



Tertiary Sector Economics

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**CONVERGENCE OF UKRAINE'S
TRANSPORT SECTOR WITH THE EU
AS AN IMPORTANT ASPECT OF ACHIEVING
THE SUSTAINABLE DEVELOPMENT GOALS
AND THE GREEN DEAL**

Abstract

The article proposes a methodological approach to assessing the convergence processes between Ukraine and the EU in the transport sector, the essence of which is to determine the parameters of the assessment, as well as to

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identify convergent and divergent trends and reasons that impede convergence within these parameters. The assessment of convergent processes between Ukraine and the EU in the transport sector in general and by transport modes was carried out according to the selected parameters, namely: foreign trade in transport services between Ukraine, EU and other countries around the world; sigma and beta convergence of the transport sector of Ukraine and the EU; greenhouse gas emissions from transport; international indices characterizing the transport sector.

Key Words:

beta convergence, convergent trends, divergent trends, foreign trade, Green Deal, greenhouse gas emissions, international indices, sigma convergence, sustainable transport development, transport sector.

JEL: B49, F15, R40.

1 figure, 6 tables, 29 references.

Problem Statement

On September 1, 2017, the Association Agreement between Ukraine, on the one hand, and the European Union, the European Atomic Energy Community and their Member States, on the other (European Union, 2014) (Association Agreement) was ratified, which became the basis for social and economic reforms.

The Association Agreement directly affected the development of Ukraine's transportation system, which is one of the key areas of cooperation between Ukraine and the EU. The signing of the EU-Ukraine Association Agreement laid the groundwork for convergence through the implementation of legislation aimed, among other things, at supporting the reform and modernization of Ukraine's transport sector, as well as the transition to a green economy, including green transport.

In December 2019, The European Green Deal (European Commission, 2019) (Green Deal) was approved as the rollout of the EU's transport policy to ensure sustainable transport development. The Green Deal is a comprehensive, multisectoral roadmap that defines the strategic framework for achieving climate neutrality of the EU economy by 2050 in accordance with the Paris Agreement (Verkhovna Rada of Ukraine, 2016). The main goal of the Green Deal is to gradually reduce greenhouse gas (GHG) emissions by 55% by 2030 and 90% by 2050 compared to 1990 levels. In July 2021, Ukraine's Updated Nationally Determined Contribution to the Paris Agreement was approved. The document envisages a 35% reduction in GHG emissions by 2030 compared to 1990. The EU's transport sector accounts for 25% of greenhouse gas emissions, which are showing an upward trend. This forces the EU to pursue a strict environmental policy aimed at combating GHG emissions. In turn, in Ukraine, this share is 10%, remaining virtually unchanged over the past 30 years. «The main decline in GHG emissions occurred during 1990-2000, which is associated with a decrease in freight transportation due to changes in the economic system» (Stasiuk et al., 2023b), namely a reduction in industrial production.

The window of opportunity for financing domestic reforms and projects was opened by Ukraine's accession to the EU on June 23, 2022, with negotiations on the EU membership process starting in June 2024. On the other hand, this puts forward a number of requirements for Ukraine in terms of transport infrastructure. First of all, it is necessary to determine whether convergence processes are taking place in the transport sector, as well as whether they are characterized by divergent trends that affect these processes. This will allow for a better assessment of Ukraine's integration aspirations.

Literature Review

The variety of convergence assessments in the context of research on the integration of the socio-economic systems of Ukraine and the EU is sufficiently covered in modern scientific works (Grytsenko et al., 2021a; Borzenko & Burlay, 2020; Grytsenko et al., 2021b; Burlay, 2019; Boyko, 2014).

According to another study, one of the leading approaches to assessing convergent and divergent processes in the transport sector (Buran & Erçek, 2021) is to develop a model of strategic management of public bus transport based on the discussion of global convergence and divergence. Other research (Fageda & Olivieri, 2019) assessed regional convergence in Spain over the period 1980-2008 through the impact of the level of transport infrastructure development.

