

# *Regional integration and economic performance: evidence from the Eurasian Economic Union*

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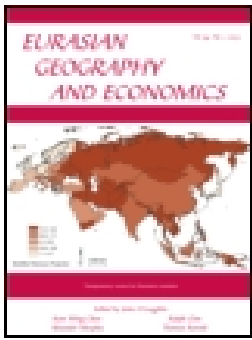
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# Regional integration and economic performance: evidence from the Eurasian Economic Union

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## ABSTRACT

There is a strong relationship between regional integration and economic performance. This paper investigates the impact of regional integration on macroeconomic indicators in the Eurasian Economic Union (EAEU) – a trade block created by the former Soviet republics in 2014. This study compares two types of regional collaboration strategies: first, unilateral trade liberalization with the one-sided opening of market access that does not imply any mutual concessions, and second, reciprocal regional liberalization evaluated as the degree of regional economic integration between the countries. We apply a random effect panel data analysis with the dataset over 25 years since 1995 covering five countries (Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Russia). We find that, under the current stage, the EAEU positively affects trade flows, negatively affects the level of employment, and has no impact on other economic performance indicators. We also conclude that despite the declared level of economic integration – customs union – Eurasian block functions mainly as a free trade area facilitating mutual trade, which is different from the broader objectives that regional integration aims to achieve.

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## KEYWORDS

Eurasian Economic Union; export; import; regional integration; economic performance

## Introduction

Divergence in countries' per capita income and gross domestic product drives interest in studying the determinants of economic performance (Wolfe, Wilson, and Haveman 2001). Given the socioeconomic outcomes of the recent COVID-19 pandemic, which resulted in a 4.3% reduction in global output (WB 2021), the search for factors that could reset the economy and drive economic performance demands practical consideration and thus becomes critical.

For years, integration into global markets and subsequent trade liberalization have been considered the driving forces of countries' economic performance (Hadhek and Mrad 2015). Trade openness has been followed by many to acquire

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new knowledge on production processes (Bas 2012; Ahn et al. 2019; Muazu and Vo 2020) to attract foreign investment (Baldwin, Forslid, and Haaland 1995; Bajo-Rubio, Díaz-Mora, and Díaz-Roldán 2010; Khalid and Marasco 2019), and to benefit from increased economy of scale (Conti 2014). When pursuing these benefits, the countries have chosen between different strategies of trade liberalization, either following a “going alone liberalization” (Bhagwati 2002) and equally recusing customs tariffs to all trading partners or opening markets to selected groups of countries based on the principle of reciprocity and adopting a strategy of regional integration. According to Agbetsiafa (2010), the latter can ensure better control over trade liberalization and exposure to foreign competition.

Since the 1980s, there has been a significant increase in regional integration activity. Around half of the 581 regional agreements notified to the WTO by 2022 were reported in the last ten years. According to the WTO Regional trade agreements database, today, almost all economies are parties to at least one regional initiative. Approximately one-third of the world trade occurs between the members of such agreements. The Eurasian countries also responded to global trends and have closely engaged in regional cooperation promoting reciprocity-based economic integration.

The significant importance of trade openness and regional integration for countries’ economic performance and the continued expansion of regional blocks around the world stimulate further empirical and theoretical research on the integration-growth nexus (Ehigiamusoe and Lean 2019). Studies capturing integration effects within specific countries or regions (Nicita 2009; Falvey, Foster, and Greenaway 2012) represent a particular interest for policymakers and academia.

Recognizing the ongoing debate on the role of integration for growth, this study answers the following research question: What role does regional integration play in the economic performance of the countries of the Eurasian Economic Union (EAEU)? In doing so, it theoretically debates and empirically examines the effects of different trade policy strategies – unilateral trade liberalization, regional integration (reciprocal liberalization), or a combination of both – on countries’ economic performance. The results help develop recommendations for policymakers and business practitioners of the region.

Being a relatively young integration initiative, the Eurasian Economic Union represents an interesting example for a case study as it unites the countries that, for a long time, had been developing under a single jurisdiction and had engaged in several integration projects of different scales (Roberts and Moshes 2016). Another reason driving the research on the Eurasian Economic block is the limited number of internationally ranked empirical studies. Most papers on Eurasian integration have been published locally in the languages of the EAEU member states and include mainly descriptive and theoretical research. One of the most prominent papers that presents empirical research on the economic performance of the EAEU countries is the study of Kılıç and

Beser (2017), who ran a panel data analysis to confirm the conclusion about a two-way relationship between export and growth and a one-way relationship between import and growth. While not focusing on the problem of endogeneity, current research has extended the findings of Kılıç and Beser (2017) by considering other growth variables (such as capital accumulation, consumption, and employment) and expanding the timeframe of the analysis. Another recent study whose findings are consistent with our research outcomes is the paper of Kemme, Akhmetzaki, and Mukhamediyev (2021). This study evaluates the effects of establishing the EAEU and concludes the absence of a significant correlation between FDI, growth, and regional integration. Many other outstanding papers on Eurasian integration that contributed to this study include Vinokurov et al. (2016), Khitakhunov, Mukhamediyev, and Pomfret (2017), Dragneva and Wolczuk (2017), Czerewacz-Filipowicz and Konopelko (2017), Vinokurov and Libman (2017), Vinokurov (2018), Czerewacz-Filipowicz (2019) and Konopelko and Czerewacz-Filipowicz (2021). While not focusing on the quantitative analysis, these publications contributed significantly to the paper's discussion on the history, prospects, and challenges of Eurasian integration, particularly the EAEU.

Building on the prior research, this study advanced existing knowledge on the relationship between regional integration and economic performance in three critical ways. First, in contrast to previous works, the study addressed the complex nature of regional integration by applying several integration variables to measure the effect of regional cooperation on countries' economic performance. In particular, expanding the approach introduced by Hufbauer and Schott (1994), the paper provided an individual analysis of the effects of the breadth and depth of regional integration and developed policy recommendations. Second, the research proposed a new conceptual framework for understanding the impact of regional integration (regional cooperation effects are being analyzed with the results of alternative trade-related growth strategies; in addition, the study evaluated the potential impact of a combination of regional integration and a unilateral tariff reduction).

The rest of this paper is structured as follows. Section 2 represents the context and the current state of Eurasian integration. Section 3 provides insights into the relationship between trade liberalization and economic performance and develops the hypotheses tested in this study (Figure 1). Section 4 contains the research design and describes the data, variables, and empirical strategy. Section 5 provides the findings of the study, which are then discussed in Section 6. Finally, Section 7 contains the conclusion.

