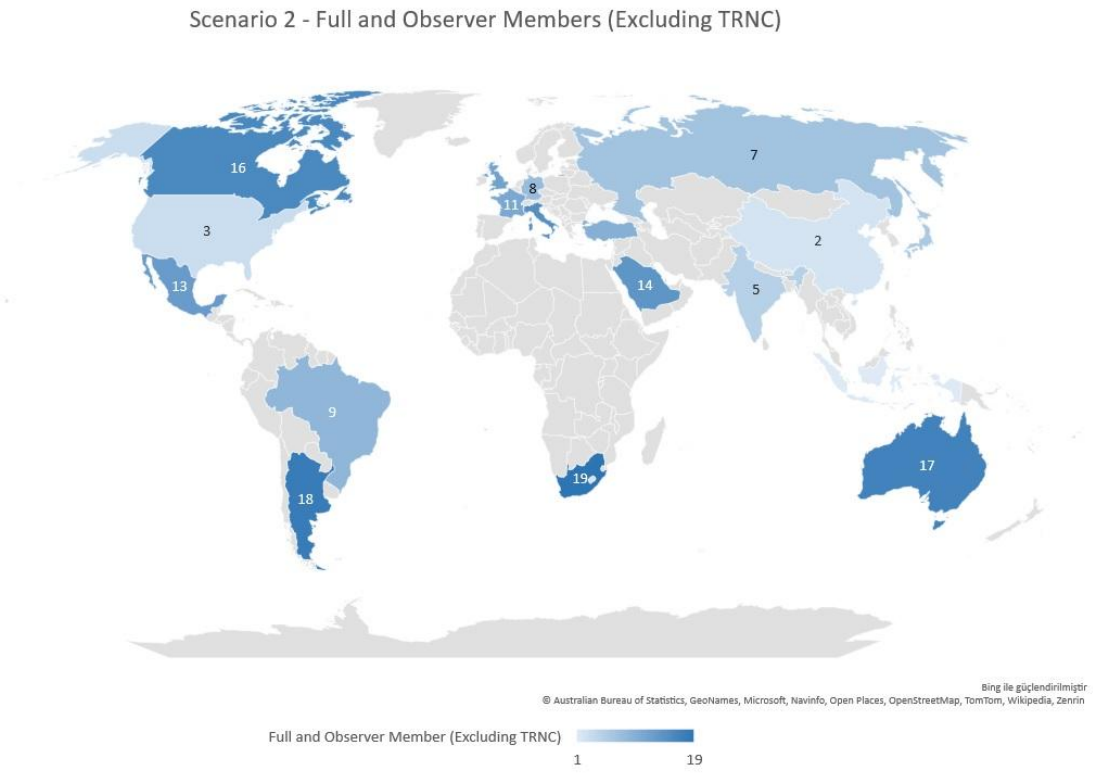

Figure 4: Comparison of the Macroeconomic Performances of Countries Based on Scenario 2

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Table 9. Scenario-Based Rankings of Countries' Macroeconomic Performance

Alternatives	Baseline	Scenario 1	Scenario 2
Argentina	18	18	18
Australia	16	17	17
Brasil	7	7	7
Canada	15	16	16
China	1	1	1
France	12	13	13
Germany	6	6	6
India	3	3	3
Indonesia	8	8	8
Italy	14	15	15
Japan	4	4	4
South Korea	10	10	11
Mexico	13	14	14
Russia	5	5	5
Saudi Arabia	9	9	9
South Africa	19	19	19
Turkey (OTS for Scenario 1 and 2)	17	12	10
UK	11	11	12
USA	2	2	2

4. DISCUSSION AND CONCLUSION

This study aims to assess Turkey's macroeconomic performance within the G20. It also explores how the Organization of Turkic States could rank within the G20 if its full and observer member countries unite to form an economic bloc. Based on the evaluation criteria, Turkey's current ranking indicates a significant potential rise for the Organization of Turkic States in various scenario analyses. The findings suggest that the Turkic states should pursue an economic union to enhance their societies' prosperity and sustainability.

However, the study has its limitations, as it relies on four existing criteria and uses the CRITIC-based EDAS methodology. Additionally, it utilizes 2022 data from the World Bank, but total reserves data for Turkmenistan could not be obtained, and the Turkish Republic of Northern Cyprus was excluded from the analysis, highlighting constraints in the research. This study contributes uniquely to the understanding of the economic potential of a union among Turkic states. It also points to areas for future research, such as using subjective weighting methods to establish more reliable criterion weights rather than relying solely on objective measures. Results from different multi-criteria decision-making approaches could further strengthen the findings. Moreover, conducting sustainable macroeconomic analyses over the past decade could provide a clearer picture of this economic power over time.

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