DYNAMICS OF INTERNATIONAL TOURISM IN LEADING TOURIST COUNTRIES OF THE EU: IMPACT OF THE COVID-19 PANDEMIC AND THE RUSSIAN-UKRAINIAN WAR

ДИНАМІКА МІЖНАРОДНОГО ТУРИЗМУ У ПРОВІДНИХ ТУРИСТИЧНИХ КРАЇНАХ ЄС: ВПЛИВ ПАНДЕМІЇ COVID-19 ТА РОСІЙСЬКО-УКРАЇНСЬКОЇ ВІЙНИ

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Abstract. The article examines trends in the development of international tourism in the leading EU countries, selected through cluster analysis. The focus is on key factors that influence both the economic development of countries and their socio-economic development: tourist arrivals, tourism expenditures, and GDP per capita. Special attention is given to the impact of the Covid-19 pandemic and the Russia-Ukraine war on the tourism sector and the economies of these countries. The purpose of the research is to identify and analyze the factors contributing to the competitiveness of leading EU countries in the global tourism industry. The study employs quantitative analysis, using statistical data on tourism indicators from Eurostat and the World Tourism Organization. The analysis is carried out through time series analysis to explore patterns and relationships between variables like GDP per capita, number of international tourists, and tourism revenue. The findings indicate that the countries with well-developed tourism infrastructure, high levels of investment in promotion, and favorable economic conditions tend to dominate the international tourism industry. The analyzed countries have demonstrated significant recovery of tourism following major crises, such as the economic crisis, the Covid-19 pandemic and Russian-Ukrainian war. Despite the severe impact of these events, which led to substantial declines in tourist arrivals and revenue, leading EU nations have shown resilience in regaining their position in the global tourism market. The practical implications suggest that countries should continuously adapt their tourism strategies to maintain or improve their global rankings and address emerging trends and competition. The study concludes that sustainable tourism development, combined with the expansion of accommodation facilities and improvement of service quality, will be crucial for maintaining the competitiveness of EU countries in the global tourism industry which will contribute to economic development and socio-economic

development of countries. The results of the analysis provide insights into future trends and offer recommendations on how to enhance the attractiveness of their countries for international visitors.

Keywords: international tourism, tourism industry, tourism, socio-economic development, economic development, EU, Covid-19, economic crisis, GDP per capita, Russian-Ukrainian war

Анотація. У статті досліджено тенденції розвитку міжнародного туризму в провідних країнах ЄС, які було обрано завдяки кластерному аналізу. Зосереджено увагу на таких ключових факторах, що впливають як на економічний розвиток країн, так і на соціально-економічний розвиток: туристичні прибуття, туристичні витрати та ВВП на душу населення. Окремо розглянуто вплив пандемії Covid-19 та російсько-української війни на туристичний сектор і економіку цих країн. Метою дослідження є виявлення та аналіз факторів, що сприяють конкурентоспроможності провідних країн ЄС у світовій індустрії туризму. У дослідженні використано кількісний аналіз із використанням статистичних даних про показники туризму від Євростату та Всесвітньої туристичної організації. Аналіз здійснюється за допомогою аналізу часових рядів, щоб дослідити закономірності та взаємозв'язки між такими змінними, як ВВП на душу населення, кількість міжнародних туристів і доходи від туризму. Результати показують, що країни з добре розвиненою туристичною інфраструктурою, високим рівнем інвестицій у просування та сприятливими економічними умовами, як правило, домінують у міжнародній індустрії туризму. Проаналізовані країни продемонстрували значне відновлення туризму після великих криз, таких як економічна криза, пандемія Covid-19 та російсько-українська війна. Незважаючи на серйозні наслідки цих подій, які призвели до значного зниження кількості туристів і доходів, провідні країни ЄС продемонстрували стійкість у відновленні своїх позицій на світовому ринку туризму. Практичні наслідки свідчать про те, що країни повинні постійно адаптувати свої туристичні стратегії, щоб підтримувати або покращувати свій глобальний рейтинг і реагувати на нові тенденції та конкуренцію. Дослідження робить висновок, що сталий розвиток туризму в поєднанні з розширенням об'єктів розміщення та покрашенням якості послуг матиме вирішальне значення для підтримки конкурентоспроможності країн ЄС у світовій індустрії туризму, що сприятиме економічному розвитку та соціально-економічному розвитку країн. Результати аналізу дозволяють зрозуміти майбутні тенденції та пропонують рекомендації щодо підвищення привабливості своїх країн для іноземних відвідувачів.

