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Review Paper

Economic Development of Countries and Formation of International Business Relations under the Influence of Globalization

Tetyana Nebozhenko[1*], Svitlana Rassadnykova[2], Ielyzaveta Lvova[3], Svitlana Palii[4] and Svitlana Marushchak[5]

[1]Department of History of Ukraine, Economic Theory and Tourism, Stepan Gzhytskyi National University of Veterinary Medicine and Biotechnologies, Lviv, Ukraine
[2]Department of Economics and International Economic Relations, International Humanitarian University, Odessa, Ukraine
[3]Department of Constitutional and International Law, Institute of Law and Security, Odessa State University of Internal Affairs, Odessa, Ukraine
[4]Department of Public Administration, Interregional Academy of Personnel Management, Kyiv, Ukraine
[5]Department of Economic Policy and Security, Admiral Makarov National University of Shipbuilding, Mykolaiv, Ukraine

*Corresponding author: nebozhenko008@gmail.com (**ORCID ID:** 0000-0003-3744-6666)

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ABSTRACT

The impact of globalization extends to various aspects of a country's development, including its economic, social, political, and technological dimensions. In turn, these dimensions play a crucial role in shaping the potential for economic growth. This article aims to evaluate the interdependencies among globalization, economic growth, and international business relations. The research methodology employed in this study involves a statistical analysis of regional economic growth, focusing on the dynamics of GDP, trade indicators spanning the years 2000 to 2022, as well as the economic dimensions of the KOFGI Globalization Index, specifically trade and financial aspects. The findings of this study underscore the intricate nature of the interconnections and dependencies existing between globalization, economic growth, and international business relations. These interconnections are intricately linked to the exchange of technologies, knowledge, investments, and the rapid advancements observed in information and communication technology (ICT). The complex nature of these interconnections has a direct impact on the pace of economic growth and shapes the strategic policies pursued by countries in their pursuit of strengthened cooperation and the identification of new collaborative partners, thereby synergizing national resources. While the period from 2000 to 2015 witnessed notable integration processes, the subsequent years from 2016 to 2020 were marked by global processes of de-globalization. This reorganization stemmed from a decline in the dynamics of industrial production and was further exacerbated by trade conflicts between major players such as the United States and China. However, a shift has been observed in the years 2021-2022, where the share of exports and imports of goods and services is projected to experience dynamic growth. In addition to the observed decline in globalization, there has been a notable deceleration in economic growth from 2016 to 2020. The presence of imbalances in international economic relations, particularly in terms of exports and imports, has contributed to disparities in globalization dimensions across various regions. North America is characterized by a dominant presence of *de jure* economic globalization, encompassing both trade-related aspects and *de facto* and *de jure* financial globalization. On the other hand, Europe and Central Asia exhibit a prevailing influence of *de jure* economic globalization, primarily in terms of trade, along with *de facto* financial globalization. Generally, from 2010 to 2020, there has been an upward trend in the level of *de jure* globalization. However, the level of *de facto* trade globalization has experienced a decline during this period. Meanwhile, the level of *de facto* financial globalization has continued to grow.

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HIGHLIGHTS

- The article aims to evaluate the interdependencies among globalization, economic growth, and international business relations.
- The findings of this study underscore the intricate nature of the interconnections and dependencies existing between globalization, economic growth, and international business relations.

Keywords: Globalization, economic growth, trade globalization, financial globalization, international relations, integration

Globalization exerts its influence on the economic, social, political, and technological development of countries, thereby shaping their potential for economic growth. Within academic circles, the prevailing approach for assessing the relationship between globalization and various indicators of socioeconomic and environmental development revolves around analyzing the dynamics of trade, investment, and technology. Nevertheless, it is important to acknowledge that this approach does not encompass all dimensions of globalization, particularly the political dimension, and only offers a limited understanding of the interdependencies among state integration, international business relations, and growth. As noted by Haelg (2020), globalization is also measured by considering indicators related to the exchange of information and ideas. The KOF Globalization Index (KOFGI) has emerged as the most widely utilized measure of globalization. Since the onset of 2016, there has been a noticeable deceleration in the pace of globalization, accompanied by a concurrent slowdown in economic growth. This necessitates a comprehensive examination of the factors contributing to the ongoing reorganization of the global economy.

The objective of this article is to evaluate the interdependencies among globalization, economic growth, and international business relations.

LITERATURE REVIEW

The state of research on the impact of globalization on economic growth

Since its widespread emergence in the 1980s, globalization has elucidated the internationalization of financial markets, as well as the expansion of goods and services markets, accompanied by the entrance of international companies into foreign markets. This phenomenon, globalization, serves to elucidate the dynamics of multidimensional processes involved in economic integration. These processes entail the increased international mobility of national resources such as labor and capital, while simultaneously fostering the growing interdependence of national economies (OECD, 2005).

