

Tanaguzova, Mereke; Nanovsky, Simeon; Orazgaliyev, Serik

Article

Assessing the effect of joining the World Trade Organization on trade performance: A study of CIS countries

Economies

Provided in Cooperation with:

MDPI – Multidisciplinary Digital Publishing Institute, Basel

Suggested Citation: Tanaguzova, Mereke; Nanovsky, Simeon; Orazgaliyev, Serik (2023) : Assessing the effect of joining the World Trade Organization on trade performance: A study of CIS countries, *Economies*, ISSN 2227-7099, MDPI, Basel, Vol. 11, Iss. 9, pp. 1-17, <https://doi.org/10.3390/economies11090236>

This Version is available at:

<https://hdl.handle.net/10419/328861>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>



Article

Assessing the Effect of Joining the World Trade Organization on Trade Performance: A Study of CIS Countries

Mereke Tanaguzova ^{1,*} **Simeon Nanovsky** ² and **Serik Orazgaliyev** ²¹ SDSN Kazakhstan, Graduate School of Public Policy, Nazarbayev University, Astana 010000, Kazakhstan² Graduate School of Public Policy, Nazarbayev University, Astana 010000, Kazakhstan; simeon.nanovsky@nu.edu.kz (S.N.); serik.orazgaliyev@nu.edu.kz (S.O.)

* Correspondence: mereke.tanaguzova@alumni.nu.edu.kz

Abstract: This research delves into the impact of World Trade Organization (WTO) membership on trade dynamics in the Commonwealth of Independent States (CIS) region, focusing on the potential augmentation or diversion of trade resulting from CIS countries' WTO accession. The study context is grounded in the interplay between regionalism, represented by regional trade agreements and historical connections, and global integration facilitated by WTO membership. The study also scrutinizes the potentially complicating role of the Eurasian Economic Union (EEU) regional bloc, referencing the 'Spaghetti Bowl' phenomenon of overlapping trade agreements. The gravity model of trade serves as a conceptual foundation to understand the effects of WTO membership and regional trade agreements on trade costs. Empirical results suggest that WTO membership has not enhanced trade for the CIS. Instances of trade within the CIS region where there is only one WTO member have resulted in a positive trend, even though there is no robust evidence that it is due to WTO membership. The EEU enhances trade and serves as a trading bloc within the region. This study highlights that while the WTO strives to foster trade liberalization and growth, its effects can be region-specific and complex, as demonstrated by the CIS region's experience. The research also hints at the importance of intra-regional trade and unique regional factors as critical determinants of trade patterns, which can enhance broader trade expansion and economic development.



Citation: Tanaguzova, Mereke, Simeon Nanovsky, and Serik Orazgaliyev. 2023. Assessing the Effect of Joining the World Trade Organization on Trade Performance: A Study of CIS Countries. *Economics* 11: 236. <https://doi.org/10.3390/economics11090236>

Academic Editor: Bruce Morley

Received: 27 July 2023

Revised: 28 August 2023

Accepted: 4 September 2023

Published: 14 September 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The WTO plays a crucial role in facilitating smooth, predictable, and free trade. With 164 member countries as of 2020, and three of the CIS countries are among the last trading partners to join the multilateral trading system. The delayed WTO membership of CIS countries, including the Russian Federation, Tajikistan, and Kazakhstan, can be attributed to economic challenges following the dissolution of the Soviet Union and several attempts to establish an enhanced customs union territory. Despite their independent accession to the WTO, CIS countries share a common history of underdeveloped institutional frameworks and a lack of foreign trade policies. Moreover, trade among CIS members themselves exhibits higher volatility compared to other regional trade blocs ([MacPhee and Sattayanuwat 2014](#)).

There is limited scholarly analysis of international trade in this region; in particular, there is a shortage of studies evaluating country-specific relationships between WTO membership and economic growth in the post-Soviet space. While the WTO's impact on CIS-region trade is limited, a possible explanation is that CIS countries' accession took place after a peak in research on the implications of the WTO, and the region was left out from the scope of extensive investigations. Thus, our main research contribution is to bridge the gap in the academic literature, and if the existing literature, statistics, and data were likened to a puzzle, the trade effect of the CIS countries would fill in the blanks.

The next section discusses literature on the topic, and Section 3 presents the methodology, data collection procedure, and the empirical model, while Section 4 presents results and discussions with potential explanation of the outcomes. Section 5 concludes.

2. Literature Review

Regarding the background of the CIS region's economic condition and trade policy development, CIS countries share common characteristics, including a small population size, narrow domestic market, political instability, and low levels of socio-economic development. Consequently, except for the Russian Federation, these countries may not be of significant interest to most WTO member countries in expanding their access to goods and services. Analyzing CIS countries' economic conditions, [Sultonov \(2022\)](#) emphasized the interdependence of CIS states due to their shared historical path and Russia's dominance in the region. The CIS accounts for 3.2 percent of the world's population, with Russia possessing the largest population, followed by Kazakhstan. The combined Gross Domestic Product (GDP) of CIS countries amounts to 1960.6 billion USD, or 2.3 percent of the global GDP as of 2020. Russia, Kazakhstan, Belarus, and Azerbaijan emerge as the largest economies within the CIS, while Kyrgyzstan and Tajikistan's per capita incomes are below the average for lower-middle-income nations.

The economic history of the CIS is marked with a recession following the Soviet Union's collapse in the 1990s. The recovery process spanned about a decade and only in the first half of the 2010s witnessed an average growth rate equal to the world average. The growth rates for Russia, Azerbaijan, and Kazakhstan were higher due to the high proportion of oil and gas in their exports. Conversely, those lacking in fuel exports experienced trade deficits, in small, remittance-dependent economies like Armenia, Kyrgyzstan, Moldova, and Tajikistan. Exploring the dynamics of economic development, significant growth rates were seen in the 2000s, explained by high fuel prices in international markets and a recession in the 2010s due to financial crises, falling fuel prices, and Russia–Ukraine conflict ([Sultonov 2022](#)).

If we only consider CIS members in the WTO, the top exporters are the Russian Federation and Kazakhstan; next comes Moldova and Armenia, and the least is the Kyrgyz Republic and Tajikistan. Moldova and Armenia have a common development path because of their proximity to Europe, which has led to their progress in European Union (EU) integration. Moldova signed the Association Agreement with the EU in 2014 and Armenia did the same in 2017, creating an environment for cooperation with the EU ([Trade Policy Review: Armenia 2018](#); [Trade Policy Review: The Republic of Moldova 2022](#)).

The CIS region's export basket is less diversified in terms of both exporting products and trading partners. A significant share in the export basket is devoted to the supply of products from natural resources and agricultural products, while the main countries of destination are countries from the EU and China. The CIS region is heavily dependent on manufacturing imports: about 80% of the import basket. Trade within the CIS is relatively small, with increasing trade with other global entities. As of 2020, Belarus, Kyrgyzstan, and Tajikistan are major importers from CIS countries, with dominance of the Russian share, while Azerbaijan and Moldova are less dependent on Russian export. Additionally, Russia stands out as a major investor in Armenia, Belarus, and Kyrgyzstan. Economic freedom in CIS countries is reported as mostly unfree, while trade freedom is mostly free ([Index of Economic Freedom 2023](#)).

The trade policies of CIS countries are complexed with overlapping bilateral and multilateral trade agreements, and there is a big gap between active and inactive regional trade agreements (RTAs). As such, the CIS Cooperation Agreement, a regional integration agreement established in 1991, aims to promote economic cooperation and regional integration among its member states. Although the provisions of the CIS agreement are not active in terms of economic integration, the agreement is in force and represents one of the forms of pre-WTO regional cooperation agreements. The historical legacy of shared cultural and linguistic bonds, as well as common borders, has facilitated successful inter-country logis-

tics, decreased transaction costs, and promoted collaboration among CIS members. Each country has bilateral and multilateral agreements in force, with its own list of exceptions and special provisions. However, in reality, several RTAs do not match trade on the ground (Roberts and Wehrheim 2001).

