

# The Impact of Crises on Azerbaijan–European Union Economic Relations: A Trade Intensity Index Approach

(Research Article)

*Krizlerin Azerbaycan'ın Avrupa Birliği'ne Ekonomik Entegrasyonu Üzerindeki Etkisi: Ticaret Yoğunluğu Endeksi Bağlamında Bir Analiz*  
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## ABSTRACT

### Keywords:

EU, Azerbaijan, Trade Intensity Index, Covid-19, Economic Integration, Crises

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The primary aim of this research is to evaluate the bilateral trade and economic relations between Azerbaijan and the European Union (EU) from 2004 to 2023, utilizing the trade intensity index. The study also examines the effects of positive agreements designed to bolster these relations, along with the influence of negative factors such as economic downturns, political obstacles, and the pandemic on Azerbaijan's path toward integration with the EU. Furthermore, it seeks to assess whether the trade intensity index between Azerbaijan and the EU stands above or below the global average. After reaching a high point in 2007, trade relations between Azerbaijan and the EU were adversely impacted by external events like the 2008 global financial crisis, the COVID-19 pandemic, and the Karabakh War in 2020. Nonetheless, bilateral agreements, including the Eastern Partnership Program, have reinforced trade relations between the two, contributing to a positive trend in trade intensity

## ÖZET

### Anahtar Kelimeler:

AB, Azerbaycan, Ticaret Yoğunluğu Endeksi, Covid-19, Ekonomik Entegrasyon, Krizler

Bu araştırmanın temel amacı, 2004–2023 yılları arasında Azerbaycan ile Avrupa Birliği (AB) arasındaki ikili ticaret ve ekonomik ilişkileri, ticaret yoğunluğu endeksi aracılığıyla değerlendirmektir. Çalışmada, bu ilişkileri güçlendirmeyi amaçlayan olumlu anlaşmaların etkileri ile ekonomik durgunluklar, siyasi engeller ve pandemi gibi olumsuz faktörlerin Azerbaycan'ın AB ile entegrasyon süreci üzerindeki etkileri de incelenmektedir. Ayrıca, Azerbaycan ile AB arasındaki ticaret yoğunluğu endeksinin küresel ortalamanın üzerinde mi yoksa altında mı olduğu değerlendirilmektedir. 2007 yılında en yüksek seviyeye ulaşan ticaret ilişkileri, 2008 küresel finans krizi, COVID-19 pandemisi ve 2020 yılında yaşanan Karabağ Savaşı gibi dışsal gelişmelerden olumsuz etkilenmiştir. Bununla birlikte, Doğu Ortaklığı Programı gibi ikili anlaşmalar, taraflar arasındaki ticari ilişkileri güçlendirmiş ve ticaret yoğunluğunda olumlu bir eğilimin oluşmasına katkı sağlamıştır.

## 1. INTRODUCTION

Economic and trade relations between countries are affected by many positive and negative factors. While positive factors such as Ricardo's theory of comparative advantage and free trade agreements contribute to the development of trade, negative factors such as global financial crises, trade wars and geopolitical tensions complicate trade relations. Therefore, it is important for countries to take these factors into account when determining their foreign trade policies and to strengthen international cooperation (Erkisi & Ceyhan, 2019). The Eastern Partnership Program, launched by the EU in 2009, includes six former Soviet republics, including Azerbaijan (Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine). Azerbaijan has not made as much progress in negotiations for a Free Trade Agreement (FTA) with the EU as other Eastern Partnership countries (Georgia, Moldova, Ukraine). However, the trade volume between the EU and Azerbaijan has consistently increased. The EU is one of Azerbaijan's largest trading partners, and cooperation in the energy sector has further strengthened this relationship. Nevertheless, Azerbaijan's role in this program is particularly significant in the areas of energy security and economic cooperation (Tabur, 2013). As some country rich in energy resources, Azerbaijan holds strategic importance for the EU. Within the framework of the Eastern Partnership, Azerbaijan has come to the forefront with the Southern Gas Corridor projects, which play an important role in supplying oil and natural gas to Europe. This energy cooperation has become a critical step toward the EU's goal of reducing its energy dependence on Russia (Ersoy & Tehci, 2020). One of the key areas where Azerbaijan plays a crucial role in the Eastern Partnership program is the Southern Gas Corridor project. This project aims to transport natural gas extracted from the Caspian Sea to Europe via Turkey, diversifying the EU's energy supply. Azerbaijan is strategically positioned as an energy supplier in this project. The projects include:

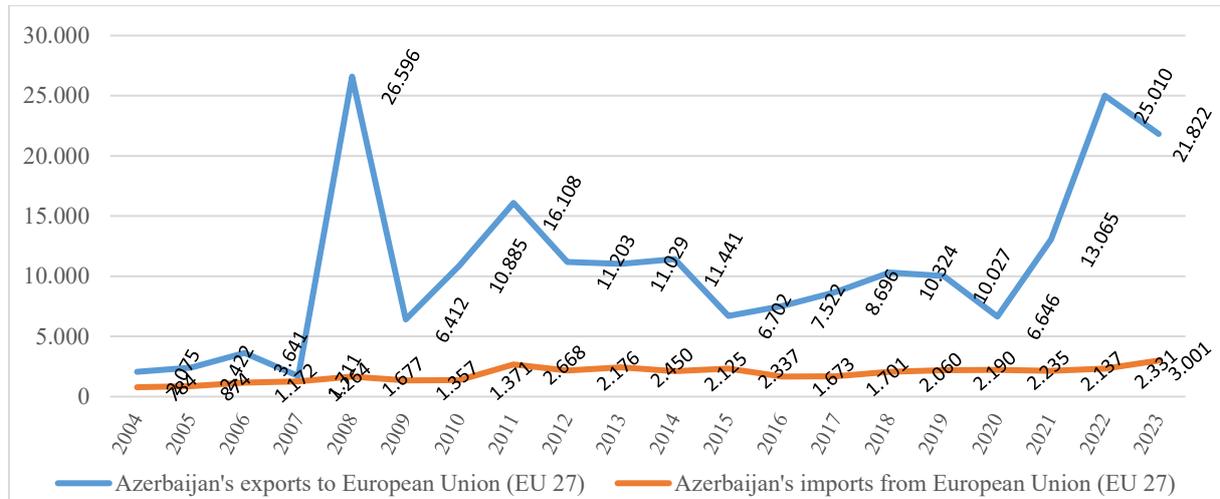
- Trans-Anatolian Natural Gas Pipeline (TANAP): This pipeline facilitates the transportation of natural gas from Azerbaijan's Shah Deniz gas field to Europe via Turkey and is critical for the EU's energy supply security strategy.
- Trans-Adriatic Pipeline (TAP): This pipeline, which follows TANAP, transports natural gas from Greece and Albania to Italy, providing direct access to EU markets.

These energy projects constitute a significant aspect of economic and strategic integration between Azerbaijan and the EU (Azakov, 2018).

Azerbaijan's process of economic integration with the EU, initiated in 2009, has made positive progress, particularly in energy cooperation and trade. However, external factors such as the global financial crisis, the COVID-19 pandemic, and the Karabakh war have negatively impacted this process. Despite these developments, the strategic importance of economic cooperation between Azerbaijan and the EU continues, and both parties are striving to strengthen their integration (Tuzcuoğlu et al., 2023). Azerbaijan's economic integration with the EU is shaped by global crises and geopolitical risks; this situation highlights the dynamics of international trade and the fragility of economic relations. Azerbaijan should take strategic steps and develop comprehensive policies considering both the positive and negative effects of its economic and trade relations with the EU (Aydın, 2020). Thanks to its strategic location and abundant energy resources, Azerbaijan has emerged as a key partner for EU nations. The foundation of these bilateral ties is deeply rooted in historical, political, and economic relations. Positioned strategically, Azerbaijan serves as a vital hub for trade, industry, and economic growth, functioning as a bridge between Europe and Asia. One of the crucial elements enhancing the region's economic potential is the mineral deposits discovered in Gedebe and Qalakend in the 19th century. These resources not only bolstered the local economy but also played a significant role in fostering economic ties with Europe. The Siemens brothers made a notable contribution to Azerbaijan's mining industry in the 1850s by investing in innovative textile technologies. Through their mining ventures, Siemens facilitated the entry of Azerbaijan's mineral wealth into international markets, thus boosting its economic connections with Europe. The modernization of the country's economy further increased trade activities and contributed to Azerbaijan's deeper integration into the European market (Həsənov, 2017).