## **EAEU and the context of Eurasian integration**

Over the last thirty years, the countries of the Eurasian region have tested various development strategies to overcome the shortcomings of the

disintegration following the collapse of the Soviet Union. The recovery included the introduction of the market-based economy, domestic economic reform, and, more importantly, the gradual reintegration into the global market through trade liberalization (Yarashevich 2014). Recognizing the limitations of the communist past, the Eurasian countries pursued the strategy of trade openness and sought to initiate foreign contact. Aiming to strengthen the competitiveness of national economies and provoke positive macroeconomic effects, the region's countries pursued trade openness through the WTO accession process and establishing regional integration initiatives (Chernova et al. 2019).

Due to the specific background of the Eurasian economies (lack of knowledge about the functioning of the market-based economy, inefficient factor allocation, disregard for comparative advantages, etc.), some scholars argued (Atik 2014) that regional integration, which allowed for a targeted reduction of trade barriers toward a selected number of countries was the most reasonable option for the immature Eurasian producers. In contrast, unilateral liberalization could create additional risks and provoke negative economic implications. In particular, Hadhek and Mrad (2015) stated that uncontrolled exposure to global trade could hurt those commodity-dependent economies vulnerable to rapid price changes. Levchenko (2016) further argued that accelerated integration into the international markets could be risky due to the immaturity of institutions, economic policies, and weak trade infrastructure.

Committed to the idea of trade openness, the Eurasian countries have sought to facilitate regional cooperation through multiple integration frameworks (Isakova, Koczan, and Plekhanov 2016). The first attempt for closer political and economic collaboration refers to the signing of the Agreement on the formation of the Commonwealth of Independent States (CIS) at the end of 1991. Cooperation within the CIS was based on the principle of consensus, which allowed the countries to cooperate on a particular matter and thereby avoid implementing certain CIS decisions (Czerewacz-Filipowicz and Konopelko 2017). Despite signing numerous agreements and political declarations (the total number of official documents signed within the CIS exceeded 1,600), the actual effects of integration remained insignificant. As a result, the intensity of the regional integration was relatively low, and many experts considered the CIS a failure (Kubicek 2009; Atik 2014).

The second wave of regional economic integration in Eurasia is associated with the signing of the Customs Union (CU) Agreement between Belarus, Kazakhstan, and Russia in 1995 (Shumsky 2005). The CU consolidated the like-minded countries that built the pro-integration core during the following decades (Vinokurov 2018).

Despite numerous cooperation initiatives established at the end of 1990 and the beginning of 2000, the actual integration processes in Eurasia remained relatively slow. However, as reasonably noticed by Vinokurov et al. (2016), it was far from a failure. While the bilateral agreements between the region's countries

contributed to the most significant progress, the overall level of integration increased significantly by the end of the 2000s.

The real breakthrough in Eurasian integration relates to establishing the EAEU in 2015 (Vinokurov 2018). The Treaty on the Union declared four freedoms of a single market. In particular, it introduced a free movement of goods, services, labor, and capital. A new block initially included Belarus, Kazakhstan, and Russia. Later, Armenia and Kyrgyzstan joined the Union.

According to Vinokurov (2018), the establishment of the EAEU has opened a new chapter in regional integration in Eurasia. The reason for such a conclusion is that the EAEU significantly differs from all other integration projects that ever existed in Eurasia. First, the Treaty on the EAEU stipulates that the Union has its own legal identity and exercises the right to perform international activities aimed at addressing the challenges faced by the member states. It may engage with other states, international organizations, and regional integration blocks (Khitakhunov, Mukhamediyev, and Pomfret 2017). The scope of the cooperation areas of the EAEU is more significant than that of its predecessors. In particular, the Treaty on the Union contains plans for setting common markets in various areas. Some of these are already in place (medical devices (2017) and a common electricity market (2020)), while others still have to be established (common financial markets (2022–2025), common gas, oil, and oil product markets (2024–2025)). The Treaty establishes the general principles for technical, sanitary, phytosanitary, and veterinary regulations. It defines the main priorities of transport, industrial, and agro-industrial policy and includes provision for a coordinated macroeconomic policy (Czerewacz-Filipowicz 2019). Finally, the Treaty promotes cooperation in the sphere of labor migration.

While harmonizing legislation, the EAEU Treaty also provides for establishing joint institutions. The Union institutional framework is based on the collective form of the decision-making process. The key bodies of the Union are the Supreme Eurasian Economic Council, which is comprised of the heads of the states (primarily responsible for the decisions on the strategy and future development of the Union), and the Eurasian Intergovernmental Council, which is represented by the heads of the governments.

The permanent regulatory body of the Union is the Eurasian Economic Commission (EEC), which combines and coordinates the members' interests and promotes the Union's joint interests. It ensures equality irrespective of the economic power or the size of a member. According to the Treaty on the Union, the central bodies of the Commission are the Council and the Board of the EEC. Vice Prime Ministers represent the Council, and the decision-making process is based on consensus. The Board, in turn, takes decisions by a qualified majority or consensus and includes two representatives from each member state. The Council and the Board have broad powers required to implement the Treaty on the Union (Dragneva and Wolczuk 2017).



Overall, the evolution of regional integration in Eurasia follows a specific development trend that Vinokurov and Libman (2017) referred to as holding-together regionalism (alternative to the coming-together concept). Holding-together integration initiatives represent cooperation projects that unite countries with strong political, economic, and cultural ties and previously have been a part of a single legal entity (state or empire).

Under this concept, the rationale behind regional integration is not grounded on the idea of a common future but rather on the image of a shared past. That means that a starting point and the development pattern of a holding-together regionalism may differ from those typical for the integration initiatives built according to the classical regional integration theory (e.g. European Union). Moreover, holding-together regionalism may have a specific U-shape development pattern: a disintegration process that results from the deconsolidation of a single entity may be followed by the intensification of regional cooperation that would develop among new countries and under new rules. In many cases, holding-together regionalism would represent a response to the economic meltdown provoked by an economic crisis at regional or global levels. Moreover, according to Vinokurov and Libman (2017), unlike coming-together projects, the integration initiative of the holding-together type would be highly politicized. It will react strongly to external shocks, have a specific sequence during the integration stages, and may divert from the integration-growth patterns captured for coming-together initiatives.

### **Role of trade liberalization in economic performance**

As one of the essential elements of modern economics, trade liberalization has witnessed a revival of interest in the role it plays in boosting economic performance (Winters and Martuscelli 2014; Menyah, Nazlioglu, and Wolde-Rufael 2014; Tahir and Azid 2015). While analyzing the potential effects of different liberalization approaches, most modern researchers consider regional economic integration the most growth-inducing strategy (Kahouli and Kadhraoui 2012).

Overall, one can identify three strands of literature that advocate trade openness as an essential driver of countries' economic performance. First, Solow (1957) and Swan (1956), with the neoclassical approach, argued that trade openness attracts foreign and domestic investments, drives the rate of capital accumulation, promotes savings, and raises GDP. The neoclassical growth theory considers trade openness as a critical determinant of higher and faster growth rates. According to Onakoya, Johnson, and Ogundajo (2019), the positive outcomes of market access liberalization could imply broader deregulation of the internal market, elimination of subsidies, and state protection, and further lead to a more efficient allocation of production resources.