Pradhan (2019) and Wang et al. (2021) revealed convergent processes by assessing transport infrastructure, financial penetration, and economic growth.

The authors conclude that financial infiltration, transport and logistics infrastructure stimulate economic growth in the long run, which is relevant for both the G-20 countries and China. Novoszath (2020) examined convergent trends between Central and Eastern European countries and more developed countries in the transport sector based on an assessment of EU co-financing projects under the CEF program.

The article by Açık & Atacan (2023) is devoted to the study of convergence between countries in the transport sector based on a comparison of international indices, in particular the Liner Shipping Connectivity Index (LSCI), which is a component of the Global Competitiveness Index. Several authors have conducted studies focused on assessing the convergence of transport infrastructure using econometric methods: Saba et al. (2021) and Saba (2021) assessed the convergence of transport infrastructure for 102 countries for 1990-2018 based on the Phillips and Sula econometric method. Beyzatlar & Yetkiner (2017) investigated convergence in the transport sector using Difference GMM and System GMM methods for 15 EU countries for the period 1970-2013 for two transport indicators, namely domestic freight transport per capita and domestic passenger transport per capita.

Thus, the papers mentioned, on the convergence of transport sectors at the intercountry or interregional levels, are focused, first, on studying the impact of transport development on economic growth, second, on analyzing the dependence of investments in the transport sector on convergent processes, and third, on developing or improving methods or tools for calculating the convergence of transport sectors, depending on the tasks set. Meanwhile, this article generalizes and summarizes the results of the calculations obtained in the course of the study, which are reflected in a number of published articles (Stasiuk et al., 2023a; Stasiuk et al., 2023b; Stasiuk et al., 2024), and presents the author's approach to a comprehensive assessment of convergent and divergent processes and trends in the transport sectors of Ukraine and the EU, based on the assessment of several parameters simultaneously.

That is why **the purpose of this article** is to develop and test a methodological approach to identifying convergent and divergent trends between Ukraine and the EU in the transport sector as an important component on the way to achieving sustainable development goals, given the candidate status for EU membership and Ukraine's obligations to fulfill the terms of the Association Agreement, as well as the need to implement other EU legislation outside the Agreement.

Methodology

A comprehensive methodological approach has been developed to investigate the assessment of convergent processes between Ukraine and the European Union in the transport sector, which has allowed to achieve the goal of the article. The essence of the developed methodological approach is as follows:

1) the concepts of «convergent processes in the transport sector of Ukraine and the EU» and «convergent trends in the transport sector» are defined;

2) evaluation parameters are defined, namely:

- foreign trade in transport services between Ukraine, the EU and other countries;
- sigma and beta convergence of the transport sector of Ukraine and the EU;
- international indices;
- sustainable development of transport;

3) assessments of convergence processes between Ukraine and the EU in the transport sector in general and by types of transport according to the selected parameters, which allowed to prove the existence of both convergent and divergent trends between Ukraine and the EU in the transport sector, depending on the selected parameter, as well as the reasons that impede convergence and identify areas of convergence.

Research Results

Convergent processes in the transport sector are understood as the convergence of Ukraine's and the EU's transport sectors in general and by mode of transport in accordance with certain parameters. They are manifested by the emergence of common features while preserving national characteristics. The effectiveness of convergent processes in the transport sector depends on institutional coherence, infrastructure and technological potential, the level of economic development and dynamics, and adherence to the principles of sustainable development and the green economy to reduce the negative impact on the environment, that will ultimately reduce the significant gap in key indicators.