When most CIS states entered the WTO, the region enhanced trade within the region through more comprehensive regional trade bounds than the CIS itself. This led to a long process of Eurasian integration, with the establishment of the Eurasian Economic Union (EAEU) in 2015. The founding members of the EAEU were the Russian Federation, Kazakhstan, and Belarus, with Kyrgyz Republic and Armenia joining later (Yeliseyev 2019). The EAEU Treaty builds upon previous agreements and treaties among the member countries of the CIS: the Treaty on a Free Trade Area (established in 1991), which aimed to promote free trade in services among CIS members; the Customs Union agreement between Kazakhstan, Russia, and Belarus (established in 1997), which sought to harmonize external trade policies and establish a common external tariff among the three countries; and the Common Economic Zone free trade agreement (established in 2004), which was signed by Belarus, Kazakhstan, the Russian Federation, and Ukraine. The regional integration agreement aimed to enhance trade between member states, eliminating trade barriers and creating a single market for the movement of goods and services. However, the EAEU has faced criticism among WTO members for trade concentration within the region, potentially hindering trade with other WTO members. The accession to the WTO was expected to facilitate trade beyond the CIS area, while the establishment of the EAEU has reinforced trade within the region. Braun et al. (2023) state that member countries were driven to integration due to functional economic reasons and the pressures brought about by economic interdependence. However, the process observed only a limited degree of political spillover. The absence of trust, characterized by the EAEU's non-democratic structure or potentially influenced by Russia's dominance, served as a significant constraint to the process. On one side is regionalism tightened with different bilateral agreements, economic integrations, and customs unions; on the other side, there is multilateralism in face of WTO membership (Roberts and Wehrheim 2001).

Academic research in the region primarily focuses on the EAEU as the sole long-term determinant of trade relationships (Tarr 2016; Bagdasarian and Pakhomov 2016; Vasilyan 2017). Analyzing the literature on the WTO's impact on each individual country, a study of the Kyrgyz Republic suggest that the impact of WTO membership is associated with the growth rate in the years following accession (Mogilevskii 2004). In contrast, Ismailova and Du (2017), analyzing trade and economic indicators for 20 years of WTO membership, argued that the Kyrgyz Republic did not benefit significantly from WTO membership. On average, scientific studies present WTO accession as having neither noticeable harm nor significant benefit to trade (Pomfret 2007a; Tai and Lee 2009; Muktar and Muktar 2019). Even though the country was the first CIS member in the WTO, it did not directly foster the development of trade given the lack of previous experience in the trade with WTO member countries and the relatively long distance for the delivery of goods (Marat 2014). Studies conducted on Moldova, partially assessing membership's influence, note a lack of negative trade effects four years post-accession while outlining tariff modifications implemented within Moldova (Cimpoies and Litvin 2005).

While the literature review on Kyrgyzstan and Moldova does not display prominent results, the literature on Tajikistani projects displays largely positive results. Khakimov (2013) explained that one of the reasons behind the Republic of Tajikistan's expectations to benefit from the WTO membership is that its main strategic allies, including China, Turkey, and Russian Federation, were already members, while the accession of the Republic of Kazakhstan was in the last stages. As a result, based on the natural trading partner hypothesis, there was an expected increase in trade volume and market liberalization (Khakimov 2013; Nikolaev and Mamadamonov 2017; Nazriev 2020).

A few scholars briefly describe the experience of the Republic of Armenia as a member of the WTO in dealing with specific aspects of economic growth. For example, Aliyev

(2014) argued that despite the expected perceived effectiveness of WTO membership in tackling domestic monopolies, the Republic of Armenia failed to experience this positive externality from accession. Hayrapetyan and Hayrapetyan (2016) also showed that WTO membership did not yield significant positive results, as the state experienced a trade balance deficit almost 15 years after accession. Additionally, researchers focusing on post-Soviet Union countries, particularly South Caucasus nations such as Azerbaijan, Georgia, and the Republic of Armenia, have discovered negative trade outcomes following WTO accession in the cases of Georgia and the Republic of Armenia (Suleymanov 2019). The findings suggest that while the WTO plays a significant role, its impact on trade development is uneven.

Academic literature on Kazakhstan's post-accession analysis shows more complicated results. Analysts postulate that WTO membership may have intensified the economic recession in Kazakhstan (Balzhigit and Jun 2018). Contrary to the notion that WTO membership negatively impacted Kazakhstan's economy, other factors are highlighted as major contributors to the downturn. The plunge in oil prices, in particular, and Kazakhstan's engagement with the Customs Union are identified as significant elements that worsened the terms of trade and subsequently slowed economic growth. The cause of the downturn was more rooted in Kazakhstan's heavy reliance on raw materials and its limited, undiversified trade avenues (Orazgaliyev 2018). This dependence and lack of diversification have made the economy more vulnerable to global market fluctuations, thus complicating the economic impacts following WTO accession. In contrast, the nation's GDP and overall welfare saw a rise as a direct consequence of WTO accession (Turakulov 2020).

Russia's trade volumes have expanded, but not as extensively as expected, largely due to macroeconomic factors and geopolitical tensions. Salnikov et al. (2018) found an increase in the number of exported products and trading partners, but also highlighted an increased concentration of Russian exports in energy resources, a trend contrary to the diversification typically expected from WTO accession.

The conflict between Russian Federation and Ukraine has had significant implications for not only global trade but also trade with CIS countries. Sanctions imposed since 2014 and expanded in 2022 by Western countries and countermeasures by Russia shifted trade dynamics and created trade barriers hardly avoided by WTO principles. Russia and Ukraine are significant exporters of commodities such as energy, crude oil, natural gas, and grains; heavily dependent trading partners were affected by the disruption. The least developed countries, which were heavily dependent on Russian and Ukrainian commodities, faced greater challenges as demand increased; consequently, prices increased and trade policy interventions in terms of export restrictions worsened the situation even more. These impacts were felt not only in terms of trade but also in the flow of investment, especially in CIS countries (Ruta 2022). On the other hand, this disturbance in trading relationships may be viewed as more of a realignment on a global scale (Farge 2023). While the logistics of trade became more complex and costly, developed nations were generally able to adapt through establishing new trading connections and turning to alternative suppliers.

Joining the WTO paves the way to increasing engagement with the global economy, while commitment to the WTO's guidelines facilitates the transition towards a market-based economy. Through the harmonization of domestic trading policies with international standards, countries fostered transparent and predictable business landscapes, making their economies more attractive to foreign investors. Additionally, CIS nations, particularly those heavily reliant on trade, have initiated efforts to broaden their range of exports and cultivate relationships with a more diverse set of trading partners. This strategy serves to mitigate potential risks associated with over-dependence on a single market.

Based on the literature gap and the above-mentioned CIS specificity, the implications of trade liberalization remain uncertain, and the behavior of CIS countries post-accession is yet to be determined. They may diversify exports, scale up trade relations, and leverage trade facilitation to cut production costs. Existing intra-regional trade among CIS countries

could lay the groundwork for trade expansion beyond the region, with WTO accession potentially catalyzing export growth and economic development.

In turn, this study investigates the following research questions:

1. Has WTO membership contributed to an enhancement in trade within the CIS region?
2. Has the CIS countries' accession to the WTO resulted in a trade diversion, either from the CIS or other countries not in the WTO?

In theory, countries in the WTO have more liberal trade policies, and membership decreases the cost of transactions. It suggests that the trade environment within the WTO is more beneficial than trade with non-members. Regarding CIS countries, the CIS region has already enhanced regionalism through trade cooperation and economic integration. Thus, CIS countries already have liberal trade policies among members, and WTO membership might be a step forward in terms of enhanced regionalism and global integration.