The relationship between Azerbaijan and the EU began to flourish significantly following the dissolution of the Soviet Union. During this time, various economic, political, strategic, and cultural aspects came to the forefront. Azerbaijan initiated its bilateral relations with the EU by signing the "Partnership and Cooperation Agreement" in 1999. This agreement facilitated the enhancement of cooperation in sectors such as trade, investment, and political collaboration. Additionally, the Eastern Partnership Program, introduced in 2009, aimed to deepen the ties between Eastern European and Caucasian countries and the EU. Through its participation in this program, Azerbaijan has implemented numerous reforms to further strengthen its relationship with the EU. Azerbaijan is notable for its rich energy resources (especially oil and natural gas). These resources are critical for Europe's energy security. Energy from the Caspian Sea is transported through various pipelines to reach Europe. In this context, the Southern Gas Corridor was developed to ensure that Azerbaijani gas reaches European markets. The TANAP and the TAP are important parts of this corridor (Dinçer, 2023). The advantages of Azerbaijan's energy resources for Europe contribute to the deepening of relations between the two sides and strengthen strategic cooperation. In this context,

in addition to economic and energy cooperation, it is also important to increase political dialogue and strengthen cultural interactions (Eyvazov, 2016). Azerbaijan's trade volume with the EU over the years, including both exports and imports, is presented in Figure 1 below.



**Figure 1. Azerbaijan's Trade Volume with the European Union (EU 27)**

Source: [www.trademap.org](http://www.trademap.org) (Access to date: 09.10.2024)

Azerbaijan's exports to the EU fluctuated significantly from 2004 to 2023, peaking at 26,596 million USD in 2008, dropping to 10,885 million USD in 2009, and gradually increasing to 25,010 million USD in 2022. In terms of imports from the EU, they generally remained below 4,000 million USD, peaking at 3,641 million USD in 2008, and were most recently recorded at 3,001 million USD in 2023. The trade balance remains strongly in favor of Azerbaijan, with exports consistently exceeding imports, reflecting the country's increasing reliance on energy exports to the EU. Additionally, stable imports indicate a consistent demand for machinery and other goods, underscoring the importance of Azerbaijan's energy sector in its trade relationship with the EU. The 2008 financial crisis caused significant fluctuations in Azerbaijan's trade with the EU. The sharp decline in exports is directly related to the change in energy prices and the economic recession in Europe. However, imports remained stable, demonstrating the resilience of Azerbaijan's overall economic structure. During this period, the country's energy sector remained the main engine of economic growth and international trade.

While evaluating Azerbaijan's import and export relations with the EU and countries around the world, the three countries with which it conducts the most trade have been identified, and the strategic importance of EU countries within the context of the bilateral trade relationship between the EU and Azerbaijan has been emphasized in the following Table 1.

**Table 1. Azerbaijan's Top Three Trading Partners in Terms of Imports and Exports**

N	2005	2010	2015	2019	2020	2021	2022	2023
Exports to the EU (27)	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy
	France	France	Germany	Germany	Greece	Croatia	Greece	Greece
	Croatia	Croatia	France	Spain	Croatia	Germany	Spain	Germany
Exports to the World	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy
	France	France	Türkiye	Türkiye	Türkiye	Türkiye	Türkiye	Türkiye
	RF	Israel	Germany	Israel	RF	RF	Israel	Israel
Imports from the EU (27)	Belgium	Belgium	Belgium	Belgium	Romania	Romania	Germany	Germany
	Germany	Italy	Romania	Romania	Germany	Germany	Belgium	Lithuania
	France	Germany	Italy	Germany	Belgium	Belgium	Bulgaria	Belgium
Exports to the World	RF	RF	RF	RF	RF	RF	RF	RF
	UK	Türkiye	Türkiye	Türkiye	Türkiye	Türkiye	Türkiye	Türkiye
	Singapore	Germany	USA	China	China	China	China	China