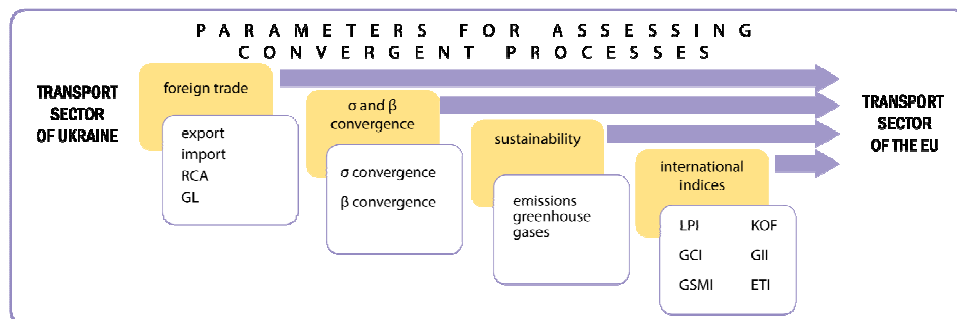
In turn, in the study, *convergent trends* mean determining the direction of the convergence process based on the results of the assessment of quantitative and qualitative data showing convergence or divergence in the key indicators of

the transport sector. ***The generalization of the identified convergent and divergent trends within the study will reflect, respectively, the presence of convergent or divergent processes in the transport sector of Ukraine and the European Union.***

Convergent processes in the transport sector between Ukraine and the EU are a consequence of Ukraine's transport policy and directly affect the development of Ukraine's transport sector, even though they occur with varying intensity and depth. Assessment of convergent processes in the transport sector allows adjusting Ukraine's transport policy and directing it towards strengthening the competitiveness of transport services in the European and international markets. With this in mind, the authors have developed a *comprehensive methodological approach to assessing convergence between Ukraine and the EU in the field of transport* (Figure 1). This involves the identification of parameters and their systematic analysis and evaluation. The parameters of the assessment are: indicators of foreign trade in transport services between Ukraine, the EU and other countries; sigma and beta indicators of convergence of the transport sector of Ukraine and the EU; sustainable development of transport based on greenhouse gas emissions; international indices characterizing the transport sector. According to the developed methodological approach, it is possible to prove analytically and computationally the existence of convergent or divergent trends.

Figure 1

Scheme of a methodological approach to assessing convergent processes between Ukraine and the EU in the transport sector



Source: developed by the authors.

For the **first parameter**, to assess the convergent trends between Ukraine and the EU, we analyzed statistical indicators and calculated based on the following data: exports, imports of transport services, growth rates, trade balance of transport services, share of exports and imports in the overall structure. Ukraine's trade counterparties with the EU in terms of exports and imports of transport services are identified. The index of revealed comparative advantage of transport services (RCA) (Balassa, 1965) and the Grubel-Lloyd Index (GL) (Grubel & Lloyd, 1975) were calculated. Calculations and analysis were carried out for the retrospective period of 2010-2022.

According to the **second parameter**, the assessment of convergence processes between Ukraine and the EU in the transport sector was carried out based on the econometric method. It consists of calculating statistical coefficients to identify σ -convergence and β -convergence, as well as the speed of convergence of the transport sector of Ukraine to the EU (2011-2021). The indicators that formed the basis for calculating the σ -convergence are as follows: freight turnover by certain types of transport, both in Ukraine and the EU, namely road, rail and river, as well as the GVA of EU and Ukrainian transport (2010-2020). In turn, the indicators that formed the basis for calculating the β -convergence between the EU and Ukraine are as follows: freight intensity by individual modes of transport, both in Ukraine and the EU, namely road, rail and river, as well as the GVA of EU and Ukrainian transport (2011-2018).

The **third parameter** assesses the convergence between Ukraine and the EU based on a comprehensive analysis of GHG emissions in general and by transport mode under the Green Deal. We analyze their dynamics, structure by sector, the share of transport emissions in the overall structure, growth rates, and emissions. The coefficients of linear correlation between GDP and GHG emissions; relative growth in GDP per capita and GHG emissions; and coefficients of concentration (intensity) of GHG emissions per \$1 of GDP are calculated. The study covers the period from 1990 to 2020. The year 1990 was taken as the base year for comparison.