Second, the endogenous growth theory scholars (Romer 1994; Rivera-Batiz 1997; Baldwin and Forslid 2000) suggest that trade openness could stimulate growth and economic performance through technology, which can be transferred internationally through market exchange. According to these proponents, trade liberalization raises competition and increases rivalry between domestic and foreign producers, encouraging innovation and leading to more efficient production performance, increased investments and capital accumulation, and, eventually, economic progress. Moreover, the free movement of goods across borders promotes knowledge spillover, thereby letting the late-comers replicate the products manufactured in the developed economies, helping to stimulate innovations in products and processes, and increasing GDP (Mwaba 2000).

According to the endogenous school, trade openness affects economic performance via a pro-competitive environment. Hence, trade openness “defragments” the markets, raising the degree of competition, lowering prices, and driving consumption. As shown by Baldwin (1989) in the example of the IT sector, growing import competition reduces national producers’ market power, altering the market structure and equilibrium markups and lowering capital replacement costs. The resulting incipient increase in quantity leads to faster growth.

The third literature strand is rooted in institutional economics and argues that open trade regimes can improve institutions and provide better governance (Rodrik, Subramanian, and Trebbi 2004). For instance, Venables (2001) suggests that trade liberalization can drive the formation of more stable institutions. Further, Levchenko (2016) argued that trade liberalization could change countries’ preferences over institutions. Competing for the sectors that generate rents under the trade openness concept, national economies will try to advance institutions to “the best attainable level” (Levchenko 2016). More stable institutions would attract additional FDI, drive employment and contribute to overall growth (Acemoglu, Johnson, and Robinson 2005).

The above discussion leads us to the first hypothesis:

**H1: *Unilateral (“going alone”) trade liberalization increases a country’s economic performance, such as a) GDP growth; b) export and import; c) consumption; d) capital formation; and e) employment.***

According to Tomiura et al. (2014), “going alone” liberalization may, in some cases, lack public support due to the unclear direct gains for national economies. On the other hand, the principle of reciprocity represented by regional integration may be a more popular strategy for winning public votes and leading to actual trade negotiations. The latter is believed to benefit the economy through better control over market access liberalization, exposure to

foreign competition (Agbetsiafa 2010), and the development of more targeted trade and economic cooperation.

There are three strands of literature that explain the mechanism of how regional integration affects economic performance.

First, the neoclassical growth literature generally supports the development of preferential trade agreements. Positive considerations rest on the assumption that regionalism contributes to more efficient employment of production factors and maximizes production capacities leading to greater prosperity and better economic performance (Bahadir 1978). The neoclassical theory assumes that countries' economic policies, including regional integration, cannot provoke long-lasting effects on countries' performance. However, chasing a more efficient allocation of resources can alter the current capital-labor ratio and temporarily drive economic performance until a new equilibrium is reached.

Another set of literature – endogenous growth literature – mainly concentrates on the dynamic effects of regional integration (Baldwin 1989, Badinger 2001) and addresses the technology and knowledge spillover effects (Aghion and Howitt 1992). Explaining the mechanism of integration's impact on economic performance, the endogenous school suggests that establishing trade blocks provides for increased competition under which home and foreign goods of integrating states become perfect substitutes (Barreto and Kobayashi 2015). Forced to compete with a more significant number of producers, local agents engage in the technological race, resulting in lower monopoly rates. As Walz (1999) suggested, market expansion through economic integration increases productivity, creates a scale effect in the R&D sector, and thus contributes to higher output, FDI, and growth rates, according to Rivera-Batiz and Romer (1991) and Ventura (2005).

The third strand is the institutional economics literature. According to North (1990), the key reason why countries can show slow economic progress is that their respective institutions can lack efficiency and be designed in the interests of particular elites. Entering regional integration implies delegating powers to independent supranational bodies and introducing a new type of decision-making process that can mitigate the risk of power abuse and promote a further reduction of negative market externalities (Hix 2010). Introducing reforms and harmonizing regulations following regional integration can also reduce political uncertainty and increase the credibility of local institutions inviting foreign capital and boosting entrepreneurial activities (Fernandez 1997).

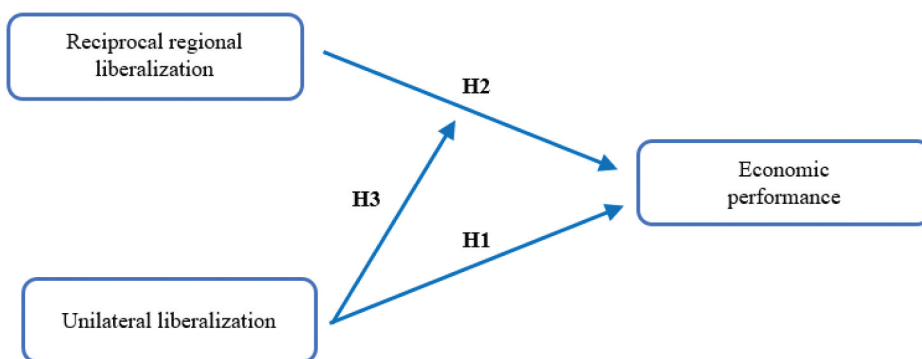
Such a perspective on regional integration also helps to understand the complex nature of the phenomena. In particular, it enables one to recognize that the impact of regional cooperation can vary significantly across the levels of institutional development and the levels of cooperation intensity related to it. That being said, when conceptualizing regional integration, the study expands the work of Hufbauer and Schott (1994) and considers not only the fact of

a country's membership of a particular regional block but instead takes into account the quality of regional cooperation measured by the depth (intensity of different integration dimensions) and the breadth of regional integration (number of participating countries).

The above discussion leads us to our second hypothesis:

**H2: *Regional integration (reciprocal regional liberalization) increases a country's economic performance, such as a) GDP growth; b) export and import; c) consumption; d) capital formation; and e) employment level.***

Interestingly, analyzing the behavior of existing regional blocs, academia (Lee and Shin 2005; Ando, Estevadeordal, and Martincus 2009; Powell and Low 2011) not rarely suggests that after joining regional integration initiatives, countries are more likely to reduce their tariff barriers and to liberalize market access conditions to nonmembers. Bagwell and Staiger (1999) refer to it as a “complementarity effect” which accompanies preferential trade liberalization. Such a scenario pledged by most growth scholars triggers the idea that further tariff reduction implemented at a block level could be as beneficial as unilateral trade liberalization. The general assumption behind this idea is that the decrease of block's tariff protection toward the rest of the world could moderate the trade diversion effect of integration and shift some supply back to the original low-cost sources, thereby reducing the markups and driving up the consumption and the quality of traded goods. Supporting this assumption, some scholars, in particular, Estevadeordal, Freund, and Ornelas (2008), claimed that the effects of regional integration on economic performance were hugely influenced by the policies pursued by integrated economies following the formation of a bloc. Claiming that joining regional integration only rarely encourages countries to follow trade liberalization, Estevadeordal, Freund, and Ornelas (2008) also suggested several reasons to support this argument. In



**Figure 1.** Author's conceptualization of the integration impact on economic performance.

particular, they stated that the costly trade diversion effect could force governments to adhere to trade openness to revive shrinking import volumes from nonmembers. He also assumed that some products could be less risky to liberalize than others. For these products, countries would supplement regional integration with unilateral tariff reduction to boost economic performance and receive additional trade-related benefits.