Source: [www.trademap.org](http://www.trademap.org) (Access to date: 09.10.2024)

This investigation examines Azerbaijan's export relationships with the EU and global markets, focusing on key destinations and trends over time. Italy, France, and Croatia have been identified as significant export targets for Azerbaijan. The data indicates a stable and consistent trade relationship with these countries from 2005 to 2023, demonstrating a strong demand for Azerbaijani products, particularly in the energy and commodity sectors. Italy emerges as a persistent partner, highlighting the strength of Azerbaijan's energy exports; this relationship is vital for Italy's energy security and economic stability. Within the framework of the investigation, it is observed that Azerbaijan's most important partners in terms of exports include not only European countries but also neighboring

countries outside Europe, namely the Russian Federation, Turkey, and Israel. In these countries, a substantial portion of exports is typically composed of products such as "mineral fuels, mineral oils and products derived from their distillation, bituminous substances, minerals, and natural gas". Furthermore, while the RF ranks highly in exports, the products exported to the RF include "edible fruits and nuts, citrus fruits or melon rinds" as well as "edible vegetables and certain roots and tubers". Overall, it is evident that the share of EU countries in Azerbaijan's exports is significant, and Azerbaijan holds an important position as an export market.

In terms of Azerbaijan's import relations with the EU, they have changed over time. While Belgium was an important import partner between 2005 and 2015, Germany assumed this role from 2021 onwards. Romania became a prominent partner in 2019 and 2020. Other EU countries such as France, Italy and Bulgaria were also among the import partners in certain years. Overall, Azerbaijan's trade with the EU is characterized by a dynamic structure and relations with various countries in different periods. Azerbaijan's import relations with the rest of the world changed significantly between 2005 and 2023, with the Russian Federation emerging as a consistent partner, while Turkey became the main import partner from 2010 onwards. While the United Kingdom (UK) was an important import partner until 2005, Turkey assumed this role in the following years. Israel, on the other hand, is notable for its energy and defense cooperation, Azerbaijan's exports to Israel are based on energy products, and Israeli high-tech products occupy an important place in Azerbaijan's imports. In recent years, China has started to play an important role in Azerbaijan's imports from 2019, and the increase in imports between 2020 and 2023 emphasizes the country's strength in the global economy. Especially in the field of industrial products and electronic devices, China has become one of the most important suppliers of Azerbaijan, contributing to the country's economic development. In order to comprehensively explain the economic and trade relations between Azerbaijan and the EU, it is necessary to investigate Azerbaijan's export and import shares with the EU, as well as the EU's contribution to the export of products such as oil and natural gas.

**Table 2. The Share of EU in Azerbaijan's Imports and Exports (%)**

	2005	2010	2015	2019	2020	2021	2022	2023
The share of EU (27) countries in Azerbaijan's total exports	55.7%	51.2%	53.0%	51.1%	48.4%	58.8%	65.6%	64.4%
The share of EU (27) countries in Azerbaijan's total exports of products under code 27	53.5%	51.0%	51.6%	50.1%	47.5%	57.7%	64.6%	63.5%
The share of EU (27) countries in Azerbaijan's exports of products under code 27	96.0%	99.7%	97.3%	98.2%	98.2%	98.1%	98.5%	98.6%
The share of EU (27) countries in Azerbaijan's total imports	20.7%	20.8%	25.4%	16.0%	20.8%	18.3%	16.0%	17.4%

**Source:** *www.trademap.org* (Access to date: 09.10.2024) HS of tariff code 27: Mineral fuels, mineral oils and products of their distillation; bituminous substances; and minerals

Between 2004 and 2023, Azerbaijan's export share to the EU increased from 55% to 64% of its total world exports. Approximately 96-98.6% of these exports consisted of "Mineral Fuels, Oils, and Products of Their Distillation, Natural Gas, Bituminous Substances, and Mineral Waxes." Due to the Russia-Ukraine war, EU countries are replacing the natural gas they import from Russia with Azerbaijan's natural gas, and this proportion is increasing every day through new agreements. Data indicates that the largest buyers of Azerbaijan's oil and natural gas are EU countries, particularly those in Central and Southeastern Europe. In terms of Azerbaijan's import share from the EU, the share of exports from the EU has fluctuated between 16% and 25% of its total world exports. A large share of these imports is made up of goods such as "Vehicles excluding railway and their parts and accessories, nuclear reactors, boilers, mechanical equipment and components, pharmaceutical products, among others."