Regarding the **fourth parameter**, we have identified six international indices, the information on which is taken for different periods, which in some cases are considered from 2012 to 2022. The selected indices focus on assessing convergent processes between Ukraine and the European Union in the transport sector: Logistics Performance Index (LPI) (2014-2018) (The World Bank, n. d.), Global Competitiveness Index (2013-2019) (Schwab & World Economic Forum, 2019), Global Sustainable Mobility Index (2020-2022) (Sum4all, n. d.), KOF Globalization Index (2014-2020) (KOF Swiss Economic Institute, n. d.), Global Innovation Index (2014-2022) (World Intellectual Property Organization WIPO, n. d.), Energy Transition Index (2012-2021) (World Economic Forum, 2024).

Comparative assessment is carried out for Ukraine, the EU, and specific EU countries like Poland, Germany, France, as well as Moldova, a candidate for EU accession.

The results of the assessment of convergent and divergent trends for each of the parameters of the proposed methodological approach are presented in Table 1.

Table 1

**Results of the assessment of convergent and divergent trends
 in the transport sector of Ukraine and the EU**

Types of transport	Parameters	Railway	Car	Maritime	Aviation	TRANSPORT SECTOR
Foreign trade	Export	–	+	–	–	–
	Import	+	+	+	–	+
	RCA	–	–	–	+	–
	GL	+	+	+	+	+
σ and β convergence	Σ	+	+	–	–	+
	B	+	+	+	–	+
Sustainable development	GHG	*	+	*	*	+
International indices	LPI	*	*	*	*	–
	GCI	+	+	+	–	+
	GSMI	*	*	*	*	+
	KOF	*	*	*	*	–
	GII	*	*	*	*	–
	ETI	*	*	*	*	+

Note: + convergent trends; – divergent trends. * This study does not cover these types of transport.

Source: compiled by the authors based on the study results.

The results of the assessment of foreign trade in transport services between Ukraine, the EU, and the rest of the world showed (Stasiuk et al., 2023b) that in 2010-2021, the largest volumes of exports of transport services of Ukraine were observed to the Russian Federation, and imports – from the EU. That being said, Ukraine's foreign trade in transport services is currently reoriented towards the EU. Furthermore, during the mentioned period, the structure of exports and imports of transport services between Ukraine and the EU countries changed in terms of geographical distribution.

The EU's autonomous trade privileges for exports of goods and services to the EU at zero duty (entered into force in April 2014) did not bring the expected positive result.

Since 2014, exports of maritime, rail, and air transport services have been on a downward trend, which has not changed to date. The only exception is road transport, whose exports of transportation services showed a slight increase. However, the shares of such modes of transport as sea and rail showed a gradual decline, thereby showing a tendency to reorient transportation to less environmentally friendly road transport, whose share among other modes of transport increased by 8% in 2012-2021. Volume of export-import transportation by air remained at the pre-war level, although the commodity structure of cargo changed with a reorientation to military and mixed-use goods, etc.

Despite the leading position of road transport in foreign trade in transport services with the EU, issues of crossing the western border, especially with Poland, Slovakia, Hungary, and Romania, have become acute, due to the competitive advantages of Ukrainian road transport. These problems are legal and political and should be addressed by the European Commission by creating conditions for free border crossing by Ukrainian carriers. Due to the blocking of seaports in 2022, which accounted for a significant share of exports of transportation services, along with the closure of Ukraine's airspace, rail and road transportation services came to the fore during this period.