Based on the above, we hypothesize:

**H3: *Unilateral trade liberalization increases the effect of regional integration on economic performance, such as a) GDP growth; b) export and import; c) consumption; d) capital formation; and e) employment level.***

## Data and method

To test the hypotheses and address the research question, we empirically assess various economic performance parameters of the EAEU states. The panel data used in the analysis include the observations for 25 years since 1995 covering five countries (Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Russia) that trade with 271 economies globally. The country-level data is retrieved from the World Bank (WB) website, which contains official statistics collected through national accounts, countries' balance of payment, and Bank's country reports, as well as from the World Integrated Trade Solution (WITS), online software which allows users to source trade-related information from the databases of the WB, United Nations Conference on Trade and Development, International Trade Center, United Nations Statistical Division and the World Trade Organization. The sample is then refined by cleaning out the missing values as well as the outliers. The latter is especially important, as the data on the weighted average Most Favoured Nation (MFN) tariffs (not rarely containing great picks) is included in the model. To avoid misinterpretation, the weighted average MFN tariffs over 40% level are excluded from consideration.

## Dependent variables

We use a number of dependent variables to test our research hypotheses. As a measure of economic performance, the following indicators have been used in the literature: GDP growth (Muazu and Vo 2020), export and import (Tumwebaze and Ijjo 2015; Ehigiamusoe and Lean 2019), consumption (Grimwade 2013; Waheeduzzaman 2017), capital formation (Bajo-Rubio, Díaz-Mora, and Díaz-Roldán 2010; Tumwebaze and Ijjo 2015; Ehigiamusoe and Lean 2019) and level of employment (Fertig 2003).

## Explanatory variables

We employ several explanatory variables to capture the trade openness (tariff liberalization) and regional integration effects.

To test our **H1** and **H3** on the relationship between the level of market access protection and economic performance, we use the import tariff rate. It is measured as a weighted average level of applied MFN tariffs (Veld 2019). To calculate the depth and breadth of regional integration on economic performance (**H2**), we draw on the prior research on international trade and integration analysis (Vanhoudt 1999; Kamau 2010), adopting the concepts of depth and breadth of integration for our study. This approach has more robust benefits as it goes beyond the often-used dummy variables that provide a dichotomous choice depending on whether the country is in or out of an integration block.

**Table 1.** Hufbauer and Schott's (1994) Integration achievement score coding system.

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<b>1. Liberalization of Trade in Goods and Services</b>
0 = No agreement made to lower tariffs and non-tariff barriers
1 = Preferential Trade Agreement
2 = Partial Free Trade Area
3 = Full Free Trade Area
4 = Customs Union
5 = No barriers among member countries
<b>2. Degree of Capital Mobility</b>
0 = No agreement made to promote capital mobility
1 = Foreign Direct Investment allowed in limited form
2 = Capital Withdrawal allowed
3 = Full access for foreign investment and capital withdrawal, except for national government procurement
4 = Full capital mobility expect for large scale mergers and acquisitions
5 = Full capital mobility without restrictions
<b>3. Degree of Labour Market</b>
0 = No agreement made to promote labor mobility
1 = Right of movement granted for select professionals
2 = Full right of movement
3 = Transferability of professional qualifications granted
4 = Transferability of pensions and other retirement devices
5 = Full freedom of movement
<b>4. Level of Supranational Institutional Importance</b>
0 = No supranational institutions
1 = Establishment of nominal institutions
2 = Information gathering and advisory role
3 = Ability for Institutions to amend proposals
4 = Ability for Institutions to veto proposals
5 = Supranational institutions operate as primarily decision node
<b>5. Degree of Monetary Policy Coordination</b>
0 = No monetary policy coordination
1 = Consultation regarding policy
2 = Commitment to maintain parity
3 = Coordinated interventions
4 = Regional Central Bank established
5 = Single currency
<b>6. Degree of Fiscal Policy Coordination</b>
0 = No fiscal policy coordination
1 = Consultation regarding policy
2 = Commitments regarding deficit spending and taxation
3 = Sanctions regarding breaking commitments
4 = Uniform tax code
5 = Single budget

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To measure the depth of regional integration, this study expands on that of Hufbauer and Schott's (1994) study, which has developed a comprehensive framework to evaluate the degree of regional integration. The indicator is referred to as the Integration Achievement Score (Table 1). The score is calculated as a simple average of the values assigned to the blocks in six categories that measure different aspects of regional integration. These aspects include:

- (1) trade in goods and services;
- (2) capital mobility;
- (3) labor market;
- (4) importance of supranational bodies;
- (5) coherence of monetary policy; and
- (6) fiscal policy coordination.

Each assessment category can have a value from zero to five along a Guttman scale, where the higher level of regional integration within the selected category translates into a higher value along the scale. The final index represents a simple average of the scores across all six categories. Applying Hufbauer and Schott's (1994) methodology ensures a high degree of objectivity as the progress across integration elements is evaluated using ratified agreements, protocols, and other legal instruments implemented by the constituencies of economic integration in order to meet the agreed obligations. The evaluation of the EAEU's depth is illustrated in Table 2.

In the case of the EAEU, marked at its inception by the signing of the Union Agreement, it has received a value of 4 for the first category, "trade in goods and services". The higher the level of liberalization of barriers to trade between the members, the higher the values in this category. Functioning as a single market for goods, services, and labor, the EAEU still experiences some barriers in mutual trade between the members and thus cannot be awarded the highest score within the category.

The second category is the free movement of capital. Liberalization in this category implies a possibility for direct investment in member countries with the associated ability to withdraw capital. As the Union Treaty allows for complete freedom of capital movement, the EAEU received a value of 4 for

**Table 2.** Evaluation of the Integration achievement score for the Eurasian Economic Union (depth of integration).

#	Scoring blocks	2015 - EAEU Founding Treaty enters into force
1	Trade in Goods and Services	4
2	Degree of Capital Mobility	4
3	Degree of Labour Market	3
4	Level of supranational institutional Importance	3
5	Degree of Monetary Policy Coordination	1
6	Degree of Fiscal Policy Coordination	1.5
<b>7</b>	<b>Total average</b>	<b>2.75</b>

this category. However, it cannot be awarded a 5 because the member states remain the authority over important mergers and acquisitions.