## 2. LITERATURE REVIEW

The Trade Intensity Index (TII) is a crucial analytical tool for evaluating the strength and structure of bilateral trade relationships. It quantifies the extent to which a country trades with a specific partner relative to its overall trade volume, thereby offering insights into trade concentration and dependency. In the context of Azerbaijan's evolving economic ties with the European Union (EU), understanding the trajectory and determinants of bilateral trade intensity becomes increasingly significant. This literature review surveys key studies that employ the TII and comparable indices across diverse geopolitical and economic settings. It emphasizes thematic similarities and divergences with a particular focus on Azerbaijan-EU trade relations, the role of external shocks, regional comparisons, and methodological advancements.

Several studies using the Trade Intensity Index reveal asymmetrical bilateral trade patterns for Azerbaijan and varying resilience to global shocks. For example, Azerbaijan-Poland trade shows Poland's higher trade intensity despite both being below the global average, with Poland more affected by the 2008 financial crisis. Azerbaijan-China trade exhibits persistently low intensity, especially post-2008. Conversely, Azerbaijan's trade intensity with Italy is above average, while Italy's with Azerbaijan remains low, indicating one-sided dependence. Trade with

Kyrgyzstan generally shows above-average intensity but declined during 2016–2017 and the COVID-19 pandemic, which impacted Azerbaijan more heavily. Overall, these findings highlight uneven trade development and the differing effects of external shocks across partner countries.

To enhance analytical depth, many researchers have supplemented the TII with complementary indices. For example, Çeştepe (2012) employed the TII in conjunction with the Grubel–Lloyd and Balassa indices to assess Turkey’s trade with Middle Eastern countries, revealing limited intra-industry trade despite growing trade volumes—especially in unprocessed goods. Demir (2020a, 2020b) analyzed Turkey’s trade with Middle Eastern and BRICS countries, observing rising trade intensity alongside persistent trade deficits, particularly with BRICS economies. Alpdoğan, Akal, and Hasanov (2020) evaluated Turkey–Azerbaijan trade and concluded that the relationship was mutually beneficial, recommending further cooperation in raw materials and knowledge exchange. In similar vein, studies by Kramskova (2022) and Şimşek et al. applied the TII to Turkey–Russia trade, illustrating the effects of geopolitical tensions—such as the Jet Crisis and the COVID-19 pandemic. These studies indicate that while Russia’s trade position improved, Turkey’s weakened, underscoring the limitations of relying solely on TII and the importance of integrating industry-level and structural trade indices for a more comprehensive understanding.

Numerous studies have also examined how external shocks—including financial crises, political instability, and pandemics—affect bilateral trade intensity. The 2008 global financial crisis significantly reduced TII values in Azerbaijan’s trade with Poland and China, as well as in Turkey’s trade with Russia. The COVID-19 pandemic yielded mixed outcomes: while Azerbaijan’s TII with Kyrgyzstan declined, Kyrgyzstan’s remained stable, indicating stronger resilience. Drieniková et al. (2024) showed that although U.S.–EU trade in goods declined below the global average during the pandemic, services trade remained relatively unaffected. These findings underscore the role of structural economic characteristics, trade composition, and political capacity in determining a country’s resilience to external disruptions.

Although research on Azerbaijan’s external trade is growing, there remains a lack of comprehensive investigation regarding its trade intensity with the EU as a cohesive economic bloc. While most existing studies focus on individual EU countries or treat Azerbaijan only marginally within broader regional contexts, this study uniquely addresses Azerbaijan–EU trade relations through the systematic application of the Trade Intensity Index (TII). By examining the impact of bilateral agreements, EU integration processes, and external shocks over time, it provides a thorough assessment of Azerbaijan’s trade position within the European market from a dual perspective. Building upon this foundation, the present study aims to synthesize previously fragmented findings by applying the TII consistently across all EU member states. This comparative and integrative approach facilitates a cohesive understanding of the factors shaping trade intensity over time, enabling the identification of macro-level trends and deviations. Consequently, the study offers policy-relevant insights and strategic recommendations to strengthen Azerbaijan–EU trade relations. Through the combination of empirical data investigation and contextual interpretation, it contributes to a more nuanced understanding of Azerbaijan’s evolving trade dynamics and supports evidence-based policymaking in the context of regional integration and global economic volatility.