The RCA index, calculated for Ukraine's exports of transport services to the EU, shows that the transport sector has high and moderate competitive advantages in almost all modes of transport. The highest values of the RCA index were calculated for rail transport compared to other modes of transport. Such a result is due to significantly higher exports of rail transport services in Ukraine compared to similar indicators in the EU. The figures were also influenced by the considerable share of rail transport services exports in the overall structure of Ukraine's services exports. Based on the RCA index evaluated for transport services of Ukraine and the EU countries by road, air and river transport, Ukraine has highly competitive advantages. The reorientation of transportation to less environmentally friendly road transport is correspondingly confirmed by the calculations of the RCA index for the export of transport services between Ukraine and the EU. This poses a challenge for Ukraine to maintain its position and prevent changes in the terms of service provision in favor of other EU member states, which will prevent the emergence of divergent phenomena for the export of transport services.

The results of the *GL* index calculations indicate convergence between Ukraine and the EU, as the level of intra-industry trade between Ukraine and the EU is growing. This is «due to the increased integration of the transport sectors, accompanied by the reorientation of trade flows between the EU countries and their trading partners and Ukraine.» The convergence in intra-industry trade in transport services between Ukraine and the EU «is slow and, in general, has not yet had the necessary impact on the accession process». The reason for that is

the unsatisfactory level of implementation of the Association Agreement in the field of transport.

The results of the analysis of the dynamics of exports and imports of transport services and the calculation of the *RCA* and *GL* indices showed a correlation between the volume of Ukraine's transport services in the EU market and socio-economic and political crises, during which cargo and passenger transportation is restricted.

Overall, the assessment of convergent trends by this parameter exposed that today there are multidirectional trends in Ukraine's foreign trade in transport services with the EU: the analysis of export-import operations shows divergent trends, in contrast to the calculated *RCA* and *GL* indices, which show convergent trends for the transport services sector. By type of transport service, convergent trends are evident for road and air transport, while convergent-divergent trends are observed for rail transport, and divergent trends are observed for sea and river transport. In particular, during the current military operations, foreign trade in air transport services is complicated by the closed airspace over Ukraine. Prospects for strengthening convergent trends between Ukraine and the EU in the transport sector will depend on the prospects for intra-industry trade.

Assessment of the sigma (σ) convergence of transport sector between Ukraine and the EU by standard deviation showed (Stasiuk et al., 2024) that socio-economic crises significantly affect convergence processes in the transport sector between Ukraine and the EU (Table 2).

Table 2

Sigma (σ) convergence of the transport sector of Ukraine and the EU by standard deviation in 2010-2020

Indicator	Presence of convergent and divergent trends
Gross value added, output by type of economic activity «Transport, warehousing»	convergent trends
Freight turnover of railway transport	divergent trends
Freight turnover of road transport	convergent trends
Cargo turnover of river transport	convergent trends

Source: compiled by the authors based on the research results.

An assessment of the sigma (σ) convergence of the transport sector of Ukraine and the EU by the coefficient of variation showed that in 2020, the group of EU countries and the EU together with Ukraine showed divergent trends (Table 3).

Table 3

Sigma (σ) convergence of the transport sector of Ukraine and the EU by the coefficient of variation in 2020

Indicator	Presence of convergent trends	Presence of divergent trends
Gross value added (GVA) of transport in Ukraine and the EU countries	with most EU countries	with Ireland and Malta
Freight turnover of railway transport in Ukraine and the EU countries	with most EU countries	with Greece and Estonia
Freight turnover of road transport in Ukraine and the EU countries	with most EU countries	with Lithuania
Cargo turnover of river transport in Ukraine and the EU countries	with Poland, the Czech Republic and Slovakia	with most EU countries

Source: compiled by the authors based on the research results.

As shown in Tables 2 and 3, the assessment of σ -convergence, both by standard deviation and coefficient of variation, demonstrated the presence of multidirectional trends between the transport sectors of Ukraine and the EU countries, either divergent or convergent. Both approaches to calculations for road transport show convergent trends. Comparing the countries, in 2020, the indicators of transport GVA, as well as rail and road freight turnover, show convergent trends with most EU countries, while river transport freight turnover shows divergent trends with most EU countries.