The academic literature extensively explores the correlation between economic growth, trade, and globalization, as well as their impact on the dynamics of various sectors such as ICT, logistics, education, science, and high-tech industries, among others. Additionally, there is a significant focus on analyzing the role of foreign direct investment (FDI) in these interrelationships (Dreher, 2006; Latif *et al.* 2018; Shahbaz *et al.* 2018; Ahmed, Zhang & Cary, 2021). Dreher (2006) made significant contributions by pioneering the development of a Globalization Index, employing panel data encompassing 123 countries spanning the years 1970 to 2000. This index comprehensively evaluates three primary dimensions: economic integration, social integration, and political integration. Empirically, Dreher (2006) establishes a direct relationship between the overall globalization index and economic growth. The study specifically highlights the impact of economic integration, information flows, and the reduction of trade barriers within developed nations. However, no discernible correlation is found between globalization and political integration. Nevertheless, Dreher (2008b) later emphasizes the significance of political dimensions within globalization, particularly in the context of the Cold War between the United States and Russia, through qualitative analysis. This viewpoint warrants agreement, especially considering the notable transformation in international business relations following the onset of the war in Ukraine at the beginning of 2022. This conflict is frequently perceived as a confrontation and competition involving major global players such as the United States, Russia, China, and others (Snetkov & Lanteigne, 2015). The political dimension of globalization becomes particularly

evident as national governments are compelled to adjust their economic policies in response to the evolving political and geopolitical landscape, the prevailing ideology of global leaders, and their corresponding international policies (Dreher, 2008b). The establishment and development of international business relations are intricately intertwined with the political dimension of globalization. Consequently, it is prudent to explore the relationship between economic growth and globalization within the framework of prominent theories in international economic relations, including realism, liberalism, constructivism, orientalism, and others. The intricate structure of international business relations can be understood through the lens of realism, which highlights the formation of alliances aimed at competing for power, resources, and regional leadership in areas of global growth. Notable examples include the EU, the US, China, and Russia, as well as regional powers of Turkey and Russia. To illustrate this point, Witt (2019) introduces two theories, realism, and liberalism, to elucidate the phenomenon of de-globalization observed in recent years. Liberalism underscores the intricate nature of economic interconnections, while realism provides insight into the formation of economic blocs and alliances centered around major nations (Witt, 2019). In practice, the establishment of alliances and the consolidation of nations foster globalization by promoting increased trade, investment, and technology exchange. Consequently, these factors strengthen international business relations and contribute to overall economic growth.

In their study, Latif *et al.* (2018) observed a long-run elasticity between economic growth and ICTs, highlighting the positive influence of globalization and FDI on growth. The study also revealed causal relationships between GDP and FDI, economic growth and globalization, as well as trade and economic growth. These findings underscore the intricate long-term interdependencies among various indicators of socioeconomic development and the global integration of countries. In a separate investigation, Ahmed, Zhang, and Cary (2021) identified a growing global influence of Japan attributed to its financial development and economic globalization. Shahbaz *et al.* (2018) conducted a study that establishes a long-run relationship between economic growth and globalization. Building upon Dreher's (2006) methodology, Gygli, Haelg, Potrafke & Sturm (2019) introduce a novel index to investigate the impact of globalization on economic growth. The results indicate distinct effects of *de facto* and *de jure* globalization on economic growth. Olimpia & Stela (2017) provide empirical evidence supporting the positive influence of globalization on GDP growth, encompassing both economic and political dimensions, except for the social dimension. Overall, globalization has contributed to accelerated economic growth, promoted gender equality, enhanced human rights, and bolstered the welfare state (Potrafke, 2015). Simultaneously, integration processes have demonstrated limited impact on labor market interactions and have had minimal effects on market deregulation, resulting in increased income inequality within countries (Potrafke, 2015). Among the evident outcomes of globalization is the expansion of international trade in goods and services, the movement of financial capital, the mobility of individuals, the exchange of information, technological advancements, and the growth of international cultural exchanges (Martens & Raza, 2009). These trends are facilitated by greater trade liberalization encompassing a wider range of differentiated products, the growth of tourism and immigration, changes in the political landscape, and increased attention to the environmental implications associated with globalization (Martens & Raza, 2009).

Ukrainian scientists considered the analysis of production and sale of products of agricultural enterprises of Ukraine (Ostapenko, R., Herasymenko, Y., Nitsenko, V., Koliadenko, S., Balezentis, T. and Streimikiene, D., 2020), the dynamic development of the world market food products and new opportunities (Bazaluk, O., Yatsenko, O., Zakharchuk, O., Ovcharenko, A., Khrystenko, O. and Nitsenko, V., 2020), conducting evaluations of investment attraction policies in the mainstream economy in the context industry implementation (Nikonenko, U., Shtets, T., Kalinin, A., Dorosh, I. and Sokolik, L., 2022), development of a conceptual analytical model for decentralized energy efficient management in the national economy (Borodina, O., Kryshtal , H., Hakova, M., Neboha, T., Olczak, P. and Koval, V., 2022), carrying out a comprehensive analysis of the security of the enterprise economy (Lelyk, L., Olikhovskyi, V., Mahas, N. and Olikhovska, M.,

2022), and highlighting the features of financial and economic security in the field of financial markets during European integration (Novak, A., Pravdyvets, O., Chornyi, O., Sumbaieva, L., Akimova, L. and Akimov, O., 2022).

Significant findings have been revealed by Huh & Park (2021), shedding light on the relationship between globalization, economic growth, and income inequality. Their research highlights that while globalization positively impacts economic growth, it also contributes to the widening income inequality. Notably, high-income countries benefit the most from the substantial impact of globalization compared to other countries, with a relatively lesser increase in income inequality observed. Of the two key drivers of global economic integration, Huh & Park (2021) identify intra-regional integration as being significantly more influential than extra-regional integration. Intra-regional integration primarily drives the growth of income inequality within the context of integration. These findings emphasize the importance of examining the differential impacts of globalization on various income groups and the role of regional integration dynamics (Huh & Park, 2021). In a comprehensive analysis employing meta-analysis and meta-regression, Heimberger (2020) draws significant conclusions regarding the influence of globalization on income inequality. The study reveals several key findings. Firstly, globalization exhibits a small to moderate effect in terms of increasing inequality. Secondly, while the trade dimension of integration demonstrates a negligible impact on inequality, financial globalization has a more substantial and robust effect in driving inequality higher. Thirdly, Heimberger (2020) identifies a consistent impact of integration on increasing inequality in both developed and developing countries. Lastly, the study highlights the mitigating role of technology and education in attenuating the impact of integration on income inequality.