### 3. PURPOSE, DATA, AND METHODOLOGY

In 2009, as part of the Eastern Partnership Program, the EU began supporting sustainable reform efforts aimed at reinforcing and deepening political and economic ties between Azerbaijan and other former Soviet Union countries. The main goal of this study is to evaluate the bilateral trade and economic relations between Azerbaijan and the EU by applying the TII. It also aims to examine how positive agreements designed to enhance these relations, as well as negative influences like economic crises, political challenges, and the pandemic, have affected Azerbaijan’s EU integration. After investigating the data, the next goal is to compare Azerbaijan’s level of economic integration with the EU before and after the launch of the Eastern Partnership Program in 2009. This comparison is intended to assess whether the program’s scope has influenced Azerbaijan’s economic integration with the EU. Additionally, the study will determine if the TII between Azerbaijan and the EU is above or below the global average. The hypothesis is that, following the Eastern Partnership Program’s implementation, Azerbaijan’s economic integration with the EU has expanded and deepened compared to earlier periods, although negative factors may have caused temporary slowdowns. The study ultimately seeks to provide recommendations for further enhancing bilateral relations based on the investigation findings.

This study employs the TII approach using data from 2004–2023 to evaluate the effects of positive agreements strengthening bilateral economic and trade relations between Azerbaijan and the EU, as well as the impacts of negative factors such as economic crises, political obstacles, and pandemics on Azerbaijan’s integration into the EU. It also aims to determine and compare whether the TII between Azerbaijan and the EU is above or below the global average. The data used in the investigation was sourced from the UNCOMTRADE statistical database and international trade statistics. To assess bilateral trade and economic relations between the EU and Azerbaijan, data

on each party's exports to one another, their exports to the global market, and total global exports were collected and investigated.

The TII serves as a tool to evaluate whether the trade volume between two countries or unions surpasses that of the global average and to compare a country's trade performance with its partners against its overall trade. Essentially, this analytical approach assesses whether a country exports a greater amount to its partner nation than the average exports to other countries worldwide. This method is particularly prevalent in investigating economic and trade relations between nations and assessing a country's level of integration within a trade union. A key focus of this study is to investigate Azerbaijan's economic integration into the EU, as well as to assess the economic and trade relations that exist between the two entities. In this study, the Trade Concentration Index method was employed. The straightforward approach, referred to as the TII, was initially introduced by Brown (Brown, 1949) and subsequently refined by Kojima (Kojima, 1964). To assess the trade intensity between two countries, the TII for country  $i$  in relation to country  $j$  during period  $t$  is calculated using the following formula (Peter & Ross, 1982):