Thus, the hypotheses tested to answer the research questions are the following:

Hypothesis 1. *WTO membership has enhanced CIS countries' trade compared to non-WTO countries.*

Hypothesis 2. *WTO membership for CIS countries has resulted in a trade diversion from non-WTO members to WTO members.*

3. Methodology

This research is related to empirical studies of trade patterns in the post-Soviet area. The sample, in detail, explores six CIS member countries enjoying WTO benefits and three soon-to-be member countries at the negotiation stage.

This study analyzes a panel dataset that combines cross-sectional data and time-series data and captures both the cross-country differences and the within-country changes over time with a set of fixed effects to control for unobserved factors. A country pair fixed effect with time dummies was utilized to control time-varying factors influencing trade between country pairs. Once the natural causes of trade are considered via augmenting the standard model with a number of extra variables that affect trade, the research investigates the effect of membership on bilateral trade via regression.

To analyze the impact of CIS countries' entry into the WTO on bilateral trade within and outside the CIS region, this research applies the gravity model in international trade and follows the model specification outlined in various empirical studies (Rose 2004; Subramanian and Wei 2007; Tang and Wei 2009; Roy 2011). Incorporating both WTO and CIS dummy variables into the gravity model, this study analyzes the impact of WTO membership on intra-regional trade within the CIS and potential trade diversion due to WTO membership.

Data Collection and Model Specification

The sample for this study consists of 180 countries worldwide, out of which 164 are full WTO members. At the same time, the remaining countries are classified as non-members, including those currently in the accession negotiation process. The sample covers the period from 1990 to 2020. Since the WTO was established in 1995, all countries have a value of 0 prior to that year. After 1995, countries were assigned a value of 1, indicating WTO membership, based on their official accession announcement year.

Gravity data are derived from official international institutional sources or academic researchers' web pages. The complete dataset is classified into bilateral trade flow variables, trade facilitation variables, country-specific variables, geographic data, cultural variables, and macroeconomic indicators. The aggregated bilateral trade flow data are obtained from the International Monetary Fund's Direction of Trade Statistics, IMF's DOTS ([International Monetary Fund n.d.](#)). In contrast, disaggregated data are sourced from the United Nations' UN Common Trade webpage ([United Nations Comtrade n.d.](#)). Trade facilitation variables, including GATT/WTO membership, countries' year of accession, and the existence of RTAs, are collected from the WTO website ([WTO | Regional Trade Agree-](#)

ments n.d.). Country-specific binary variables, such as language, religion, colonial ties, and other cultural proximity proxies, are acquired from The Centre d'Études Prospectives et d'Informations Internationales, CEPII (CEPII—Gravity n.d.). Macroeconomic variables like GDP and population are collected from the World Bank Database (World Bank Open Data n.d.), while countries' 3-digit ISO codes and income group classifications are gathered from World Integrated Trade Solutions (WITS n.d.).

The geographic distance between trading partners was computed using their respective latitude and longitude coordinates. While manual calculations were performed, minor discrepancies in the results were found when compared to the CEPII database. To ensure the validity and reliability of the findings, the CEPII dataset was utilized for this study, which also incorporates additional bilateral information regarding shared languages and landlocked or colonial connections.

Furthermore, the study incorporates binary indicators for a country's membership in the WTO and the existence of RTAs between trading partners as trade facilitation variables in the gravity equation. The accession dates for WTO membership were obtained from the organization's official website, while information on active RTAs was gathered from the WTO Regional Trade Agreements Information System (WTO | Regional Trade Agreements n.d.). Additional variables were constructed to assess the impact of these trade facilitation measures (EAEU), with their coefficients being of primary interest in the analysis. While the use of binary indicators provides a straightforward method of incorporating these trade facilitation measures into the gravity equation, their limitations highlight the complexity of assessing the impact of trade agreements on bilateral trade flows.

The model specification is as follows:

$$\ln_{-}trade_{ij\tau} = \beta_0 + \beta_1 \ln_{-}dist_{ij\tau} + \beta_2 \ln_{-}GDP_{ij\tau} + \beta_3 \ln_{-}GDPper_{-}capita_{ij\tau} + \beta_4 \ln_{-}area_{ij\tau} + \beta_5 contig_{ij\tau} + \beta_6 lang_{ij\tau} + \beta_7 col_{-}dep_{ij\tau} + \beta_8 landl_{ij\tau} + \beta_9 islands_{ij\tau} + \beta_{10} rta_{-}wto_{ij\tau} + \beta_{11} \ln(oil_{-}price_{\tau}) + y_1 both_{-}wto_{ij\tau} + y_2 one_{-}wto_{ij\tau} + y_3 both_{-}cis_{-}wto_{ij\tau} + y_4 one_{-}cis_{-}wto_{ij\tau} + y_5 both_{-}wto_{-}one_{-}cis_{ij\tau} + y_6 one_{-}wto_{-}both_{-}cis_{ij\tau} + \varepsilon_{ij\tau}$$

where:

$\ln_{-}trade_{ij\tau}$ —natural logarithm of bilateral trade between country i and country j at time t ;

$\ln_{-}dist_{ij\tau}$ —natural logarithm of the distance between country i and country j at time t ;

$\ln_{-}GDP_{ij\tau}$ —natural logarithm of the GDPs of countries i and j at time t ;

$\ln_{-}GDPper_{-}capita_{ij\tau}$ —natural logarithm of the GDP per capita of countries i and j at time t ;

$\ln_{-}area_{ij\tau}$ —natural logarithm of the land area of countries i and j at time t ;

$contig_{ij\tau}$ —binary variable indicating whether two countries share a contiguous border (0 otherwise);

$lang_{ij\tau}$ —binary variable indicating whether countries share a common official language (0 otherwise);

$col_{-}dep_{ij\tau}$ —binary variable indicating whether two countries had a colonial or dependent relationship (0 otherwise; includes post-Soviet dependency);

$landl_{ij\tau}$ —binary variable indicating whether both countries are landlocked (0 otherwise);

$islands_{ij\tau}$ —binary variable indicating whether both countries are an island nation (0 otherwise);

$rta_{-}wto_{ij\tau}$ —binary variable indicating whether countries are members of a trade agreement (0 otherwise);

$\ln(oil_{-}price_{\tau})$ —natural logarithm of the oil price at time t ;

$Both_{-}wto_{ij\tau}$ —binary variable which is unity if both i and j are WTO members at time t ;

$One_{-}wto_{ij\tau}$ —binary variable which is unity if either i or j is a WTO member at time t .

The following four binary variables account for the complex interplay between regional affiliation (CIS) and global trade integration (WTO membership) in shaping trade

patterns, providing a comprehensive framework to test the effects of WTO membership on trade within the CIS region and whether it has resulted in a trade diversion.

both_cis_wto_{ijτ}—If both trading partners are CIS countries and WTO members, this variable is set to one; otherwise, it is set to 0. This is important in answering the first research question as it focuses on the effect of WTO membership on intra-CIS trade. If the coefficient is positive and statistically significant, it suggests that WTO membership has boosted trade among CIS countries. For instance, a positive coefficient would imply that country pairs such as Armenia and Kazakhstan, both being CIS and WTO members, have experienced an increase in trade relative to non-WTO and non-CIS pairs.

both_wto_one_cis_{ijτ}—If both countries are WTO members, and one of them is a CIS country, the variable is set to one, and otherwise it is set to 0. This clarifies the overall impact of WTO membership on trade involving one CIS country and other WTO members not in CIS. A positive and statistically significant coefficient suggests that being a WTO member has enhanced a CIS country's trade with other WTO members relative to non-WTO pairs.

one_cis_wto_{ijτ}—If one trading partner is a CIS country and a WTO member and the other trading partner is non-CIS and non-WTO, the variable is set to one or otherwise 0. This variable directly addresses the second research question. A negative and statistically significant coefficient would imply that WTO membership for a CIS country has led to a diversion of trade from non-WTO members to other WTO members, signifying a preference for trading with WTO partners.

one_wto_both_cis_{ijτ}—If one trading partner is a WTO member among two CIS countries, the variable is coded 1, and otherwise 0. It captures the potential trade diversion within the CIS region due to WTO membership. A negative and statistically significant coefficient would suggest that WTO membership has led to a shift in trade preference away from non-WTO CIS members.