Measuring globalization

Dreher (2006) and Dreher, Gaston, and Martens (2008) conducted pioneering assessments of globalization, considering its economic, political, and social dimensions. Subsequently, the development of the KOF Globalization Index in 2002 facilitated empirical evaluations of its impact on diverse indicators within socioeconomic systems. Notably, early investigations by Ekman (2003, cited in Dreher *et al.* 2008a for further information) revealed a positive nonlinear relationship between population health, as measured by life expectancy, and the KOF index.

The evaluation of globalization encompasses a wide range of indicators, with the World Bank alone considering over 900 indicators. Notably, these indicators assess countries' integration into the global economic environment by examining factors such as international commodity exchange, private capital flows, and foreign direct investment (FDI) flows (European Commission, 2007). Moreover, the World Bank, drawing on the research by Cordella and Ospino Rojas (2017), proposes the Financial Globalization Index (FGI) as a measure of financial globalization (World Bank, 2023a). In addition to the World Bank's efforts, the KOF Globalization Index provides a comprehensive assessment of globalization. It captures the economic dimensions of globalization, including trade and financial aspects, as well as the political and social dimensions, encompassing interpersonal, information, and cultural aspects. The KOF Globalization Index has demonstrated growth in these dimensions since the 1970s, particularly after the conclusion of the Cold War (Swiss Economic Institute, 2023a). The KOF Index adopts a comprehensive perspective of globalization, defining it as a process that establishes networks among economic actors spanning multiple continents. This interconnectedness is facilitated by the flow of information and ideas, the movement of people, capital, and goods, transcending national borders, and fostering the integration of economies, technologies, cultures, and governance. As a consequence, these intricate interactions generate a web of interconnections and dependencies (Statista, 2022). Therefore, when considering the impact of globalization on international business relations, it becomes essential to examine the concept through the lenses of realism, liberalism, and constructivism.

Within the scope of analyzing the impact of globalization on economic development, this study focuses on the economic dimensions and their influence on growth, as outlined in Table 1. According to the Globalization Index for the year 2022, Switzerland claimed the top spot with a score of 90.61, closely followed by the Netherlands (90.48)

Table 1: Globalization Index: Structure, variables and weights, 2022

Globalization Index, *de facto*	**Weights**	**Globalization Index, *de jure***	**Weights**
Economic Globalization	33,3	Economic Globalization	33,3
Trade Globalization, *de facto*	50,0	Trade Globalization, *de jure*	50,0
Trade in goods	38,1	Trade regulations	27,9
Trade in services	42,6	Trade taxes	28,1
Trade partner diversity	19,3	Tariffs	26,3
		Trade agreements	17,5
Financial Globalization, *de facto*	50,0	Financial Globalization, *de jure*	50,0
Foreign direct investment	26,3	Investment restrictions	30,6
Portfolio investment	16,5	Capital account openness	38,8
International debt	29	International Investment Agreements	30,6
International reserves	0,8		
International income payments	27,5		

Source: *Swiss Economic Institute (2023b).*

Table 2: 2022 KOF Globalization Index: Variables description

Dimension	**Variable Name**	**Variable Definitions**
Trade Globalization, *de facto* (KOFTrGIdf)	Trade in goods	Exports and imports of goods (% of GDP).
	Trade in services	Exports and imports of services (% of GDP)
	Trade partner diversity	Average of the Herfindahl-Hirschman market concentration index for exports and imports of goods (inverted).
Trade Globalization, *de jure* (KOFTrGIdj)	Trade regulations	Average of two subcomponents: Prevalence of non-tariff trade barriers and compliance costs of importing and exporting.
	Trade taxes	Income from taxes on international trade as a percentage of revenue (inverted).
	Tariffs	The unweighted mean of tariff rates.
	Trade agreements	The number of bilateral and multilateral free trade agreements.
Financial Globalization, *de facto* (KOFFiGIdf)	Foreign direct investment	The sum of stocks of assets and liabilities of foreign direct investments (% of GDP).
	Portfolio investment	The sum of stocks of assets and liabilities of international equity portfolio investments (% of GDP).
	International debt	The sum of inward and outward stocks of international portfolio debt securities and international bank loans and deposits (% of GDP).
	International reserves	Includes foreign exchange (excluding gold), SDR holdings, and reserve position in the IMF (% of GDP).
	International income payments	The sum of capital and labor income to foreign nationals and from abroad (% of GDP).
Financial Globalization, *de jure* (KOFFiGIdj)	Investment restrictions	Prevalence of foreign ownership and regulations to international capital flows
	Capital account openness	Chinn-Ito Index of capital account openness
	International Investment Agreements	The number of Bilateral Investment Agreements (BITs) and Treaties with Investment Provisions (TIPs).

Source: *Gygli, Savina, Florian Haelg, Niklas Potrafke and Jan-Egbert Sturm (2019).*

and Belgium (90.09). It is worth noting that the pace of globalization has experienced a significant slowdown due to the COVID-19 pandemic (Statista, 2022). This deceleration can be partly attributed to the decline in international trade of goods and services, with the trade-to-GDP ratio dropping to 52% in 2020. However, by 2021, the trade-to-GDP ratio had already rebounded to 57% (World Bank, 2023a).

The OECD Globalization Indicators encompass an extensive range of metrics, totaling 240 indicators that assess trade, financial, and technological globalization. These indicators provide quantitative measurements of various economic activities conducted by countries under foreign influence. Specifically, they evaluate the contributions made by multinational corporations to growth, productivity, employment, wages, research and development, international trade, and the diffusion of technology.