$$TII_{ijt} = \frac{(X_{ij} / X_{it})}{(X_{wj} / X_{wt})} \quad (1)$$

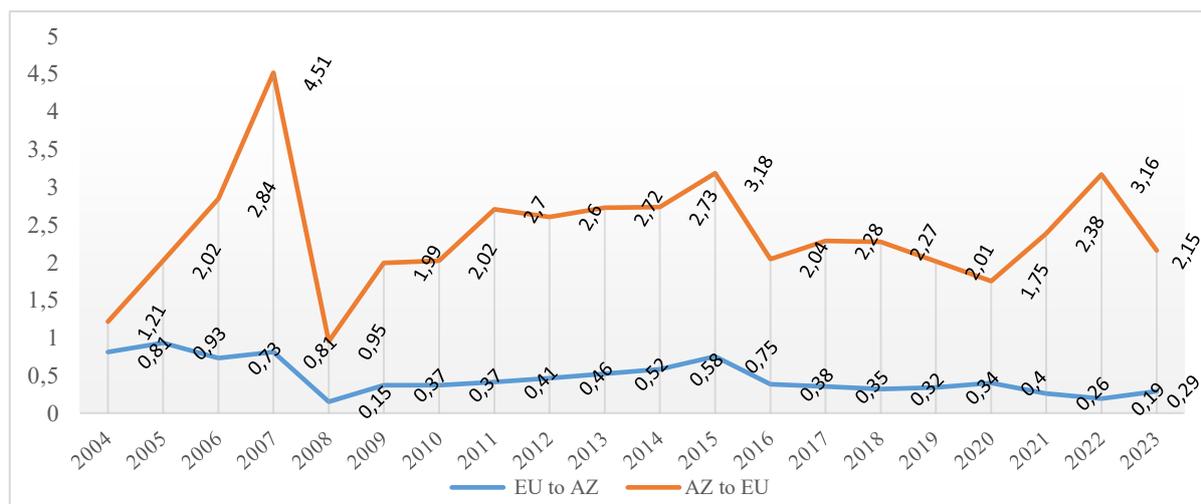
Here,  $TII_{ijt}$  – TII between Azerbaijan and the EU,  $X_{ij}$  = exports of union  $i$  to union  $j$ ,  $X_{it}$  = total exports of union  $i$ ,  $X_{wj}$  = total exports of union  $j$  to the world,  $X_{wt}$  = total world exports,  $t$  = years.

There  $TII_{ijt} \geq 0$  can take a value greater than zero. If it takes the value zero  $TII_{ijt} = 0$ , there is no trade relationship between the two countries or unions and if it takes the value  $TII_{ijt} = 1$ , there is a fully balanced bilateral trade relationship. If  $TII_{ijt}$  is between  $0 < TII_{ijt} < 1$ , country  $i$ 's trade with the other country is below the world average and if  $TII_{ijt} > 1$  country  $i$ 's trade with the other country is above the world average (Anand, 2021).

#### 4. FINDINGS

The TII method is used to assess bilateral trade and economic relations between Azerbaijan and the EU. This method examines the positive agreements aimed at strengthening these relations, as well as the impact of negative factors such as economic crises, political difficulties and pandemics on Azerbaijan's integration into the EU. Furthermore, the investigation aims to determine whether the trade intensity between Azerbaijan and the EU is above or below the world average. This study presents the results of the TII approach, which aims to measure the bilateral trade relations between Azerbaijan and the EU for the period 2004-2023 within the framework of positive and negative factors. The findings are summarized in Figure 2 below for comparison purposes.

Bilateral trade relations between the EU and Azerbaijan between 2004 and 2023 will be investigated based on the results of the TII approach presented in Figure 2, and in this context, Azerbaijan's trade intensity towards the EU and the EU's trade intensity approach scores towards Azerbaijan will be evaluated separately.



**Figure 2. TII Scores Between Azerbaijan and the European Union**

Source: The graph was created by the authors.

According to the results of the investigation in terms of the EU's bilateral trade relations with Azerbaijan and trade intensity, it is seen that the EU's trade relations with Azerbaijan are below the world average, in other words, TII score result is below 1 ( $TII_{ijt} < 1$ ). Starting in 2004 with a score of 0.69, trade intensity peaked in 2005 with a score of 0.93, representing the peak year of trade between the two sides. However, a slight decline in trade intensity

was observed in 2006 and 2007. In 2008, due to the financial crisis, trade intensity dropped dramatically to 0.15 points, representing the lowest level between the years. In 2009, after the EU's Eastern Partnership Program agreement with Azerbaijan, trade intensity showed a slow recovery process and increased from 0.37 points in 2009 to 0.75 points in 2015, providing a revival of trade for a certain period. From 2015 to 2018, there was a decline again, with trade intensity increasing to 0.40 percentage points in 2020 during the COVID-19 pandemic. However, from 2020 onwards, the trade intensity decreased again to 0.19 points because of COVID-19 as well as the Karabakh War that started in Azerbaijan. These fluctuations reflect the uncertainties and challenges of the pandemic and political events in the region on economic relations. By 2023, trade intensity had increased again to 0.29 points, but this value is still well below the high levels of previous years. This suggests that trade has not fully recovered in the post-COVID-19 period.