ε_{ijt} —omitted other variable which influences bilateral trade flow.

4. Results

The results are first presented for CIS as a region before presenting the individual countries' results within the CIS. The data were analyzed using a cross-sectional time series approach, capturing variations between countries and variations over time. Through including a set of fixed effects, the analysis isolates WTO membership's impact on the trade outcomes of CIS countries.

4.1. Interpretation of the Findings: WTO Impact on CIS Countries' Trade

A dummy variable for CIS countries has been included in the model to specifically identify the effects associated with the region while controlling for the WTO's impact on all other countries, referred as *both_wto* and *one_wto*.

In Table 1, specification (1) provides regression outcomes using exporter and importer time fixed effects, which control for unobservable time-specific factors affecting exporting and importing parties. These factors may include different national or global economic and political circumstances, such as exchange and interest rates, recession or economic boom, elections, changes in trade policy, etc., that affect both countries in a given year.

In contrast, specification (2) provides regression outcomes of country pair fixed effects, which capture unobserved factors that are specific to pairs of countries and consistent over time. These factors may include connections between pairs that affect trade relationships such as cultural ties and historical trade patterns, geographical proximity, shared language, colonial ties, etc. Meanwhile, specification (3) provides regression outcomes using country pair fixed effects with time dummies, which control the same factors as country pair fixed effects but allows these dimensions to change over time, such as trade agreements signed in a specific year.

Table 1. WTO's impact on CIS trade: reference group non-WTO members trade, 1990–2020.

	(1)	(2)	(3)
	ln_Trade	ln_Trade	ln_Trade
both_wto	0.08 *** (0.013)	0.143 *** (0.009)	0.161 *** (0.027)
one_wto	0.124 *** (0.016)	−0.006 (0.01)	−0.014 (0.025)
both_cis_wto	0.34 (0.242)	−0.505 *** (0.161)	−0.5 *** (0.162)
both_wto_one_cis	0.041 (0.058)	−0.242 *** (0.025)	−0.212 *** (0.025)
one_cis_wto	−0.266 ** (0.107)	−0.501 *** (0.061)	−0.455 *** (0.063)
both_cis_one_wto	−0.018 (0.215)	0.064 (0.131)	0.033 (0.131)
ln_gdp	0.451 *** (0.066)	0.421 *** (0.011)	0.625 *** (0.014)
ln_gdp_per_capita	0.017 (0.066)	0.137 *** (0.014)	0.014 (0.015)
ln_oil_price	0.083 *** (0.009)	−0.025 *** (0.006)	
rta_wto	0.114 *** (0.019)	0.201 *** (0.012)	0.274 *** (0.012)
eaeu	−0.042 (0.174)	0.247 (0.2)	0.325 (0.2)
Observations	700,565	700,565	700,565

Standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$.

Specification (1) fails to control for all time-invariant unobservable factors, while specifications (2) and (3) represent the gold standard, and primary interpretations refer to coefficients on specification (3).

As depicted in Table 1, it is evident that CIS countries experience statistically significant negative outcomes: when both CIS trading partners are in the WTO (−0.492 ***), CIS countries trade with other WTO members (−0.212 ***), and CIS countries trade with non-WTO members (−0.455 ***). The trade dynamics change when CIS countries that are part of the WTO engage in trade with non-WTO CIS members (0.094), exhibiting a positive impact in comparison to trade with non-WTO members. However, these results are not due to WTO membership. The influence of the EAEU is discernibly positive (0.247 and 0.318), indicating that regional trade tends to be positive.

The results suggest that if both trading partners are CIS and WTO members, their trade is less compared to when they are non-CIS and non-WTO members. This answers the first research question and suggests that WTO membership has not boosted trade among CIS countries. Moreover, if both countries are WTO members, but only one of them is a CIS country, their trade is also less than that of non-WTO pairs. This implies that being a WTO member does not necessarily enhance a CIS country's trade with other WTO members. Furthermore, if one trading partner is a CIS and WTO member, and the other is a non-CIS and non-WTO member, their trade is less than that of other country pairs. This addresses the second research question, implying that WTO membership for a CIS country has led to a diversion of trade away from non-WTO members. Finally, there is no strong evidence to suggest that if one of the two CIS countries is a WTO member, there is a shift in trade preference away from the non-WTO CIS member.

Discussion and Potential Explanations of the Outcomes

These results are somewhat contradictory when compared to the mainstream understanding of the effects of WTO membership, which suggests that becoming a WTO member would increase trade. With respect to its alignment with previous existing research on CIS

countries, such comprehensive research has not been performed before, and this study could potentially provide a new perspective on the impact of WTO membership on CIS trade.

This block of analysis aims to address the complex question of how WTO membership affected the region's trade characterized by deep historical roots, a dominant political power, and integration agreements. Linking these findings with a broader theory of regionalism and multilateralism, and examining them through the lens of either substitutes or complements, the results indicate a strong preference for regionalism over multilateralism. Political power and the influence of the EAEU have halted EU integration (Falkowski 2017), showing that regionalism is persistent. The results might reflect a broader pattern where historical trading paths, political will, and power continue to shape trade policy in the region. WTO membership does not appear to be either a complement or a substitute for regional trade in the CIS area.

Interdependence among the CIS nations began to take shape even before the establishment of the CIS itself. Considering the CIS region as a stronghold of regionalism is challenging (Olcott et al. 1999; Esengul 2009; Kubicek 2009). Thus, scholars distinguish between "regionalism" and "new regionalism". The latter entails more comprehensive integration encompassing economic, political, and protective dimensions, not only focusing on free trade policy. Within the CIS region, political leaders have initiated new regionalism, evidenced by various acts of customs union formation. Such integrations raised concerns about the recently gained sovereignty of CIS nations (Bohr 2004). The perceived lack of voice within the CIS spurred countries to seek paths toward multilateralism.

The motivation for this shift to a multilateral system is driven by the desire to reduce the economic and political power of traditional trading partners (Roberts and Wehrheim 2001). Many CIS countries expressed a willingness to join the WTO ahead of Russia, seeking to extract concessions from Russia due to restrictive measures and to fortify trade leverage over other CIS trading partners that remained outside of the WTO (Kubicek 2009). Consequently, bilateral agreements, rather than plurilateral arrangements, have come to dominate the CIS region's trade policies.

Kubicek (2009) identifies the failure of the CIS as an institution. Moreover, in the international arena, the CIS was a distinct region, characterized by historical interdependence. The persistent dominance of Russian hegemony over certain states was projected to give a breath to the economic integration of certain states, as seen in the later formation of the EAEU. Consequently, the formation of the EAEU marked an advancement in new regionalism, gaining influence in regional trade.

Scholars debate on the growing number of RTAs and their broad implications, including whether they create trade or divert it from non-RTA members (Bhagwati 1992; Pomfret 2007b, 2021; Baldwin and Seghezza 2010; Powell and Low 2011; Elliott 2018; Bilas 2018). Given the region's weak comparative advantage in the international arena and its undiversified export portfolio (Drobot 2016; Hartwell 2016; Falkowski 2017; Macerinskiene and Sakhanova 2011; Weber and Yang 2011; Mamadiev 2013), the establishment of the EAEU is seen as a protectionist measure to enhance production and global competitiveness.

Currently, the scope of RTAs extends beyond trade barriers (Rodrik 2018). With the decreasing central role of the WTO, countries are gravitating towards protectionism, and members are less willing to liberalize unilaterally (Chase 2003; Gunnella and Quaglietti 2019; Evenett and Fritz 2019). Most of the members call for reforms to the WTO (Caporal and Gerstel 2018; Kumar and Kandžija 2018). In the absence of progress within the WTO, RTAs have emerged as a viable alternative option (Sutton 2007). While RTAs' role as a stumbling block to multilateralism remains underexplored, there are instances of RTAs serving as a building block for multilateralism (Vitalis 2015). Bilas and Franc (2016) are more optimistic and posit that regionalism and multilateralism are expected to continue to coexist.