The assessment of the beta (β) convergence between the EU and Ukraine, individual EU countries and Ukraine showed (Stasiuk et al., 2024) the presence of convergent trends for the period 2012-2019 in terms of transport turnover (Table 4).

Table 4

**Beta (β) convergence of the transport sector of Ukraine and the EU
 in 2011-2021**

Indicator	Periods of convergent trends
GVA of transport in the EU and Ukraine	2013-2019
Freight congestion of rail transport in the EU and Ukraine	2014-2021 between Ukraine and Germany – 2012-2019 between Ukraine and Poland – 2013-2019 between Ukraine and France – 2014-2019.
Freight congestion of road transport in the EU and Ukraine	2017-2021 between Ukraine and Germany – 2012-2019 between Ukraine and Poland – 2012-2019 between Ukraine and France – 2011-2012 and 2018.
Freight congestion of river transport in the EU and Ukraine	2012-2019 between Ukraine and Germany – 2012-2019 (excluding 2018) between Ukraine and France – 2012-2019 (excluding 2018) between Ukraine and Poland – 2011-2012 and 2018.

Source: compiled by the authors based on the research results.

Following the results of the β -coefficients calculations, we can state that convergent trends in the transport sector between the EU and Ukraine and individual EU countries and Ukraine are at an early stage. Similar to the results of the σ -convergence, the β -convergence calculations showed the existence of convergent trends for road transport, which is confirmed by the Student's t-test, reflecting the importance of the selected parameters. The assessment of β -convergence in the comparison between countries showed convergent trends with Poland and Germany, mainly due to spatial proximity.

Sustainable transport development (Stasiuk et al., 2023b). Estimating the growth rate of GHG emissions in the EU and Ukraine relative to the previous year since 2015 shows similar trends. This may indicate the convergence of policies (environmental and transport) as a result of the adoption of the Association Agreement, as well as the ratification of the Paris Agreement and accession to the Green Deal.

The calculated volumes of GHG emissions from transport in the EU and Ukraine in CO₂-eq. per 1 km² and per 1 person showed that the reason for the overall decline in transport GHG emissions in Ukraine during 1990-2020 was not

only a decrease in population, but, first of all, a reduction in industrial production after the collapse of the Soviet Union.

The research for Ukraine estimates that when comparing GDP per capita and GHG emissions from transport, the best results are obtained for the base year 2005, which is associated with the ratification and gradual implementation of the Kyoto Protocol over a 15-year period.

During 1990-2020, Ukraine and the EU maintained a downward trend in emissions intensity, i.e., a decrease in emissions per unit of GDP, but in Ukraine, this trend per \$1 of GDP and per \$1 of transport value added shows a much faster decline than in the EU and is heading towards zero, which is a positive trend. During times of per capita GDP growth in Ukraine, GHG emissions from transport also rose. Therefore, it is important to enhance environmental policies focused on reducing GHG emissions during these periods. The convergent trends in the transport sector between Ukraine and the EU in terms of sustainable development indicators are presented in Table 5.

Table 5

Convergent and divergent trends in the transport sector between Ukraine and the EU in terms of sustainable development indicators, 2020

Indicator	The presence of convergent and divergent trends
Pearson's correlation between Ukraine's GDP and GHG emissions from Ukrainian transport	convergent trends
Relative growth of GDP per capita and GHG emissions from transport in the EU and Ukraine in 1990, 2005 and 2015	convergent trends
GHG emissions from transport in the EU and Ukraine, t CO ₂ _{eq.} per 1 km ² and per 1 person (2020)	convergent trends
Concentration (intensity) ratio of GHG emissions per 1 USD of GDP and per 1 USD of transport value added	convergent trends

Source: compiled by the authors based on the research results.

It is evident from Table 5 that in 2020, according to all the calculated indicators, there are convergent trends in the transport sector between Ukraine and the EU in terms of sustainable development, but Ukraine still needs to do significant work towards sustainable development to reach the European average.