MATERIALS AND METHODS

The article presents a statistical analysis of economic growth using GDP dynamics and trade indicators (exports and imports) spanning the period from 2000 to 2022 (World Bank, 2023a; 2023g). The authors examine the trends in the KOF Globalization Index, specifically the economic dimension of trade and finance, for the years 2000 to 2020, as provided by the Swiss Economic Institute (2023). To assess the influence of ICT exports by global leaders and the impact of foreign direct investment inflows and outflows on globalization processes, indicators for the period 2000 to 2021 are considered. This analysis aims to provide insights into the factors driving the integration of countries.

RESULTS AND DISCUSSION

In a multipolar world, countries and regions adopt multi-vector policies to foster the comprehensive development of their national economies, facilitate the export of domestic products, promote tourism, showcase their culture, and attract investments to stimulate economic growth (GfK, 2017). The growth of globalization and the increasing openness of the global economy can be observed through the analysis of trade as a share of GDP across different regions (Table 3). Notably, Central European and Baltic countries, along with EU member states, exhibit the highest level of openness, as reflected by the proportion of trade to GDP (139% and 105% in 2022). Conversely, North America and the United States demonstrate relatively lower levels of openness, primarily attributed to their relatively smaller share of exports of goods and services concerning GDP (12.49% in 2021) and the share of imports (15.88% of GDP in 2021).

For comparative analysis, the proportion of exports of goods and services concerning GDP in Central Europe and the Baltic States stood at 68.33% in 2022, while the proportion of imports was 70.02% (Tables 4-5). Over the past two decades, the share of EU exports has experienced an upward trend, reaching 55.91% in 2022, despite the challenges posed by the pandemic. In contrast, China's average share of exports amounted to 19% during the past five years, with a corresponding share of imports at 17.4% in the period of 2018-2022.

Although all regions witnessed an increase in the share of trade in relation to GDP, the proportion of exports of goods and services experienced a significant decline during 2016-2020. This decline can be attributed to factors such as the trade tensions between the United States and China and the implementation of trade restrictions on specific groups of goods. These findings reaffirm the significance of trade policies and their impact on the process of globalization.

Central European and Baltic countries have also demonstrated leadership in terms of the share of

Table 3: Dynamics of the share of trade in GDP, 2000 - 2022, %

	2000-2005	2006-2010	2011-2015	2016-2020	2020	2021	2022
Central Europe and the Baltics	84,76	101,56	117,40	121,49	115,70	127,02	139,44
East Asia & Pacific	58,23	66,15	62,13	53,69	50,81	56,08	64,04
European Union	70,81	78,64	86,71	89,46	85,17	92,89	105,38
Latin America & Caribbean	42,50	45,25	45,28	46,16	46,82	53,95	56,77
Middle East & North Africa	75,92	86,11	82,80	74,98	69,09	59,51	—
North America	28,16	30,68	32,76	29,58	26,66	28,60	—
Sub-Saharan Africa	56,23	58,50	55,15	46,44	40,20	45,84	—
World	52,03	57,71	58,70	55,28	52,15	56,53	—

Source: *Calculated by the author based on the World Bank (2023a).*

Table 4: Dynamics of the Share of Exports of Goods and Services in GDP, 2000-2022, %

	2000-2005	2006-2010	2011-2015	2016-2020	2020	2021	2022
Central Europe and the Baltics	41,72	49,84	59,64	62,20	59,22	63,85	68,33
East Asia & Pacific	26,53	33,65	31,85	28,22	26,68	29,09	31,50
European Union	35,71	39,61	45,13	47,94	46,39	50,40	55,91
Latin America & Caribbean	23,77	23,40	21,68	23,50	24,96	28,57	29,46
Middle East & North Africa	40,86	47,23	45,79	39,09	35,48	-	-
North America	11,84	13,48	15,04	13,24	11,63	12,49	-
Sub-Saharan Africa	27,75	29,74	27,26	21,49	19,10	22,93	23,51
World	24,47	28,96	29,90	27,88	26,38	28,95	30,67

Source: *Calculated by the author based on the World Bank (2023b).*

Table 5: Dynamics of the Share of Imports of Goods and Services in GDP, 2000-2022, %

	2000-2005	2006-2010	2011-2015	2016-2020	2020	2021	2022
Central Europe and the Baltics	45,71	53,07	58,18	59,27	56,07	62,72	70,02
East Asia & Pacific	24,16	30,06	29,95	26,04	24,06	26,35	28,54
European Union	34,03	38,29	41,90	44,06	42,77	46,69	54,35
Latin America & Caribbean	22,75	22,69	23,08	23,84	24,16	30,28	32,21
Middle East & North Africa	32,63	36,58	35,45	35,96	34,39	33,66	-
North America	15,62	17,44	18,02	15,98	14,54	15,88	-
Sub-Saharan Africa	26,28	28,65	27,92	24,69	20,80	23,82	25,95
World	24,29	28,31	29,05	27,23	25,62	28,07	30,28

Source: *Calculated by the author based on the World Bank (2023c).*

imports of goods and services from 2000 to 2022 (Table 5). From 2016 through 2020, a global trend of de-globalization was observed, accompanied by a decline in the proportion of imports of goods and services. However, in the years 2021-2022, there has been a notable resurgence in the dynamic growth of both exports and imports of goods and services.