4.2. Interpretation of the Findings: WTO's Impact on Individual Countries' Trade

In order to investigate the effect of each country's exports, the CIS region was disaggregated by countries. This was carried out to gain a more detailed understanding of the impact of individual countries' trade, which would not have been possible through simply analyzing the aggregate data of the CIS region. Through disaggregating the CIS region by countries, this study accounted for the variation in the trade performance of individual countries within the region and how that variation might affect the overall relationship between trade and the WTO variable. The same approach has been utilized for each specific country. During the regression analysis, the study included a unique identifier, or "dummy variable," for each country while ensuring a consistent sample size. Dummy variables of individual countries were established through an interaction of variables: both_cis_wto, both_wto_one_cis, one_wto_cis, and both_cis_one_wto with CIS countries, based on whether the country in focus is Russia (RUS), Kazakhstan (KAZ), Armenia (ARM), Moldova (MDA), Kyrgyzstan (KGZ), or Tajikistan (TJK). Therefore, the regression analysis was performed via integrating these interactions between countries and controlling for regional variables, comparing these countries to non-WTO member countries.

Table 2 presents the regression analysis disaggregated by country (Russia, Kazakhstan, Tajikistan, Kyrgyzstan, Armenia, and Moldova). This level of disaggregation by country provides an understanding of trade patterns within WTO and CIS countries. The regression results are presented only for country pairs and time-fixed effects adhering to gold-standard controls, accounting for all country-pair-specific time-invariant unobservable factors.

Table 2. WTO's impact on individual CIS countries: reference group non-WTO members, 1990–2020.

	ARM	RUS	KGZ	MDA	KAZ	TJK
	In_Trade	In_Trade	In_Trade	In_Trade	In_Trade	In_Trade
both_wto_both_cis	0.871 *** (0.338)	−0.453 (0.325)	−0.267 (0.374)	−0.027 (0.419)	−0.25 (0.357)	0.389 (0.412)
both_wto_one_cis	0.442 *** (0.139)	0.47 *** (0.102)	0.326 ** (0.163)	0.291 ** (0.12)	−0.281 ** (0.128)	−1.451 *** (0.184)
both_cis_one_wto	0.516 * (0.291)	0.083 (0.2)	0.121 (0.264)	0.069 (0.356)	0.084 (0.284)	−1.364 *** (0.52)
one_wto	0.644 * (0.348)	0.389 (0.281)	0.39 (0.296)	0.273 (0.303)	−0.92 ** (0.453)	−0.949 ** (0.47)
EEAU	0.297 ** (0.149)	0.367 ** (0.16)	0.356 ** (0.153)		0.36 ** (0.166)	
Observations	700,565	700,565	700,565	700,565	700,565	700,565

Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Despite the general negative impact of the WTO on the CIS, a more detailed, disaggregated analysis reveals varied outcomes. WTO membership enhanced trade for Armenia, both within the region (0.871 ***) as well as with global partners (0.442 ***), while trade with non-members is also positive both with the region (0.516 *) as well as with other non-WTO countries (0.644 *). The results are statistically significant and attributable to WTO membership. The Russian Federation trades with WTO members other than CIS countries, showing that the country benefits from WTO membership and moves successfully from regional trade to global trade (0.47 ***). While trade with CIS countries in the WTO shows a negative sign (−0.354), this result is not due to WTO membership; EEU trade becomes positive and statistically significant (0.367 **). The same conclusion can be made for Kyrgyzstan and Moldova. While trade with CIS countries in the WTO shows a negative sign (−0.267 and −0.027), this result is not due to WTO membership; trade with WTO members other than CIS countries shows results of (0.326 ** and 0.291 **). These results indicate that WTO membership has a negative impact on Kazakhstan (−0.281 **) and Tajikistan (−1.451 ***). Kazakhstan, however, demonstrates a negative outcome in

trade with non-WTO members (-0.126), suggesting that the unfavorable results are not exclusively tied to WTO membership. Contrarily, Tajikistan exhibits positive trade results with CIS countries (0.389). Thus, it can be seen that the region's negative result regarding WTO membership is mostly weighted to Kazakhstan's and Tajikistan's experience.

It is important to mention that when the CIS was investigated as a region, the EAEU coefficient was positive but not statistically significant, while once countries were disaggregated, EAEU trade became positive and statistically significant. The difference may be due to the fact that the trend appears in different groups of data but disappears or reverses when these groups are combined. When the CIS examined as a whole, the coefficient for the EAEU was positive but not statistically significant. This could mean that while there was a general trend towards a positive impact on trade within the EAEU, the impact was not strong enough to be statistically significant when considering the CIS region as a whole. However, when countries are disaggregated and analyzed individually, the EAEU's impact on trade becomes positive and statistically significant.

The WTO's different impacts in different countries might be also explained by this fact. WTO impact varies significantly among individual countries. Some countries benefit more from membership than others, and these differences can become obscured when data are aggregated into the CIS. Some countries might be outliers with exceptionally high or low impacts from the WTO. When data are aggregated, these outliers could have a significant influence on the overall trend. Moreover, there could be some hidden or overlooked variables that are affecting trade in individual countries but which cannot be seen when data are aggregated. For CIS countries, specific industries are prevalent in each country and affect the impact on trade.

Discussion and Potential Explanations of the Outcomes

A possible explanation for negative results is heterogeneity within the CIS region. There are significant differences among CIS countries in their economic structures and their ability to leverage the benefits of WTO membership. These differences could potentially diminish the positive effects of WTO membership when the CIS is considered as a whole. Moreover, WTO membership might lead to trade diversion, where trade is diverted to non-WTO members. While trade with non-CIS members which are not in WTO shows positive impact (0.033), the results are not statistically significant, and one of the possible explanations is the establishment of the EAEU. Countries might divert trade from WTO members and trade more with the EAEU (there are four WTO members, and Belarus is not in the WTO; the positive coefficient on trade with non-WTO CIS members serves as potential explanation). The EAEU coefficient shows a positive outcome on trade, and the possible correlation of the Russian Federation (WTO accession-2012) and Kazakhstan's (WTO accession-2015) accession to the WTO with the establishment of the EAEU (established in 2015) might be a reason trade was diverted from WTO members. Moreover, while WTO membership could lead to trade creation through reducing barriers and fostering more trade with other WTO members, it could also lead to trade destruction through displacing local industries unable to compete in the global market. These dynamics could be more pronounced within the CIS region.

Kazakhstan and Tajikistan show a negative trend. The observational periods can potentially explain such deviations. The observation period for Kazakhstan is only 4 years, and for Tajikistan, it is 6 years. As WTO membership effects take time to materialize, this short observation period might not be enough to capture the benefits of WTO accession. The results are in line with Kalaganova's 2019 findings, stating that a decrease in trade is a natural phenomenon in the early stage and that countries need 5–10 years to adjust to a new trade policy (Kalaganova 2019). Balzhigit and Jun (2018) found a 24% drop in trade surplus due to increased import and decreased export attributable to a lack of competitiveness in the global market. Kazakhstan conducts global trade with the same products as it did without being in the WTO, and WTO membership will not harm or benefit the country,

because of the EAEU. At the same time, economists see WTO membership as a matter of status rather than economic benefit ([Turakulov 2020](#)).