According to the results of the investigation, in terms of Azerbaijan's bilateral trade relations and trade intensity with the EU, it is seen that Azerbaijan's trade relations with the EU are above the world average except for 2008 (0.95 points), in other words, the TII score is above 1 ( $TII > 1$ ). Azerbaijan's trade intensity with the EU fluctuated from 2004 to 2023 due to external factors. Starting with 1.21 points in 2004, trade intensity reached the highest level of trade between Azerbaijan and the EU in 2007 compared to 2004, increasing nearly three times to 4.51 points. In 2008, trade intensity dropped to 0.95 points, the lowest level in these years, due to the impact of the financial crisis, and trade intensity remained below the world average, indicating the negative impact of global economic uncertainties on bilateral trade and economic relations. Since the EU signed the Eastern Partnership Program agreement with Azerbaijan in 2009, trade intensity has gradually revitalized. Despite some fluctuations during this period, the trade intensity reached 3.18 points in 2015, indicating a recovery in trade between Azerbaijan and the EU and demonstrating the continued strengthening of economic relations. Beginning with a slight decline in 2016, trade intensity followed a fluctuating trend until 2020, when it dropped to 1.75 points due to the impact of the COVID-19 pandemic. In the post-pandemic period, despite the ongoing economic stagnation, an increase in Azerbaijan's bilateral trade intensity with the EU was observed between 2020 and 2022. Trade intensity rose to 2.38 points in 2021 and showed a significant increase, reaching 3.16 points in 2022. However, in 2023, it declined again to 2.15 points.

Overall, the trade intensity from the EU to Azerbaijan exhibits significant fluctuations, peaking in 2007 and experiencing a notable decline in 2008; conversely, the trade intensity from Azerbaijan to the EU demonstrates strong growth during both the pre-crisis and post-crisis periods. These fluctuations reflect the impact of global events, such as economic crises, wars, the COVID-19 pandemic, and bilateral agreements, on the trade relationships between the two parties.

## 5. CONCLUSION

The trade relations between Azerbaijan and the EU have exhibited a fluctuating trend. After reaching a peak in 2007, various external factors—such as economic crises, wars, the COVID-19 pandemic, and bilateral agreements—have significantly impacted trade intensity. The global financial crisis of 2008 profoundly affected both sides of the trade relationship. For the EU, trade intensity dropped sharply, reflecting its vulnerability to external economic shocks. Conversely, Azerbaijan's trade intensity fell below the world average, demonstrating the adverse effects of global uncertainties on its trade relations. While the EU's trade relations and intensity with Azerbaijan consistently remain below the world average, Azerbaijan's trade relations and intensity with the EU have generally been above the world average, excluding the year 2008. External factors such as the global financial crisis, the COVID-19 pandemic, and the Karabakh War have led to significant declines in trade intensity for both the EU and Azerbaijan, adversely affecting the economic relations between the two parties. Additionally, bilateral agreements such as the Eastern Partnership Program have strengthened trade relations for both the EU and Azerbaijan, resulting in a marked positive improvement in trade intensity.

The results of this study are similar to the results of studies such (Drieniková, Zubaľová, & Horváth, 2024), (Imren Karaosmanođlu & Baghirov, 2022), (Muradov, Tuzcuođlu, Ahmadov, & Baghirov, 2023), (Yazıcı, 2016), (Şimşek, Şimşek, & Zhanaltay, 2017), which show that while adversities such as the global financial crisis, war, political instability between countries and the COVID-19 pandemic have a negative impact on bilateral trade relations and integration, on the other hand, agreements such as bilateral integration have a positive impact on bilateral trade relations and integration.

While there has been a continuous decline in trade from the EU to Azerbaijan, Azerbaijan's trade volume with the EU has significantly increased. This situation requires the EU thoroughly investigate the reasons behind this decline and develop strategies to revitalize economic engagement. Additionally, it highlights the need to reassess trade policies, market conditions, and competitive dynamics in the region to address the decreasing trade volume. It is particularly important for the EU to develop strategies that will enhance its economic engagement with Azerbaijan. Both parties should undertake strategic initiatives to establish a sustainable and mutually beneficial economic relationship and create new opportunities by reassessing the existing trade dynamics. This study will

constitute a valuable research resource for future academics and researchers due to the lack of sufficient studies on this subject.

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