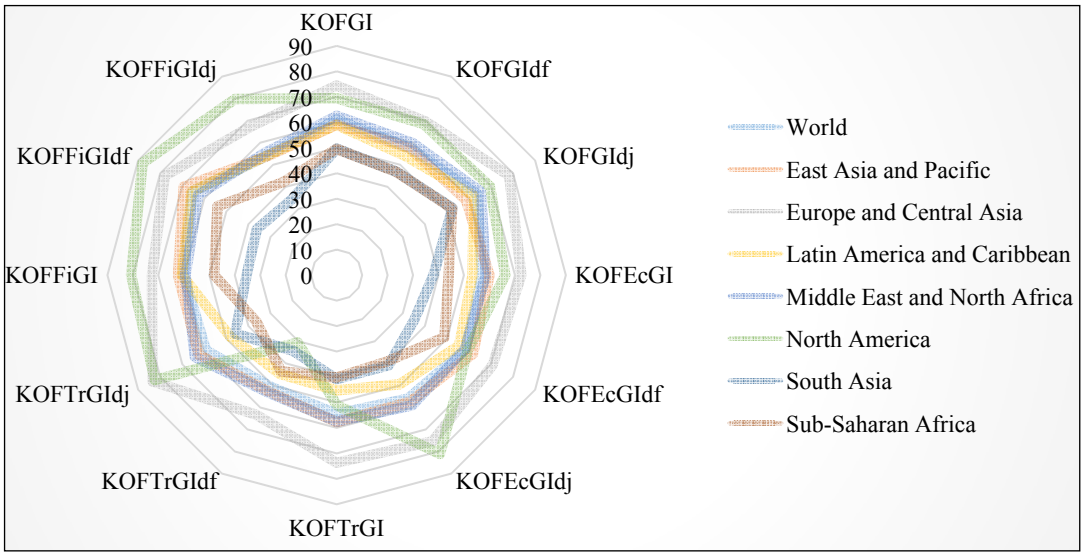
The significance of the technological factor in the processes of globalization, international business relations, and economic development deserves attention. The advancement of information and communication technologies (ICTs) has played a crucial role in fostering globalization and facilitating the rapid dissemination of information, knowledge, technology, and human exchange. Over the past decade (2011-2021), the development of ICTs has gained momentum in all regions worldwide, with China making notable progress in ICT production and exports. While the average share of ICT exports in China was 3.48% during 2001-2010, Central Europe and the Baltic States recorded 5.2%, Europe and Central Asia had 7.81%, the EU achieved 8.59%, and the United States attained 4.4%. However, in the period of 2011-2021, China has been catching up with other regions, with ICT exports reaching 11.61%, surpassing the United States, Central Europe, and the Baltic States (World Bank, 2023d). The practice of student exchange among global players deserves significant attention. Notably, the number of Chinese students pursuing education abroad witnessed steady growth until 2019. In that year, approximately 703,500 Chinese students departed from China to pursue their studies overseas, representing a 6.25% increase compared to 2018. This propelled China to become the largest country of origin for international students globally. However, due to the impact of the coronavirus pandemic, it is estimated that the number of departing students decreased by around half in 2020. It is important to note that as of August 2022, official Chinese sources had not yet published data for years beyond 2019 (Statista, 2023c).

Simultaneously with the expansion of trade as a share of GDP, the Globalization Index also exhibits a rising trend (Table 6), with Europe and Central Asia attaining the highest score (74.4 points in 2020). Noteworthy high values of the Index can be observed in Northern European countries (69.43 in

Table 6: KOF Globalization Index, 2000 - 2020

	2000-2005	2006-2010	2011-2015	2016-2020	2020
East Asia and the Pacific	51,26	55,56	58,02	59,32	59,06
Europe and Central Asia	65,83	71,24	73,22	74,59	74,40
Latin America and the Caribbean	52,86	56,99	58,77	59,35	59,02
Middle East and North Africa	54,33	60,39	61,99	62,62	62,52
North America	67,47	68,95	69,39	69,92	69,43
Sub-Saharan Africa	41,13	45,44	48,32	49,53	49,51
World	53,16	57,96	60,16	61,24	61,06

Source: Calculated by the author based on the Swiss Economic Institute (2023c).



Source: *Calculated by the author based on the Swiss Economic Institute (2023c).*

Fig. 1: KOF Globalization Index by economic (trade and financial) dimension, 2020

2020) and the Middle East and North Africa region (62.52 in 2020).

Different regions of the world exhibit varying degrees of globalization across different dimensions. For instance, North America is characterized by dominant *de jure* economic globalization (with a score of 82) and both *de facto* and *de jure* financial globalization (88 and 80, respectively).

In contrast, Europe and Central Asia predominantly experience *de jure* economic globalization (scoring 75), encompassing *de jure* trade globalization (83) and *de facto* financial globalization (Fig. 1). Overall, the level of *de jure* globalization has been increasing worldwide from 2010 to 2020, while the level of *de facto* trade globalization has witnessed a decline. Meanwhile, the level of *de facto* financial globalization has been on the rise. Researchers attribute this decline in globalization, especially during 2016-2020, to deindustrialization, which entails a decrease in the proportion of industrial production in the gross domestic product (Callaghan, 2021).