Moreover, regarding economic and production factors, Tajikistan, classified as a lower-middle-income economy, has a relatively weak production base, which could limit its ability to immediately benefit from WTO membership. The necessary adjustments to fully exploit the opportunities from WTO membership might take more time for an economy like Tajikistan's. Kazakhstan is in a transitional period following its WTO accession. During this time, the country is aligning its practices and regulations to WTO standards, which could temporarily disrupt trade flows. In addition, the results are consistent with [Turakulov 2020](#), stating that right after accession, Kazakhstan experienced economic recession, and GDP decreased due to a reliance on raw materials. Kazakhstan's trade is heavily dependent on commodities, particularly oil, which accounts for about 80% of its trade. As the country works to diversify its economy, short-term disruptions in trade may occur. Moreover, Kazakhstan's trade is also influenced by its membership in the EAEU, which could be providing more favorable conditions for trade, especially preferential tariffs, thus inclining the balance away from both WTO and non-WTO members.

Potential expectations for Central Asian countries are that they are more isolated from significant trading partners. It appears more beneficial for most CIS countries to trade within the EAEU, where tariffs are more preferential compared to the WTO. In addition, the political situation with the Russian Federation and sanctions from the EU and the USA also shape trading opportunities for Central Asian countries. The efficiency of product transit through Russian territory has been disrupted, causing logistics issues. As a result, Central Asian countries are currently struggling to meet domestic market demand and are working on import substitution despite already having a focus on exports.

Observations from other CIS countries such as Kyrgyzstan and Moldova show similar positive trends in trade development with WTO members. Armenia presents a diversified trade pattern, which could be an example for other CIS countries aiming to expand their trade networks. Ultimately, these results emphasize the importance of considering individual country contexts when assessing the impact of WTO membership on trade. It is clear that while WTO membership can generally promote trade, this effect is not uniform across all countries and can be influenced by various factors.

4.3. EAEU and Free Trade Agreements

The formation of the EAEU in 2015 marked a significant milestone in the economic integration process of the member states—Russian Federation, Kazakhstan, Belarus, Armenia, and the Kyrgyz Republic. Prior to the EAEU, the Customs Union and the Common Economic Space were formed to facilitate trade and economic cooperation among the three founding countries. While four of the five EAEU members are already members of the WTO, Belarus is still negotiating its accession ([Eurasian Economic Union n.d.](#)).

Analysis indicates a growing proportion of free trade agreements (FTAs), making up 40% of all trade agreements, while trade agreements exclusively devoted to service provision are on a decline, integrating into deeper trade relationships instead. The impact of FTAs is substantial, boosting trade by nearly 26% for new WTO members. The typical FTA abolishes import tariffs in most industries, and one advantage of such agreements is their flexibility, allowing members to uphold independent trade policies. This highlights the critical role of FTAs in promoting international trade, which makes their adoption highly recommended ([WTO | Regional Trade Agreements n.d.](#)).

Meanwhile, the CIS faces its own set of challenges. Difficulties in signing bilateral FTAs between individual nations and the EAEU arise due to regulations on the free circulation of goods across the EAEU member countries. This creates a significant hindrance to the negotiation and execution of comprehensive agreements offering preferential treatment to each country, likely leading to protracted delays in signing such agreements. However, [Baena-Rojas and Olarte \(2020\)](#) state that Russian Federation, Kazakhstan, and Armenia are among the top ten PTA-granting nations providing unilateral tariff preferences to over

half the developing nations globally. The authors come to the interesting conclusion that, even though tariff concessions might be granted through PTAs, developing economies are more inclined to negotiate and sign FTAs to avoid losing benefits and enhance business cooperation. One of the recommendations of the authors for developing nations is to enhance economic indicators to ensure greater reciprocity and to sign FTAs ([Baena-Rojas and Olarte 2020](#)).

Thus, the EAEU established FTAs with Iran, Serbia, and Vietnam. The trade agreement with Iran, signed in 2018, was a preliminary three-year pact aimed at creating a free trade area, covering a broad range of goods and services, investments, intellectual property, and technical barriers to trade. It aimed to gradually reduce and eradicate tariffs. The FTA with Serbia, signed in October 2019, provides for liberalization in the trade of goods and services and cooperation in investment, intellectual property, and government procurement areas. Similarly, the FTA with Vietnam, signed in May 2015, covers a broad spectrum, including trade in goods and services, investment, intellectual property, and government procurement, with provisions for reducing and eliminating tariffs.

Although FTAs aim to enhance trade relations, they must adhere to non-discrimination principles under WTO rules. The Most-Favoured-Nation (MFN) clause mandates that any benefit granted by one WTO member to another must be extended to all members. They must also abide by WTO transparency rules, requiring public notification of all trade agreements, and regulations preventing unfair trade practices. However, FTAs can sometimes lead to complex overlapping trade rules, raising transaction costs. Hence, the WTO plays a vital role in ensuring FTAs conform to international trade rules and do not lead to unfair or discriminatory trade practices. It also provides a mechanism to resolve disputes arising from the implementation of FTAs.

4.4. Robustness Check

The findings in Table 1 show interesting results with regard to oil price coefficients, with an inverse relationship of oil price and international trade. When oil price increases, international trade decreases. For the purpose of a robustness check, the regression model was tested using oil price's interaction with distance. [Nanovsky \(2019\)](#) investigates the role of distance and oil prices in international trade. The main finding of the study is that when oil prices rise, international trade becomes more localized. This is because high oil prices increase the cost of transportation, particularly over long distances. Therefore, when oil prices are high, countries are more likely to trade with nearby nations to save on shipping costs. Conversely, when oil prices fall, trade becomes more dispersed because it is cheaper to transport goods over longer distances. One implication of these findings is that isolated countries (those far from other major economies) are more affected by changes in oil prices. They benefit more when oil prices decrease (because it becomes cheaper for them to trade with distant countries), but they also suffer more when oil prices increase. The geographical remoteness of CIS countries and their extended distances to major trade partners make regional trade considerations especially pertinent. Therefore, to ensure the robustness of the analysis, the research incorporated interaction effects into the model. The results indicate that increases in oil prices actually reduce trade volumes. As a consequence, regional trade becomes more dominant, and trade among CIS countries tends to be more localized ([Nanovsky 2019](#)).

4.5. Policy Implications

Based on this study's results, the following policy implications might enhance the trade development of CIS countries. To fully benefit from a multilateral trading system and enhance trade in the region, it is crucial for all CIS countries to become members of the WTO. This is particularly important given that Belarus, despite being part of the EAEU, is not a WTO member and provides some obstacles in terms of tariff adjustments. The research by Falkowski in 2017 indicates that the comparative advantages of the Russian Federation and Kazakhstan are reduced if natural resources are not taken into account.

Therefore, there is a need to diversify export portfolios and reduce the dependency on the export of raw materials. Despite the fact that RTAs have faced criticism, their role in boosting trade is essential, and it is suggested to engage in RTAs that do not discriminate against other WTO members. Trade strategies should go beyond the regional context and see the perspectives of trading with other WTO members. Furthermore, fostering innovation and technology adoption is essential. Investment in research and development, as well as the incorporation of new technologies in industries with growth potential, could significantly improve competitiveness and boost the export performance of CIS countries.

5. Conclusions

Despite the fact WTO membership shows a positive outcome for trade, the CIS region's results deviate from global implications. To sum up, WTO membership has not boosted trade within the CIS region. Rather, new regionalism opened by the EAEU's establishment plays a significant role in shaping trade dynamics in the region. WTO membership has not been effective in increasing trade within the CIS bloc, and it does not seem to enhance trade between CIS countries and other WTO members. Curiously, investigating the CIS region, the conclusions suggest a diversion of WTO member trade. However, there is not compelling evidence to suggest a shift in trade preference within the CIS region due to WTO membership.

However, a closer look reveals different outcomes at the country level. Armenia saw its trade boosted due to WTO membership, both regionally and globally. Likewise, Russia, Kyrgyzstan, and Moldova show positive trade with WTO members outside the CIS region, suggesting they are benefiting from WTO membership and transitioning successfully from regional to global trade. The overall negative impact on the CIS region from WTO membership is primarily influenced by the experiences of Kazakhstan and Tajikistan.