Ключові слова: міжнародний туризм, туризм, індустрія туризму, економічний розвиток, ЄС, Covid-19, економічна криза, розвиток, відновлення туризму, ВВП на душу населення, російсько-українська війна

Introduction. The rapid development of international tourism in the European Union (EU) has been a significant driver of economic and socio-economic development, contributing to employment, infrastructure growth, and the overall well-being of the region. In recent decades, leading EU countries such as France, Spain, and Italy have consistently ranked among the top global destinations for international tourists. This growth, however, has been subject to fluctuations due to global economic crises and, more recently, the unprecedented impact of the Covid-19 pandemic. Additionally, the ongoing Russia-Ukraine war has created new challenges for the tourism industry, particularly in Eastern Europe, by disrupting travel routes, reducing tourist confidence, and causing shifts in regional economic stability. The tourism industry, highly sensitive to external shocks, experienced dramatic declines in arrivals and revenues during these crises, which not only affected economic performance but also hindered socio-economic development, including community livelihoods and social infrastructure. Given this backdrop, the study of trends in international tourism development, particularly in the context of post-crisis recovery, is both timely and relevant. The novelty of this research lies in its focus on examining the recovery patterns of the tourism industry in leading EU countries after economic crises. While much attention has been paid to the general impact of economic crisis, the Covid-19 pandemic and Russian-Ukrainian war on development and recovery of tourism, less has been done to comprehensively assess the long-term recovery trends, as well as the factors that contribute to the resilience and competitiveness of these countries in the global tourism industry.

The primary objectives of this study are to: analyze the key factors influencing the development of international tourism in leading EU countries, assess the impact of economic crisis, the Covid-19 pandemic and the Russian-Ukrainian war on tourism performance, identify the factors contributing to the post-crisis recovery of the tourism industry, and provide recommendations for sustaining longterm competitiveness in the global tourism market.

The purpose of the research is to identify and thoroughly analyze the key factors that contribute to the competitiveness of leading EU countries in the global tourism industry. By understanding these drivers of success, the research aims to provide insights into how these countries maintain their leadership positions and how other regions might adopt similar strategies to boost their tourism competitiveness.

Analysis of recent research and publications. In recent years, there has been significant academic interest in international tourism, its economic impact, and resilience to global crises. Researchers have focused on analyzing the effects of economic and social shocks on the tourism industry in the EU.

Notably, scientists discuss the issue of effective management in the tourism and hospitality industry in a competitive environment (*L. Kevin, J. Mengjie & S. Wenming, 2017*). The authors emphasize that international tourism is a crucial driver of economic growth. Some of the works highlights that tourism significantly contributes to GDP and serves as a vital source of employment (*Wang, Y., & Tziamalis, A., 2023*). However, they also point out that a large proportion of tourist flows are concentrated in a few leading countries, which presents challenges related to the uneven development of the sector across the EU.

Farynyuk and Naumova had another important aspect is the statistical analysis of the tourism market conducted. Their study focuses on key indicators of tourism activity in Ukraine, providing valuable insights for comparison with EU countries. The research demonstrates how global economic crises and shifts in demand for international travel affect the overall structure of the tourism market *(Farynyuk, N. V., Naumova, M. A., 2018)*.

The World Tourism Organization (UNWTO) has also made significant contributions to understanding the effects of the Covid-19 pandemic on the tourism industry. According to its reports *(UNWTO report, 2021)* global tourism suffered unprecedented losses in 2020, and recovery in leading EU countries only began towards the end of 2021. Furthermore, the European Union's Final Report on Regional Impacts of the Covid-19 Crisis on the Tourist Sector (2021) offers a detailed analysis of tourism recovery in different EU regions. This document highlights the need for sustainable development investments and emphasizes the importance of digitalization in fostering recovery.

Mashika, Grabar and Kashka emphasize the challenges faced by the tourism industry due to the shocks of the COVID-19 pandemic and the Russian-Ukrainian war. They argue that, in light of these crises, the EU tourism sector requires support in developing and implementing comprehensive risk management plans to be better prepared for future disruptions. The authors highlight that while tourism recovery is underway across much of Europe, the process is notably slower in Eastern Europe due to the ongoing Russian-Ukrainian war. This prolonged conflict has not only disrupted travel routes and diminished tourist confidence but also hampered economic stability, further complicating the region's recovery efforts (Mashika H., Grabar M., & Kashka M., 2023).