Concurrent with the decline in globalization, there was a significant deceleration in economic growth during the period 2016-2020 (Table 7). The average annual GDP growth rate during this period stood at 1.8%, with a particularly sharp contraction of -3.07% in 2020. Notably, different regions exhibited varying rates of both growth and decline throughout the period spanning 2000 to 2022. It is worth highlighting that China's average annual GDP growth rate was 10.45% in 1991-2000, 10.57% in 2001-2010, and 6.95% in 2011-2021. In comparison, other countries and regions worldwide experienced low (up to 3-3.5%) or moderate (4%-7%) levels of economic growth. Since the early 2000s, Europe, the Eurozone, and the EU have experienced notably low growth rates, prompting these countries to explore

Table 7: GDP growth (annual %), 2020-2022

	2000-2005	2006-2010	2011-2015	2016-2020	2020	2021	2022
Central Europe and the Baltics	4,27	2,98	2,45	2,67	-3,39	6,38	4,05
East Asia & Pacific	4,96	5,70	5,07	3,66	-0,12	6,10	2,85
European Union	2,10	1,03	1,00	0,60	-5,67	5,47	3,54
Latin America & Caribbean	2,78	3,70	2,36	-0,47	-6,45	6,73	3,75
Middle East & North Africa	4,62	4,26	3,19	1,15	-3,77	4,42	5,75
North America	2,83	1,02	2,13	1,23	-2,95	5,87	2,16
Sub-Saharan Africa	5,12	5,25	3,94	1,39	-2,00	4,17	3,57
World	3,40	2,81	3,00	1,80	-3,07	6,02	3,08

Source: *Calculated by the author based on the World Bank (2023e).*

potential partner nations for stable economic expansion and investment in high-tech sectors. China emerged as one of the investors in European economies, serving as a key factor in fostering cooperation between the two regions. The economic interests shared between Europe and China have formed the foundation for establishing cooperative ties between the regions. This cooperation is instrumental in understanding the processes of globalization, as it fosters international business relations and contributes to the sustained growth of GDP in the EU. Notably, the strong cooperation is exemplified by the EU's position as the leading exporter to China, while China ranks third in terms of trade volume with the EU and third in terms of exports from the EU (following the United States and the United Kingdom) (European Commission, 2021).

The significance of investment cooperation as a crucial factor in globalization and the strengthening of international business relations among major global players should also be emphasized. Bilateral investments between China and the EU have experienced substantial growth since 2000. Between 2000 and 2020, European Union (EU) companies made substantial investments totaling approximately €148 billion in China. These investments were distributed across various sectors, with significant amounts allocated to the automotive sector (€14.7 billion), raw materials and supplies (€29.2 billion), the financial sector (€11.2 billion), agriculture and food (€11.8 billion), consumer goods and services (€9.4 billion), and the ICT sector (€4.4 billion). Conversely, Chinese companies also demonstrated significant investment activity in the EU, with investments amounting to approximately €117 billion during the same period. The sectors attracting substantial investments from Chinese companies included the automotive sector (€19.7 billion), transport and infrastructure (€17.7 billion), ICT (€16.1 billion), industrial production and equipment (€12.5 billion), energy (€8.2 billion), and consumer goods and services (€8.8 billion) (European Commission, 2021).

The proportion of foreign direct investment (FDI) relative to GDP in the Eurozone exhibited an upward trend, reaching 4.96% from 2001 through 2010. However, in the subsequent period of 2011-2021, this figure declined to 3.44% (World Bank, 2023f). Similar patterns were observed in China, with an increase in the FDI-GDP ratio from 2000 to 2010, followed by a decline from 2011 to 2021 (World Bank, 2023f). Notably, Central European and Baltic States experienced a significant rise in the FDI-GDP ratio, reaching 6.02% during 2001-2010, which slightly decreased to 4.43% in 2011-2021 (World Bank, 2023f). Conversely, the United States maintained a relatively stable FDI-GDP ratio ranging from 1.5% to 1.7% between 2000 and 2021 (World Bank, 2023f). In 2012, Chinese foreign direct investment (FDI) in European countries reached €12 billion, followed by a decrease to €7.3 billion in 2013. However, in 2016, there was a significant surge to €47.4 billion, which gradually declined in the years 2017-2021. The COVID-19 pandemic had a substantial impact on Chinese FDI in Europe, resulting in a sharp drop to €7.9 billion in 2020 and €10.6 billion in 2021. Notably, the Netherlands, Germany, France, and the United Kingdom emerged as the primary recipients of Chinese investment in 2021. Over the period from 2000 to 2021, the cumulative value of Chinese FDI

in European countries was highest in the United Kingdom, amounting to €79.6 billion. On the other hand, Eastern European countries exhibited the lowest level of accumulated Chinese FDI in Europe (Statista, 2023b). In comparison to 2020, investments from Chinese state-owned enterprises (SOEs) in the European Union (EU) experienced a 10% decline, reaching their lowest level in the past 20 years, accounting for 12% of the total Chinese investment. Chinese SOE investments were predominantly concentrated in the energy and infrastructure sectors, particularly in southern Europe. Notably, the consumer goods and automotive industries emerged as the leading sectors for investment (Rhodium Group, 2022).

In Central Europe and the Baltic States, the outflows of foreign direct investment (FDI) were minimal during the periods of 2001-2010, averaging 2.37% of GDP, and 2011-2021, averaging 2.62% of GDP (World Bank, 2023g). China experienced a modest outflow of FDI, amounting to 0.71% of GDP during 2001-2010 and 1.1% of GDP during 2011-2021 (World Bank, 2023g). Conversely, the countries of Europe and Central Asia, the Eurozone, and the EU witnessed significant outflows of FDI, with substantial growth observed since 1991. Overall, the process of globalization and technological advancements have contributed to the increasing share of FDI, both inflows and outflows, in various regions.