The next category is labor mobility. The single labor market is present when labor can move freely while seeking new employment opportunities. Due to the limited transferability of professional qualifications and pension rights, the EAEU is ranked with a 3 for this category.

Following labor mobility is the level of supranational institutional development. The institutions need full authority over all internal and external policy aspects to score the highest value in this category. The EAEU institutional structure implies that the Eurasian Economic Commission, the Union regulatory body, plays primarily an advisory role with the ability to propose amendments to the legislative proposals drafted by the member states. However, the decision-making process remains in the hands of the national governments that meet at the level of heads of state or heads of government. With such an institutional arrangement, the EAEU is ranked with a 3 in the category “level of Supranational Institutional Importance”.

The last two categories cover the fiscal and monetary cooperation of the regional initiative. The category of monetary coordination described the progress in establishing a single currency. For the EAEU, the value of this category equals 1. The Union Treaty does not imply a common monetary policy for the member states. The final category, fiscal coordination, refers to the degree of coordination in taxation, spending, and budgeting. In the case of the EAEU, this category receives a value of 1.5 as specific commitments on deficit spending are incorporated in the Union Treaty. A simple average of all categories (the value of 2.75) represents the overall Integration achievement score of the Eurasian Economic Union. This value will be applied in further analysis to capture the depth of regional integration within the Union.

To account for the liberal considerations of economic integration that emphasize “an integration by markets,” the research also incorporates the second dimension of integration. In particular, it considers the breadth of integration measured as the number of economies participating in regional arrangements. To capture the evolution of regional processes, the breadth of integration can be evaluated repeatedly to account for any changes related to the number of constituencies of a group. For the EAEU, the value of the breadth of regional integration will equal 5.

### ***Control variables***

We use a set of control variables which may also explain the differences in economic performance. First, government spending would remain constant to avoid fiscal contraction effects provoked by lesser customs tariff revenues resulting from trade openness (Veld 2019). Next, the model assumes that savings and foreign direct investments remain fixed. By including these factors



**Table 3.** Descriptive statistics.

Variable	Measurement explanation, source	Mean	St. Dev.	Min	Max
GDP Growth	Annual percentage growth rate of GDP per capita based on constant local currency, WB.	2.19	7.71	−40.74	14.69
Export	Log of exports of goods, services and income in current U.S. dollars, WB.	23.25	2.13	19.24	27.18
Import	Log of imports of goods and services in current U.S. dollars, WB.	22.22	1.88	19.52	26.87
Consumption	Household final consumption expenditure (% of GDP), WB.	81.39	16.81	51.31	117.45
Capital formation	Gross capital formation (gross domestic investment) (% of GDP), WB.	26.15	7.62	1.63	47.94
Employment	Proportion of a country's population that is employed (age 15 and older), WB.	57.17	6.21	44.02	70.50
Import tariff	Weighted average level of MFN tariffs, WB.	5.53	2.45	0	11.28
Breadth of integration	Number of countries constituting integration block	0.51	1.51	0	5
Depth of integration	Integration Achievement Score which is the degree of regional integration	0.26	0.78	0	2.75
Government spending	General government consumption (% of GDP), WB.	15.87	3.90	8.32	25.00
Savings	Gross savings (% of GDP), WB.	20.80	9.39	−7.94	36.15
Herfindahl-Hirschman Index	Degree of market concentration and/or competition, WITS	0.14	0.10	0.03	0.51
Global markets integration	The extent to which a country's exports reach global markets measured as the Export Market Penetration Index, WITS.	3.60	2.88	1.41	11.28
FDI	Net inflows of investment (% of GDP), WB.	3.92	3.46	−1.39	17.13

Source: Authors' elaboration of the collected data.

as control variables, we exclude the capital inflow in financial instruments and concentrate mainly on the capital inflow in fixed capital assets (gross capital formation). To account for the level of market concentration and integration into the global markets, we also control for the Herfindahl-Hirschman Index and the Export Market Penetration Index. The model also controls for year and county effects.

The descriptive statistics for all variables in this study can be found in [Table 3](#), while the correlations between variables are presented in [Table 4](#).

### **Empirical strategy**

The trade openness can be explained by unilateral liberalization and regional integration in their effect on economic performance, and we estimated this econometric model using random effect panel data analysis additional controls for countries and years with the dependent variable  $y_{it}$  and the independent variable  $x_{it}$  such that:

$$y_{it} = \beta_0 + \beta_1 i + \beta_2 t + \varepsilon_{it} \quad (1)$$

where  $i$  is the country and  $t$  is the year.

**Table 4.** Correlation matrix.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. GDP Growth	1													
2. Export	-0.12	1												
3. Import	-0.001	0.99*	1											
4. Consumption	-0.04	-0.80*	-0.076*	1										
5. Capital formation	0.22*	0.02	0.11	-0.18*	1									
6. Employment	-0.23*	0.41	0.36	0.49	-0.04	1								
7. Import Tariff	-0.03	0.53*	0.53*	-0.48*	0.003*	-0.14	1							
8. Breadth of integration	-0.2	0.17	0.20*	-0.05	-0.007	-0.04	-0.11	1						
9. Depth of integration	0.15	0.76*	0.76*	0.85*	0.36*	-0.04	0.46*	0.12	1					
10. Government spending	0.15	0.76*	0.76*	-0.85*	0.36*	-0.36*	0.46*	0.13	0.01	1				
11. Savings	-0.009	-0.46*	-0.44*	0.29*	0.12*	0.06	-0.10	-0.06	0.33*	-0.23*	1			
12. Herfindahl-Hirschman Index	-0.01	0.81*	0.81*	-0.46*	0.23*	0.04	0.55*	0.06	0.42	0.46*	-0.42*	1		
13. Global markets integration	0.26*	-0.16	-0.11	0.08	0.23*	0.17	0.29	-0.09	-0.09	-0.41*	-0.04	-0.07	-0.42*	1
14. FDI														

Level of statistical significance: \* 5%.

Source: Authors' elaboration of the collected data.

The dependent variable  $y_{it}$  would represent GDP growth, volumes of import and export, capital formation, consumption, and employment rates for country  $i$  at a time period  $t$ , respectively.

The explanatory variables, such as weighted average import tariff and the breadth and depth of regional integration for country  $i$  at a time period  $t$ , would be represented by  $x_{it}$ .

The control variables are government spending, Herfindahl-Hirschman index, FDI, Global markets integration Index, and savings, presented by  $\tau_{it}$ . The model also controls for country-fixed effects and year-fixed effects.

We add country controls into the model to account for the country's unobservable characteristics that do not vary across time. The aim of introducing the year control effects is to account for the factors that vary over time and affect all members of the Union (e.g. economic crises, the introduction of economic and political sanctions, or the adoption of new regulation at the EAEU level).