The assessment of the convergence of the transport sector of Ukraine with the EU by international indices is presented in Table 6.

Table 6

Position of the Ukrainian transport sector according to international indices

Index' name	Period	Ukraine's position in ratings
Logistics Performance Index	2014, 2016, 2018	<ul style="list-style-type: none"> • a decline in the overall index and most sub-indices (except for competence and logistics quality); • significant lagging behind the EU countries
Global Competitiveness Index	2013-2019	<ul style="list-style-type: none"> • improved position and narrowed the gap in all indicators; • ahead of Poland and Moldova in terms of the quality of railway infrastructure and a slight gap with Germany and France
Global Sustainable Mobility Index	2020, 2022	<ul style="list-style-type: none"> • significant improvement of positions; • rapprochement with the EU countries due to the deterioration of positions in Germany, France and Poland
KOF Globalization Index	2014, 2018, 2020	<ul style="list-style-type: none"> • stable positions, which are quite high relative to the total number of countries assessed by the index
Global Innovation Index	2014, 2018, 2020, 2022	<ul style="list-style-type: none"> • rapid improvement of positions during 2014-2020; • a sharp decline in positions in 2022; • a decline in the Infrastructure sub-index; • significant lagging behind Germany, France, and Poland in the Logistics Productivity sub-index, ahead of Moldova in the ranking
Energy Transition Index	2012, 2019, 2021	<ul style="list-style-type: none"> • growth of the position during 2019-2021, although Ukraine's place is almost at the bottom of the ranking; • rapid growth in the GAP sub-index

Source: compiled by the authors based on the research results.

The assessment of Ukraine's international indices characterizing the transport sector revealed an improvement in its position in most of them. Ukraine has better standings in the indices reflecting the quality of transport infrastructure, which indicates a convergence of trends in the characteristics of transport infrastructure. During the research period, Ukraine demonstrated its readiness for an energy transition. The Government of Ukraine, in its efforts to converge with the EU in the transport sector, should focus on the components that, according to the assessment, showed negative convergence trends, namely customs procedures, logistics services, innovative development of the transport sector, etc.

In terms of the following indices: Global Competitiveness Index, Global Sustainable Mobility Index, Global Innovation Index, Energy Transition Index, convergent trends are observed, while the Logistics Performance Index and KOF Globalization Index show divergent trends.

Conclusions

The study proves the existence of both convergent and divergent trends; by type of transport, convergent trends are observed to a greater extent in road and rail transport, while divergent trends are common for air and maritime transport. **Convergent trends** in the transport sector as a whole between Ukraine and the EU have been identified – for *road transport* according to the Global Competitiveness Index, exports, imports, the Grubel-Lloyd Index, sigma and beta convergence, and greenhouse gas emissions; for *rail transport* by the Global Competitiveness Index, imports, Grubel-Lloyd index, sigma and beta convergence; **divergent trends** were revealed for *air transport* by the Global Competitiveness Index, exports, imports, sigma and beta convergence and for *maritime transport* by exports, RCA index, sigma convergence during 2010-2022.

The obtained results of the assessment of convergent processes in the transport sector between Ukraine and the EU indicate a slow pace of convergence and no impact on solving urgent problems, yet it depends on the speed of integration. According to the European barometer, the implementation of the EU-Ukraine Association Agreement in the field of transport, transport infrastructure, postal and courier services, and digital integration in 2023 was 56% (Cabinet of Ministers of Ukraine, 2024).

The study findings allow the authors to assert that the proposed comprehensive methodological approach to assessing the convergence of the transport sectors of Ukraine and the EU proved to be effective. This methodological approach can be used both for further analysis of the development of convergent or divergent trends between the transport sectors of Ukraine and the EU and adapted to assess convergent processes in other sectors of the economy.

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Received: February 2, 2025.
Reviewed: February 19, 2025.
Accepted: March 12, 2025.