CONCLUSION

The findings of the study support the intricate nature of the interrelationships and interdependencies among globalization, economic growth, and international business relations. These interconnections stem from the exchange of technologies, knowledge, investments, and the rapid advancement of ICTs. The complexity of these factors influences the pace of economic growth and shapes the policies adopted by nations to enhance cooperation and seek new partnerships to leverage their respective national resources. From 2000 to 2015, there were notable processes of integration, whereas the period from 2016 to 2020 witnessed a phase of de-globalization and a decline in the proportion of global trade, exports, and imports of goods and services. This reconfiguration can be attributed to a decrease in industrial production and trade conflicts between the United States and China. However, in the years 2021 and 2022, there has been a dynamic growth in the share of exports and imports of goods and services. Despite the challenges posed by the pandemic, all regions experienced an upturn in the trade-to-GDP ratio, and the Globalization Index also displayed an upward trend from 2000 to 2020. Concurrently, the slowdown in globalization was accompanied by a significant deceleration in economic growth during the period from 2016 to 2020.

The researchers also highlighted the significance of the technological factor in the dynamics of globalization, international business relations, and economic development. Notably, there has been a notable acceleration in the development of Information and Communication Technologies (ICT) across all regions of the world over the past decade (2011-2021). This advancement in ICT has played a crucial role in facilitating globalization by enabling the rapid and widespread dissemination of information, knowledge, technology, and other related factors.

Regional disparities in the dimensions of globalization arise due to imbalances in international economic relations. North America is characterized by a dominance of *de jure* economic globalization, encompassing trade, as well as *de facto* and *de jure* financial globalization. On the other hand, Europe and Central Asia exhibit a predominance of *de jure* economic globalization, particularly in terms of trade, and *de facto* financial globalization. Overall, from 2010 through 2020, there has been an upward trend in the level of *de jure* globalization, while the level of *de facto* trade globalization has experienced a decline. Concurrently, the level of *de facto* financial globalization has witnessed growth.

REFERENCES

Ahmed, Z., Zhang, B. and Cary, M. 2021. Linking economic globalization, economic growth, financial development, and ecological footprint: Evidence from symmetric and asymmetric ARDL. *Ecological Indicators*, **121**: 107060.

Bazaluk, O., Yatsenko, O., Zakharchuk, O., Ovcharenko, A., Khrystenko, O. and Nitsenko, V. 2020. Dynamic development of the global organic food market and opportunities for ukraine. *Sustainability (Switzerland)*, **12**(17).

Borodina, O., Kryshtal, H., Hakova, M., Neboha, T., Olczak, P. and Koval, V. 2022. A conceptual analytical model for

the decentralized energy-efficiency management of the national economy. [Konceptualny model analityczny zdecentralizowanego zarzadzania efektywnosci? energetyczn? gospodarki narodowej] *Polityka Energetyczna,* **25**(1): 5-22.

Callaghan, C.W. 2021. Consequences of deindustrialisation for globalisation: Insights for international business. *International Business Rev.*, **30**(3): 101804.

Cordella, T. and Ospino, R.A. 2017. Financial globalization and market volatility: an empirical appraisal (English). Policy Research working paper, no. WPS 8091 Washington, D. C.: World Bank Group. http://documents.worldbank.org/curated/en/720931496861776485/Financial-globalization-and-market-volatility-an-empirical-appraisal

Dreher, A. 2006. Does globalization affect growth? Evidence from a new index of globalization. *Appl. Econ.,* **38**(10): 1091-1110.

Dreher, A., Gaston, N. and Martens, P. 2008. Measuring globalisation. Gauging its Consequences Springer, New York.

Dreher, A., Gaston, N., Martens, P., Dreher, A., Gaston, N. and Martens, P. 2008a. Consequences of globalisation reconsidered: Applying the KOF index. *Measuring Globalisation: Gauging its Consequences*, pp. 75-171.

Dreher, A., Gaston, N., Martens, P., Dreher, A., Gaston, N. and Martens, P. 2008b. Towards an Understanding of the Concept of Globalisation. *Measuring Globalisation: Gauging Its Consequences*, pp. 5-23.

European Commission, 2007. Selected readings. Focus on: Measuring globalisation December 2007. https://ec.europa.eu/eurostat/documents/4187653/5775037/LN-SR122007-EN.PDF.pdf/2b535cd7-edf0-4e66-a9de-ddaa41217b28?t=1414777373000

European Commission, 2021. https://trade.ec.europa.eu/doclib/docs/2021/march/tradoc_159481.pdf

GfK, 2017. GfK: Anholt-GfK Nation Brands Index 2017. Retrieved from https://www.gfk.com/ru/insaity/press-release/issledovanie-gfk-anholt-gfk-nation-brands-index-2017/

Gygli, S., Haelg, F., Potrafke, N. and Sturm, J.E. 2019. The KOF globalisation index–revisited. *The Rev. of Int. Organizations*, **14**: 543-574.

Gygli, Savina, Florian Haelg, Niklas Potrafke and Jan-Egbert Sturm. 2019: The KOF Globalisation Index – Revisited, *Rev. of Int. Organizations*, **14**(3): 543-574.

Haelg, F. 2020. The KOF globalisation index–A multidimensional approach to globalisation. *Jahrbücher für Nationalökonomie und Statistik,* **240**(5): 691-696.

Heimberger, P. 2020. Does economic globalisation affect income inequality? A meta-analysis. *The World Economy,* **43**(11): 2960-2982.

Huh, H.S. and Park, C.Y. 2021. A new index of globalisation: Measuring impacts of integration on economic growth and income inequality. *The World Econ.*, **44**(2): 409-443.

Jahanger, A., Usman, M., Murshed, M., Mahmood, H. and Balsalobre-Lorente, D. 2022. The linkages between natural resources, human capital, globalization, economic growth, financial development, and ecological footprint: The moderating role of technological innovations. *Resources Policy*, **76**: 102569.