Finally,  $\varepsilon_{it}$  would be an error term that consists of:

$$\varepsilon_{it} = \gamma_i + \mu_t + v_{it} \quad (2)$$

Where  $\gamma_i$  represents the omitted variables that vary across countries but not overtime (country-fixed effects),  $\mu_t$  denotes the omitted variables that vary over time but are constant across countries (time-fixed effects), while finally,  $v_{it}$  is the idiosyncratic error term.

The type of error adopted in the model is Driscoll-Kraay standard error.

Before adopting random-effect panel data analysis with additional country and year controls, we implemented several diagnostic tests. In particular, we ran Cumby-Huizinga test, Breusch-Pagan Lagrangian multiplier test, and Robust Hausman test. The results of the diagnostic tests allowed us to use a random effects regression and to choose an appropriate type of standard error (Driscoll-Kraay standard error).

## Results of the analysis of the Eurasian Economic Union

To find the effect of unilateral liberalization as well as reciprocal regional liberalization (breadth and depth of integration) on economic performance, the study tests **H1-H3** for the EAEU Members. Table 5 presents the results of the random effect panel data analysis.

From Table 5, we find that trade openness, also referred to as unilateral liberalization, has different effects on economic performance indicators before and after regional integration. Similarly, regional integration (measured as breadth and depth of integration) does not equally affect various indicators of countries' economic performance. Overall, the findings resulting from applying the regression analysis to the EAEU have not supported **H1**. According to the estimation results, unilateral trade liberalization had not significantly affected

**Table 5.** Regression results from panel mixed-effects regression on Eurasian Economic Union. Dependent variables: various measures of economic performance.

Specifications	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Models												
Import tariff (H1)	Growth -0.0351 (0.22)	Growth -0.115 (0.34)	Export -0.008 (0.01)	Export -0.008 (0.01)	Import -0.003 (0.01)	Import -0.001 (0.01)	Consum. -0.280 (0.63)	Consum. -0.280 (0.57)	Capital -0.083 (0.43)	Capital -0.083 (0.43)	Employ. 0.030 (0.13)	Employ. 0.030 (0.13)
Breadth (of integration) (H2)	0.026 (1.08)	0.480*** (0.10)	0.480*** (0.10)	0.480*** (0.10)	0.493*** (0.09)	0.493*** (0.09)	13.67 (5.46)	13.67 (5.46)	3.75 (1.92)	3.75 (1.92)	-2.634*** (0.91)	-2.634*** (0.91)
Import tariff x Breadth (H3)	-0.189 (0.18)	0.0200 (0.01)	0.0200 (0.01)	0.0200 (0.01)	0.066*** (0.01)	0.066*** (0.01)	1.714** (0.88)	1.714** (0.88)	0.500 (0.33)	0.500 (0.33)	-0.342 (0.14)	-0.342 (0.14)
Depth (of integration) (H2)		-15.15 (11.25)		1.029*** (0.17)		11.41*** (0.34)		68.50 (15.55)		17.56 (10.58)		-14.55* (2.89)
Import tariff x Depth (H3)		-1.076 (0.83)		0.038 (0.04)		0.121** (0.03)		3.295* (1.70)		0.961 (0.63)		-0.658 (0.28)
Government spending	-0.455 (0.19)	-0.154 (0.42)	0.001 (0.01)	0.001 (0.01)	0.006 (0.01)	0.006 (0.01)	0.183 (0.65)	0.183 (0.48)	-0.152 (0.31)	-0.152 (0.31)	-0.387** (0.13)	-0.387** (0.13)
Savings	0.292** (0.10)	0.215** (0.13)	0.010* (0.00)	0.012* (0.00)	-0.003 (0.00)	-0.00213 (0.00)	-1.146*** (0.13)	-1.146*** (0.13)	0.366*** (0.14)	0.366*** (0.14)	-0.048 (0.03)	-0.048 (0.03)
Economy maturity	10.25 (6.43)	5.280 (9.30)	0.027 (0.42)	0.027 (0.42)	0.216 (0.45)	0.157 (0.48)	32.91** (11.13)	32.91** (11.13)	-17.99** (8.04)	-17.99** (8.04)	-3.895 (3.48)	-3.895 (3.48)
Global markets integration	0.167 (0.21)	1.823 (1.31)	-0.088 (0.05)	-0.088 (0.05)	-0.119** (0.03)	-0.112** (0.03)	-2.333 (1.84)	-2.333 (1.84)	-1.516 (1.56)	-1.516 (1.56)	1.776*** (0.39)	1.776*** (0.39)
FDI	0.012 (0.21)	0.217 (0.24)	0.001 (0.01)	0.001 (0.01)	0.015** (0.01)	0.016** (0.01)	0.266 (0.49)	0.266 (0.49)	0.755*** (0.22)	0.755*** (0.22)	-0.071 (0.08)	-0.071 (0.08)
Country controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Constant	-1.794 (2.18)	-0.040 (1.58)	25.48*** (0.63)	19.97*** (0.28)	27.48*** (0.43)	20.45*** (0.23)	109.7*** (18.03)	109.7*** (18.03)	26.91*** (20.34)	26.91*** (20.34)	51.01*** (4.30)	51.01*** (4.30)
R2	0.662	0.717	0.997	0.997	0.997	0.997	0.931	0.931	0.766	0.766	0.973	0.973
RMSE	3.49	3.38	0.135	0.144	0.123	0.123	5.521	5.521	4.302	4.302	1.245	1.245
F-stat	272.25	260.58	3002.83	1062.55	986.95	1861.47	250.92	4876.82	799.31	39.37	1163.12	8331.62

Level of statistical significance: \*  $p < 0.05$  \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . Number of observations = 105. Driscoll-Kraay standard error.

Source: Author calculations.

EAEU countries' economic performance before they entered into regional integration. We argue that the idea for explaining this pattern could be a poor quality of governance and institutions of countries constituting the block, effective functioning of which, according to Hadhek and Mrad (2015) and Levchenko (2016), is seen as a necessary condition for gaining the benefits from trade liberalization. According to the WB data, a simple average of the regulatory quality rank of the countries of the EAEU in 2019 was around 46%, while for more developed regional initiatives such as the EU, such an indicator was more than 87%.