Author Contributions: Conceptualization, M.T., S.N. and S.O.; methodology, S.N.; software, M.T.; validation, M.T., S.N. and S.O.; formal analysis, M.T.; investigation, M.T. and S.N.; resources, M.T.; data curation, M.T.; writing—original draft preparation, M.T.; writing—review and editing, M.T., S.N. and S.O.; visualization, M.T. and S.O.; supervision, S.N. and S.O.; project administration, M.T., S.N. and S.O. All authors have read and agreed to the published version of the manuscript.

Funding: This research is funded by the Science Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan (Grant No. AP13068148).

Informed Consent Statement: Not applicable.

Data Availability Statement: Gravity data are derived from official international institutional sources or academic researchers' web pages. [United Nations Comtrade \(n.d.\)](https://comtradeplus.un.org/TradeFlow). Trade Data. Retrieved 26 May 2020, from <https://comtradeplus.un.org/TradeFlow> (accessed on 26 May 2020). [CEPII—Gravity \(n.d.\)](http://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=8). Retrieved 21 May 2020 from http://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=8 (accessed on 21 May 2020). [WITS \(n.d.\)](https://wits.worldbank.org/datadownload.aspx?lang=en). <https://wits.worldbank.org/datadownload.aspx?lang=en>. Retrieved 21 May 2020, from <https://wits.worldbank.org/datadownload.aspx?lang=en> (accessed on 21 May 2020). [World Bank Open Data \(n.d.\)](https://data.worldbank.org/). World Bank Open Data. Retrieved 21 May 2023, from <https://data.worldbank.org/> (accessed on 21 May 2023). [WTO | Regional Trade Agreements \(n.d.\)](http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx). Retrieved 21 May 2020, from <http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx> (accessed on 21 May 2020).

Conflicts of Interest: The authors declare no conflict of interest.

References

- Aliyev, Khatai. 2014. Expected Macroeconomic Impacts of the Accession to WTO on Azerbaijan Economy: Empirical Analysis. Doctoral dissertation, Eastern Mediterranean University (EMU)-Doğu Akdeniz Üniversitesi (DAÜ), Famagusta, Cyprus.
- Baena-Rojas, Jose Jaime, and Susana Herrero Olarte. 2020. From preferential trade arrangements to free trade agreements: One of the downturns of cooperation in international relations? *Social Sciences* 9: 139. [[CrossRef](#)]
- Bagdasarian, Kniaz, and Alexander Pakhomov. 2016. Issues regarding EAEU members participation in the WTO activity. *Social Science Research Network*. [[CrossRef](#)]

Baldwin, Richard E., and Elena Seghezza. 2010. Are Trade Blocs Building or Stumbling Blocs? *Journal of Economic Integration* 25: 276–97. Available online: <http://www.jstor.org/stable/23000977> (accessed on 27 July 2023). [CrossRef]

Balzhigit, Assilov, and Yan Zhi Jun. 2018. Impact of WTO Membership on the Kazakhstan's Export. *International Journal of Business Marketing and Management* 3: 67–71.

Bhagwati, Jagdish N. 1992. Regionalism versus Multilateralism. *The World Economy* 15: 535–56. [CrossRef]

Bilas, Vlatka. 2018. World Trade Organization and regional economic integrations: Together in future or not? *Međunarodne studije* 18: 49–64.

Bilas, Vlatka, and Sanja Franc. 2016. The effects of mega-regional trade agreements on the multilateral trading system. *Časopis za ekonomiju i tržišne komunikacije/Economy and Market Communication Review* 6: 212–32.

Bohr, Annette. 2004. Regionalism in Central Asia: New geopolitics, old regional order. *International Affairs* 80: 485–502. [CrossRef]

Braun, Mats, Anna Gromilova, and Lea Melnikovová. 2023. Understanding Economic integration in the Eurasian Economic Union—The Relevance of Integration Theories. *Journal of Contemporary European Studies*, 1–14. [CrossRef]

Caporal, Jack, and Dylan Gerstel. 2018. WTO Reform: The Beginning of the End or the End of the Beginning? Available online: <https://www.csis.org/analysis/wto-reform-beginning-end-or-end-beginning> (accessed on 26 September 2019).

CEPII—Gravity. n.d. Available online: http://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=8 (accessed on 21 May 2020).

Chase, Kerry A. 2003. Economic Interests and Regional Trading Arrangements: The Case of NAFTA. *International Organization* 57: 137–74. [CrossRef]

Cimpoies, Dragos, and Aurelia Litvin. 2005. Consequences of joining the WTO on the agricultural foreign trade of the Republic of Moldova. Paper presented at the IAMO Forum 2005 “How effective is the invisible hand? Agricultural and Food Markets in Central and Eastern Europe”, Halle, Germany, June 16–18.

Drobot, Elena Valerievna. 2016. Research of the economic potential of the Eurasian Economic Union: Competitiveness factors and threats to the economic security. *Russian Journal of Entrepreneurship* 17: 1407–28.

Elliott, Kimberly Ann. 2018. The WTO and regional/bilateral trade agreements. In *Handbook of International Trade Agreements*. London: Routledge, pp. 17–28.

Esengul, Chinara. 2009. *Politics of Regionalism in Central Asia*. Bishkek: Institute for Integration of International Educational Programs.

Eurasian Economic Union. n.d. Eurasian Economic Union. Available online: <http://www.eaeunion.org/?lang=en#about> (accessed on 27 July 2023).

Evenett, Simon J., and Johannes Fritz. 2019. *Jaw Jaw Not War War, Prioritising WTO Reform Options. The 24th Global Trade Alert Report*. London: Centre for Economic Policy Research.

Falkowski, Krzysztof. 2017. Long-term comparative advantages of the Eurasian Economic Union member states in international trade. *International Journal of Management and Economics* 53: 27–49. [CrossRef]

Farge, Emma. 2023. Ukraine War's Impact on Trade Not As Bad As Expected: WTO. *Reuters*. February 23. Available online: <https://www.reuters.com/world/europe/ukraine-wars-impact-trade-not-bad-expected-wto-2023-02-23/> (accessed on 27 July 2023).

Gunnella, Vanessa, and Lucia Quaglietti. 2019. The economic implications of rising protectionism: A euro area and global perspective. In *Economic Bulletin*. Issue 3/2019. Frankfurt: European Central Bank.

Hartwell, Christopher A. 2016. Improving competitiveness in the member states of the Eurasian Economic Union: A blueprint for the next decade. *Post-Communist Economies* 28: 49–71. [CrossRef]

Hayrapetyan, Grigor R., and Viktoriya Hayrapetyan. 2016. The foreign trade of Armenia with main partners. *Research Result. Economic Research* 2: 3–7.

Index of Economic Freedom. 2023. Index of Economic Freedom. The Heritage Foundation. Available online: <https://www.heritage.org/index/heatmap> (accessed on 23 August 2023).

International Monetary Fund. n.d. Principal Global Indicators. Available online: <https://data.imf.org/regular.aspx?key=61013712> (accessed on 26 May 2020).

Ismailova, Aizhan, and Yulan Du. 2017. The eve of the 20th anniversary of Kyrgyz Republic's membership in the WTO: Priorities, consequences and prospects. Paper presented at the Second International Conference on Economic and Business Management (FEBM 2017), Shanghai, China, October 21–23.

Kalaganova, Nursulu. 2019. Joining the WTO is a Step Towards an Economy Based on Innovations in the Competitiveness of Kazakhstan Products. Available online: <https://articlekz.com/article/20322> (accessed on 27 July 2023).

Khakimov, Parviz. 2013. The Impact of WTO Accession Growth on Agricultural Sector of Tajikistan (No. 1611-2016-134575). Available online: https://ageconsearch.umn.edu/record/159111/files/Khakimov_new.pdf (accessed on 27 July 2023).