Latif, Z., Latif, S., Ximei, L., Pathan, Z.H., Salam, S. and Jianqiu, Z. 2018. The dynamics of ICT, foreign direct investment, globalization, and economic growth: Panel estimation robust to heterogeneity and cross-sectional dependence. *Telematics and Informatics*, **35**(2): 318-328.

Lelyk, L., Olikhovskyi, V., Mahas, N. and Olikhovska, M. 2022. An integrated analysis of enterprise economy security. *Decision Science Letters,* **11**(3): 299-310.

Martens, P. and Raza, M. 2009. Globalisation in the 21st century: measuring regional changes in multiple domains. *Integrated Assessment J.*, **9**(1).

Nikonenko, U., Shtets, T., Kalinin, A., Dorosh, I. and Sokolik, L. 2022. Assessing the policy of attracting investments in the main sectors of the economy in the context of introducing aspects of industry 4.0. *Int. J. of Sustainable Dev. and Planning,* **17**(2): 497-505.

Novak, A., Pravdyvets, O., Chornyi, O., Sumbaieva, L., Akimova, L. and Akimov, O. 2022. Financial and Economic Security in the Field of Financial Markets at the Stage of European Integration. *Int. J. Professional Business Rev.*, **7**(5).

OECD. 2005. Handbook on Economic Globalisation Indicators. https://www.oecd.org/industry/ind/34964971.pdf

Olimpia, N. and Stela, D. 2017. Impact of globalisation on economic growth in Romania: An empirical analysis of its economic, social and political dimensions. *Studia Universitatis "Vasile Goldis" Arad–Economics Series*, **27**(1): 29-40.

Ostapenko, R., Herasymenko, Y., Nitsenko, V., Koliadenko, S., Balezentis, T. and Streimikiene, D. 2020. Analysis of production and sales of organic products in Ukrainian agricultural enterprises. *Sustainability (Switzerland),* **12**(8).

Potrafke, N. 2015. The evidence on globalisation. *The World Economy*, **38**(3): 509-552.

Rhodium Group. 2022. Chinese FDI in Europe: 2021. https://rhg.com/research/chinese-fdi-in-europe-2021-update/

Shahbaz, M., Shahzad, S.J.H., Mahalik, M.K. and Sadorsky, P. 2018. How strong is the causal relationship between globalization and energy consumption in developed economies? A country-specific time series and panel analysis. *Appl. Econ.*, **50**(13): 1479-1494.

Snetkov, A. and Lanteigne, M. 2015. 'The Loud Dissenter and its Cautious Partner'–Russia, China, global governance and humanitarian intervention. *Int. Relations of the Asia-Pacific*, **15**(1): 113-146.

Statista, 2022. Globalization Index – top 50 Countries 2022. Published by Statista Research Department, Jan 4, 2023. https://www.statista.com/statistics/268168/globalization-index-by-country/

Statista, 2023b. Cumulative value of completed foreign direct investment (FDI) transactions from China in EU-27 and

UK between 2000 and 2021, by country. https://www.statista.com/statistics/1244460/china-cumulative-foreign-direct-investment-to-eu-by-country/ Last Accessed on 15th March, 2023.

Statista, 2023c. The number of students from China going abroad for study from 2010 to 2020. https://www.statista.com/statistics/227240/number-of-chinese-students-that-study-abroad/

Swiss Economic Institute, 2023a. KOF Globalisation Index. https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html

Swiss Economic Institute, 2023b. 2022 Globalisation Index: Structure, variables, and weights. https://ethz.ch/content/dam/ethz/special-interest/dual/kof-dam/documents/Globalization/2022/KOFGI_2022_structure.pdf

Swiss Economic Institute, 2023c. KOF Globalisation Index. https://ethz.ch/content/dam/ethz/special-interest/dual/kof-dam/documents/Globalization/2022/KOFGI_2022_public.xlsx Last Accessed on 17th March,2023

Witt, M.A. 2019. De-globalization: Theories, predictions, and opportunities for international business research. *J Int. Business Stud.*, **50**(7): 1053-1077.

World Bank, 2023. World Development Indicators (WDI).

World Bank, 2023a. Financial Globalization Indices. Metadata last updated on – Jan 19, 2023. https://datacatalog.worldbank.org/search/dataset/0039801/Financial-Globalization-Indices

World Bank, 2023a. Trade (% of GDP). World Bank national accounts data, and OECD National Accounts. https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS

World Bank, 2023b. Exports of goods and services (% of GDP). World Bank national accounts data, and OECD National Accounts. https://data.worldbank.org/indicator/NE.EXP.GNFS.ZS

World Bank, 2023d. ICT goods exports (% of total goods exports). United Nations Conference on Trade and Development's UNCTADstat database. https://data.worldbank.org/indicator/TX.VAL.ICTG.ZS.UN

World Bank, 2023e. GDP growth (annual %). World Bank national accounts data, and OECD National Accounts. https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG

World Bank, 2023f. Foreign direct investment, net outflows (% of GDP). International Monetary Fund, Balance of Payments database, supplemented by data from the United Nations Conference on Trade and Development and official national sources. https://data.worldbank.org/indicator/BM.KLT.DINV.WD.GD.ZS

World Bank, 2023g. Foreign direct investment, net inflows (% of GDP). International Monetary Fund, International Financial Statistics and Balance of Payments databases, World Bank, International Debt Statistics, and World Bank and OECD GDP estimates. https://data.worldbank.org/indicator/BX.KLT.DINV.WD.GD.ZS

World Bank, 2023c. Imports of goods and services (% of GDP). World Bank national accounts data, and OECD National Accounts. https://data.worldbank.org/indicator/NE.IMP.GNFS.ZS.