Our **H2**, which predicted that regional integration, which implies reciprocal liberalization by participating countries, would enhance economic performance, is only partly supported based on the regression results. Both indicators for the depth and breadth of regional integration are positive and significant for export and import. For example, an increase in the breadth of regional integration by one country is associated with an increase in export by 0.48% ( $\beta = 0.480$ ,  $p < 0.001$ ) and imports by 0.49% ( $\beta = 0.493$ ,  $p < 0.001$ ). An increase in the depth of regional integration measured by 1 point in the value of the Integration achievement score is associated with an increase in export by 1.03% ( $\beta = 1.029$ ,  $p < 0.001$ ), while the rise in imports was 11.41% ( $\beta = 11.140$ ,  $p < 0.001$ ). Interestingly, the effect of regional integration on the level of employment is negative. This is to say that an increase in the breadth of regional integration by one country is associated with a reduction in employment by 2.63% ( $\beta = -2.634$ ,  $p < 0.05$ ), while the depth of integration (an increase by 1 point in the score) leads to a reduction in employment by 14.55% ( $\beta = -14.550$ ,  $p < 0.01$ ). The results suggest that the Eurasian integration most significantly affects inward and outward trade flows, raising exports and imports, negatively impacting employment, and does not provide significant effects on other indicators such as GDP growth, consumption, and capital formation rates.

We argue that these findings conflict with the expected results. For example, when countries experience export growth, they should also enjoy a positive effect on employment rates. However, the empirical results under **H2** contrast this assumption. First, as Ayadi and Ramos (2017) argued, eliminating tariff protection under regional integration increases competition and forces domestic prices to fall to the lower regional level.

Under such market pressure, domestic production shrinks, while household consumption further contributes to import growth. Even though some scholars (Fertig 2003) suggest that regional economic integration could be positive for employment in the long run, Ayadi and Ramos (2017) argue that during the initial stages of trade and economic cooperation, countries can temporarily experience hikes in unemployment rates. Thus, decreasing market share and falling markups slow down national demand for labor and increase unemployment.

The second argument is that a bigger market resulting from regional integration can encourage Eurasian producers to seek an economy of scale and increase productivity in tradable activities. When doing so, national businesses try to reduce the production factors ratio and decrease the demand for labor. Under this scenario, low-skilled workers and workers implementing outlined jobs are at the highest unemployment risk.

By including in the model two indicators explaining the effects of economic integration, we can make a conclusion about the scale of impact of different integration parameters. Thus, the EAEU case suggests that the quality of integration measured as integration depth provides a more significant impact on the economic performance of block constituencies than the so-called breadth of integration, which accounts for the number of countries participating in the integration block.

Our findings must suggest that the Eurasian regional integration does not provide any significant effects on the countries' GDP growth as well as the consumption and capital formation rates. This means that establishing the block at this stage does not impact the overall economic performance of the Eurasian countries. Integration does not contribute to production growth or stimulate capital accumulation. In contrast, the EAEU serves primarily as a trade-facilitating instrument contributing to a better allocation of production resources, further strengthening the production specialization, and promoting the economy of scale.

Our **H3**, which predicted that trade liberalization following regional integration would enhance economic performance, is partly supported. This means that these two integration strategies do not always serve as complementary. In particular, the results suggest that the reduction of import tariff (EAEU Common Customs Tariff) by 1% and an increase in the breadth of integration by one country has a significant positive effect on imports (0.06%) ( $\beta = 0.066$ ,  $p < 0.001$ ) and consumption (1.71%) ( $\beta = 1.714$ ,  $p < 0.001$ ).

For the depth of integration, we find that the reduction of import tariff by 1% and an increase in the depth of integration by 1 point has a significant positive effect on import (0.12%) ( $\beta = 0.121$ ,  $p < 0.001$ ) and consumption (3.29%) ( $\beta = 3.295$ ,  $p < 0.001$ ). The consumption effect signals the positive impact of trade liberalization on block economic performance (Dayal and Dayal 1977).

It is worth noticing that limited growth effects under **H2** and **H3** may be related to a specific geopolitical situation in which the EAEU has been established. In 2015, when the Treaty on the Union came into effect, Russia, the biggest economy of the block, had already been sanctioned by a number of countries in Europe and the US. Taking into account Russia's contribution to the EAEU's GDP (exceeds 85%), the restrictive measures that limited trade and investment flow inside and outside Russia could significantly slow down the growth of the Union. Russia's countersanctions in the form of an import ban on selected agricultural products could further decrease the consumption

indicators of the block. These assumptions are confirmed by the year controls included in the model that demonstrate changes in our economic performance over time across all countries. While measuring the effects arising from different trade liberalization options, we also controlled our calculations for other country characteristics that might affect the economic performance of participating countries. First, we discovered that household savings have the most significant impact on EAEU's economic growth. This approach expands the number of studies that support the idea that savings can boost economic performance (Bebczuk 2000; Anoruo and Ahmad 2001). FDI mainly increases imports and capital accumulations, while integration into global markets is significant for increasing employment and limiting imports. The level of economic maturity affects consumption and capital accumulation.

The model results also suggest that a higher level of market concentration resulting from lower competition does not create an additional stimulus for investment in business development and thus negatively affects the capital accumulation rate. On the other hand, the economy of scale effect that would result from the growing position on the market would positively affect the level of consumption by decreasing the production cost. Simultaneously, in many cases, the dominant market position would provoke additional controls and regulations that would not allow the producers to abuse their position, stimulate fair pricing, and contribute to increased consumption. Finally, government spending is significant for employment, and an additional 10% contribution from the government leads to a decrease in employment by 7.7%. This pattern can emerge when additional government spending is mainly funded by increased taxation.

At some point in time, increased taxation reaches the level at which households' income decreases so significantly that it provokes a substitution effect, following which many individuals refrain from official employment and replace office time with leisure activities.

## Discussion

This study contributes to international economics and business literature (Edwards and Lederman 1998; Naito 2017) that studies the role of unilateral trade liberalization and regional integration on economic performance.

In particular, this study advances economic literature and contributes to policy development by introducing a conceptual framework for exploring the effects of regional integration on economic performance. In particular, the research considers the impact of trade openness by comparing the potential outcomes of two trade liberalization strategies – unilateral liberalization of import tariffs and reciprocal regional integration. It also considers the potential complementary effects that could emerge when the two approaches are implemented in combination.

Unlike other studies, this work applies a multidimensional approach to measuring regional integration and introduces a concept of breadth and depth of regional cooperation (Hufbauer and Schott 1994). This concept is used to evaluate to what extent regional integration may be measured by the size of an integration block and/or the level of consolidation and unification of regional policies. Such an approach allows the complex nature of the research objective to be addressed while considering the effects of the different policy choices available for the development of regional blocks.

Analyzing regional integration, the study particularly expands Hufbauer and Schott's (1994) work and shows that the depth and breadth of integration can both facilitate and limit internationalization and economic development as the results of integration and trade liberalization may be heterogeneous. This research further develops the knowledge of the positive effects of integration by concluding that the deepening of regional integration could have a more significant impact on economic performance than a simple enlargement of an integration block. The latter advances the existing research on institutions (Hadhek and Mrad 2015; Levchenko 2016) and significantly contributes to the Eurasian region's policy design and policy targeting. Underlining the fact that both breadth and depth of regional integration should be examined for capturing the real impact of integration, the study also argues that by giving priority to a particular dimension of regional integration, policymakers consequently choose the type of economic outcome they will experience following the formation of the regional block.