Kubicek, Paul. 2009. The Commonwealth of Independent States: An example of failed regionalism? *Review of International Studies* 35 S1: 237–56. [CrossRef]

Kumar, Andrej, and Vinko Kandžija. 2018. Is there still a future to the regional trade agreements? *Zbornik radova Ekonomskog fakulteta Sveučilišta u Mostaru*, 105–30. [CrossRef]

Macerinskiene, Irena, and Gaukhar Sakhanova. 2011. National economy competitiveness of Kazakhstan Republic. *Engineering Economics* 22: 292–99. [CrossRef]

MacPhee, Craig R., and Wanasin Sattayanuwat. 2014. Consequence of regional trade agreements to developing countries. *Journal of Economic Integration* 29: 64–94. [CrossRef]

Mamadiev, Bedelbai. 2013. Competitiveness analysis of Kyrgyzstan using Porter's diamond. *Journal of Qafqaz University* 2: 131–37.

Marat, Erica. 2014. Kyrgyz Republic: China's Regional Playground? In *Beijing's Power and China's Borders*. London: Routledge, pp. 145–60.

Mogilevskii, Roman. 2004. Is Accession to the World Trade Organization Worthwhile? The Experience of Kyrgyzstan. *Problems of Economic Transition* 47: 68–73.

Muktar, Smeets, and Djumaliev Muktar. 2019. Kyrgyz Republic and structural reforms: Twenty years of wto membership. *Вестник Санкт-Петербургского университета. Экономика* 35: 513–42.

Nanovsky, Simeon. 2019. The impact of oil prices on trade. *Review of International Economics* 27: 431–47. [CrossRef]

Nazriev, Sino. 2020. An investigation of variation and impact of interest rate in commercial banks after accession to the World Trade Organisation (WTO): The case study of Republic of Tajikistan. Doctoral dissertation, University of the West of Scotland, Glasgow, UK.

Nikolaev, Andrey, and Umed Mamadamonov. 2017. The Impact of the WTO Law on Forming Antidumping Legislation of the Republic of The Republic of Tajikistan. *Legal Concept—Pravovaya Paradigma* 16: 135–40. [CrossRef]

Olcott, Martha Brill, Anders Aslund, and Sherman W. Garnett. 1999. *Getting It Wrong: Regional Cooperation and the Commonwealth of Independent States*. Washington, DC: Carnegie Endowment for International Peace.

Orazgaliyev, Serik. 2018. State intervention in Kazakhstan's energy sector: Nationalisation or participation? *Journal of Eurasian Studies* 9: 143–51. [CrossRef]

Pomfret, Richard. 2007a. Lessons from Kyrgyz Republic's WTO Experience for The Republic of Kazakhstan, The Republic of Tajikistan and Uzbekistan. *Asia-Pacific Trade and Investment Review* 3: 27–46.

Pomfret, Richard. 2007b. *The Economies in Transition, The WTO and Regionalism*. Boston: Springer, pp. 1843–57. [CrossRef]

Pomfret, Richard. 2021. 'Regionalism' and the global trade system. *The World Economy* 44: 2496–514. [CrossRef]

Powell, Stephen Joseph, and Trisha Low. 2011. Is the WTO Quietly Fading Away: The New Regionalism and Global Trade Rules. *Geo. JL & Pub. Pol'y* 9: 261.

Roberts, Michael, and Peter Wehrheim. 2001. Regional trade agreements and WTO accession of CIS countries. *Intereconomics* 36: 315–23. [CrossRef]

Rodrik, Dani. 2018. What Do Trade Agreements Really Do? *Journal of Economic Perspectives* 32: 73–90. [CrossRef]

Rose, Andrew Kenan. 2004. Do We Really Know That the WTO Increases Trade? *American Economic Review* 94: 98–114. [CrossRef]

Roy, Jayjit. 2011. Is the WTO mystery really solved? *Economics Letters* 113: 127–30. [CrossRef]

Ruta, Michele, ed. 2022. The Impact of the War in Ukraine on Global Trade and Investment. © Washington, DC. Available online: <http://hdl.handle.net/10986/37359> (accessed on 27 July 2023).

Salnikov, Vladimir Alekseevich, Dim Irshatovich Galimov, and Andrey Gnidchenko. 2018. Using Input–Output tables for analyzing and forecasting the sectoral structure of Russian economy. *Studies on Russian Economic Development* 29: 645–53. [CrossRef]

Subramanian, Arvind, and Shang-Jin Wei. 2007. The WTO promotes trade, strongly but unevenly. *Journal of International Economics* 71: 151–75. [CrossRef]

Suleymanov, Elchin. 2019. Does the WTO Membership Economically Matter? Evidence from South Caucasus Economies. *ASERC Journal of Socio-Economic Studies* 2: 30–48. Available online: <https://ssrn.com/abstract=3417519> (accessed on 10 July 2019).

Sultonov, Mirzosaïd. 2022. Regional economic and financial interconnectedness and the impact of sanctions: The case of the Commonwealth of Independent States. *Journal of Risk and Financial Management* 15: 565. [CrossRef]

Sutton, Michael. 2007. Free trade agreements, the world trade organization and open trade. *Ritsumeikan International Research* 20: 111–24.

Tai, Simon, and Jung Wan Lee. 2009. Strategies of Regional Economic Integration and WTO Accession in Central Asia. *Eurasian Journal of Business and Economics* 2: 1–14. Available online: <https://ssrn.com/abstract=3089152> (accessed on 27 July 2023).

Tang, Man-Keung, and Shang-Jin Wei. 2009. The value of making commitments externally: Evidence from WTO accessions. *Journal of International Economics* 78: 216–29. [CrossRef]

Tarr, David Gerald. 2016. The Eurasian Economic Union of Russia, Belarus, Kazakhstan, Armenia, and the Kyrgyz Republic: Can it succeed where its predecessor failed? *Eastern European Economics* 54: 1–22. [CrossRef]

Trade Policy Review: Armenia. 2018. WTO (WT/TPR/S/379). Trade Policy Review Body. Available online: https://www.wto.org/english/tratop_e/tpr_e/s379_e.pdf (accessed on 21 May 2023).

Trade Policy Review: The Republic of Moldova. 2022. WTO Trade Policy Review Body (WT/TPR/S/428). WTO. Available online: https://www.wto.org/english/tratop_e/tpr_e/s428_e.pdf (accessed on 21 May 2023).

Turakulov, Valijon. 2020. Trade Policy Issues of Oil-Rich But Land-Locked Country Case: Focusing on Kazakhstan Post-WTO Entry. *AgEcon Search*. Available online: <http://ageconsearch.umn.edu/record/333223> (accessed on 27 July 2023).

United Nations Comtrade. n.d. Trade Data. Available online: <https://comtradeplus.un.org/TradeFlow> (accessed on 26 May 2020).

Vasilyan, Syuzanna. 2017. "Swinging on a Pendulum" The Republic of Armenia in the Eurasian Economic Union and with the European Union. *Problems of Post-Communism* 64: 32–46. [CrossRef]

Vitalis, Vangelis. 2015. *Regional Economic Integration and Multilateralism: The Case of the ASEAN-Australia-New Zealand FTA and the Malaysia-New Zealand FTA*. ADBI Working Paper, No. 523. Tokyo: Asian Development Bank Institute (ADBI).

Weber, Anke, and Chunfang Yang. 2011. *Armenia: An Assessment of the Real Exchange Rate and Competitiveness*. Working Paper 11/20. Washington, DC: International Monetary Fund.

WITS. n.d. World Integrated Trade Solution. Available online: <https://wits.worldbank.org/datadownload.aspx?lang=en> (accessed on 21 May 2020).

World Bank Open Data. n.d. World Bank Open Data. Available online: <https://data.worldbank.org/> (accessed on 21 May 2023).

WTO | Regional Trade Agreements. n.d. Available online: <http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx> (accessed on 21 May 2020).

Yeliseyeu, Andrei. 2019. The Eurasian Economic Union: Expectations, Challenges, and Achievements. German Marshall Fund of the United States. Available online: <http://www.jstor.org/stable/resrep21473> (accessed on 27 July 2023).

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.