Comparing the effects of different trade openness strategies, the research suggests that simple tariff liberalization cannot lead to a desirable economic impact for the EAEU countries. In contrast, the study proposes that when targeting better economic performance, the governments must focus on a combination of strategies supplementing regional economic integration with market access liberalization. This, in turn, may help overcome any negative implications of integration, including trade diversion effects, and could lead to developing more efficient trade patterns with nonmembers.

By contributing to international business literature, this study confirms to managers and entrepreneurs the potential consequences of regional integration and trade liberalization for business and society. For instance, the results suggest that companies within the countries participating in regional integration could experience a short-term economic slowdown (e.g. lower employment rates) immediately after integration begins. It also indicates that the combination of trade liberalization options and, in particular, the combination of regional integration and liberalization of market access to nonmembers could drive up the consumption level and thus contribute to the development of production in the countries of the integration block. This may be an essential indicator for business managers to obtain information about the expected growth in demand, job creation, and consumption changes. Interestingly, the



findings suggest that a unilateral tariff policy change could have a lower impact on employment compared to the one that could be generated by both the breadth and depth of regional integration.

Finally, this study proposes how the relationship between integration and growth could be used to understand a real, rather than a declared level of cooperation within the integration block and nonmember states. For instance, the study argues that while the Treaty on the EAEU promotes the goal of customs union formation, the empirical findings suggest that the Eurasian block is primarily performing as a free trade area facilitating mutual trade between the country members while creating zero or limited effects on other economic indicators such as GDP growth, capital formation, and consumption rates.

### ***Policy recommendations***

Based on the analysis of the relationship between regional integration and economic performance on the example of the EAEU, it is possible to develop policy recommendations that could enable the countries to increase the potency of their regional cooperation.

First, the analysis suggests that the deepening of regional cooperation may generate a more significant impact when compared to the results of a simple enlargement of an integration block. This conclusion supports the idea of the prevailing importance of non-tariff measures over the conventional means of market protection represented as customs tariffs. Based on this conclusion, further development of the EAEU should focus on strengthening the depth of integration rather than increasing the number of the block's constituent members. The empirical results suggest that countries could not genuinely benefit from the economy of scale or enjoy improved access to production allocation without cooperation across sectors.

Further deepening of regional cooperation may take several forms. The initial effort should be put into the implementation of the existing arrangements. Based on the unveiled relationship between integration and economic performance, the EAEU demonstrates a gap between actual and declared levels of regional cooperation acting as a trade-facilitating instrument rather than an economic or customs union. To bridge this gap and promote growth effects, the EAEU members should prioritize the regional agenda and fulfill in full the commitments that were undertaken under the Treaty on the EAEU. Once the member states implement the existing arrangements in full, the EAEU may explore other avenues for institutional development, using Hufbauer and Schott's (1994) Integration achievement score coding system as a guideline.

Second, apart from strengthening the integration arrangement and improving the quality of governance and institutions at the regional level, the EAEU countries must direct their efforts toward developing the institutions at the

national level. Based on the region's unique characteristics, the primary focus should be on strengthening the rule of law and limiting the impact of privileged groups of stakeholders on defining national priorities and executing the decision-making process. Improved governance and institutions at the national level could enable more efficient cooperation and equal distribution of integration effects.

Finally, a tailor-made policy recommendation may be proposed with due account to the specificities of the EAEU development and an increasing number of restrictions that stem from the growing tensions with the Western economies (and, in particular, economic sanctions against the biggest economy of the block). To overcome new challenges and to ensure the future of the EAEU, the Union must prove its relevance and propose new ways of benefiting its members. To do so, it must further promote integration in the sphere of mutual interests and better respond to the evolution of the members' demands, including in new or underdeveloped spheres of cooperation. In particular, the EAEU could position itself as an innovation and knowledge-sharing platform and contribute to the development of the local supply chain that, at some point, could replace unreliable global suppliers.

### ***Limitations and future research agenda***

As with other studies, this paper has its limitations. In particular, the study considers the integration effects based on the example of a specific block, the EAEU. Hence, some findings might be related to the trajectory of Eurasian integration and limit the predictions for the relationship between integration and economic performance for other integration blocks. Another important aspect of this research is that it restricts the integration effects to strictly economic matters ignoring the developmental dimension of integration. Finally, the study only analyses a unidirectional relationship between different trade openness strategies, including regional integration, and several growth variables, without concluding on the possibility of bi-directional causality between the economic performance indicators included in the study.

Further research could expand the findings of this paper and provide more details on the integration impact on economic performance and the effects of other trade openness strategies by running a country and region-specific analysis and testing hypotheses on a bigger number of blocks aiming to capture the main patterns across the regions. Moreover, recognizing the importance of developmental aspects of regional integration for drawing conclusions about the impact of integration on countries' socioeconomic performance, the study could advance the empirical model in considering several variables that could reflect the dynamics in the quality and the standard of living. In addition, future research could explore the impact of integration on the development of non-commercial and informal connections (e.g. social capital development,

networks, cultural exchanges, joint response to natural disasters, etc.). Finally, future research could consider the problem of endogeneity and test for the existence of bi-directional causality between the considered variables.

## Conclusion

In a time of failure of multilateral liberalization efforts, regional integration becomes one of the most applied instruments for achieving economic progress. Noting the gaps in the existing literature, this research aimed to provide an empirical assessment of the relationship between regional integration and regional economic performance. To better understand the level and the scale effect of integration, the study tested it against the effects of alternative trade liberalization strategies. Based on the research agenda, the study evaluated the impact of integration on the example of the Eurasian Economic Union and provided valuable conclusions for policymakers and business practitioners.

The study's conclusions indicate that regional integration's positive effects on economic performance could be further improved if the formation of an economic block were to be followed by subsequent trade liberalization for all trading partners. The research also indicates that the most significant contribution to growth comes from the improvement of integration arrangements related to the alignment of regulation and development of standard rules and practices rather than from a simple expansion of the common market achieved through the accession of new members. When assessing the level of integration in Eurasia, the study highlights that despite the declared objective, the EAEU is primarily performing as a trade-facilitating initiative overlooking the cooperation that could serve as a natural stimulus for better economic performance.

Although the study covers only one relatively young integration initiative, it contains valuable insights into the relationship between integration and countries' economic performance that could serve as a basis for future empirical analysis and also as recommendations for the policymakers and international development institutions looking for of most efficient approaches to boost economic performance. The limitations of the study – non-inclusion of the developmental aspects and consideration of only one integration initiative – form a basis for future research indicating the need to test the hypothesis on a bigger number of integration blocks undergoing different stages of institutional development and the inclusion of the developmental angle into the equation.

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## Data availability statement

The data that support the findings of this study are available in the World Bank Open Data [<https://data.worldbank.org/>] and World Integrated Trade Solution databases [<https://wits.worldbank.org/>].

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