Additionally, Liasidou conducted a review of European countries' official tourism websites, examining their strategies to attract international tourists' post-crisis. The study shows that countries actively promoting sustainable and safe tourism through digital platforms demonstrated faster recovery rates (*Liasidou*, 2022).

Thus, recent research emphasizes the significance of tourism for the economic growth of EU countries and explores key factors contributing to its recovery after crises such as the Covid-19 pandemic and the Russia-Ukraine war. This research serves as a foundation for further development

of the sector, particularly in terms of sustainable development, digitalization, and innovation, addressing the need for resilience in the face of global disruptions.

Presentation of the main research material. International tourism is a key factor in the global economy, contributing significantly to the development of many countries, including those in the European Union (EU), which attract millions of travelers annually. Analysis of trends in the development of international tourism in EU countries is an important task for understanding the dynamics of this sector and determining strategic directions for its further development.

It was decided to conduct a cluster analysis of all 27 EU countries which is based on various indicators of tourism activity (such as GDP per capita, number of international tourists, and tourist expenditures e.t.c). This analysis will help identify typical groups of countries with similar characteristics in their tourism markets, reveal development trends, and highlight the key factors influencing tourism activity in the region.

For the cluster analysis, we selected hierarchical clustering using the Complete Linkage method. The measure of dissimilarity between units was chosen as L2 dissimilarity, which assesses differences between objects, such as data points in a multidimensional space. Using Stata 16, we obtained average values for indicators and based on this data, a dendrogram was constructed, as shown below.

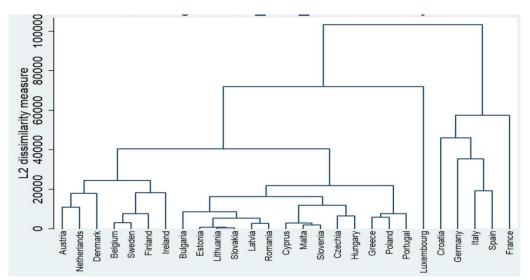


Figure 1. Dendrogram of cluster distribution according to the Complete Linkage method and L2 dissimilation measure. Source: author's calculations

The dendrogram shows that EU countries can be divided into several groups based on their economic and social indicators. Clusters reflect different levels of economic development and similarities between countries within the EU.

The first cluster consists of two subclusters: Austria, the Netherlands, Denmark, Belgium; and Sweden, Finland, Ireland. These countries have similar indicators for the chosen variables, with tourism developing well and GDP per capita gradually increasing.

The second cluster is divided into three subclusters: Bulgaria, Estonia, Lithuania, Slovakia, Latvia, Romania; Cyprus, Malta, Slovenia, the Czech Republic, Hungary; and Greece, Poland, and Portugal. These countries exhibit lower levels of tourism development and GDP per capita compared to those in the first cluster.

The third cluster contains only one country—Luxembourg. This is notable because Luxembourg has the highest GDP per capita among EU countries, yet its tourism sector is less developed, with relatively low tourist arrival figures.

Fourth Cluster: Germany, France, Italy, Spain, Croatia. These countries, characterized by high GDP per capita and exceptional tourism metrics, are major European tourist destinations with well-developed infrastructure and significant economic contributions from tourism.

In recent years, countries such as France, Spain, and Italy have consistently ranked among the top 10 most visited countries globally. Their attractiveness to tourists is driven by their rich cultural heritage, historical landmarks, diverse landscapes, and well-developed infrastructure, making them perennial favorites for international travelers. Therefore, we will focus on these countries for further calculations and analysis, as an example of the most successful EU economies and attractive countries for tourism development. Below, in the Table 1 we will look the leading EU country's place in the ranking of the most visited countries in the world in 2020-2024 (Q1 - Quarter 1).

Table 1. The leading EU country's place in the ranking of the most visited countries in theworld (2020-2024)

Country	The country's place in the top-10 ranking of the most visited countries in the				
name	world				
	2020	2021	2022	2023	2024
					(Q1)
France	1	1	1	1	1
Italy	2	5	5	4	5
Spain	5	3	2	2	2

Source: compiled by the author based on data from UNWTO and Statista

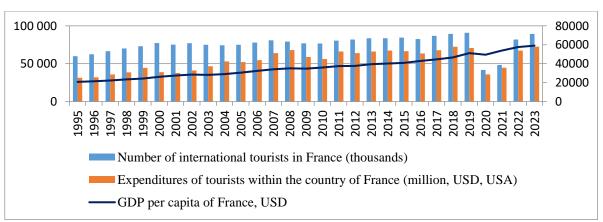
France consistently holds the top position as the most visited country in the world from 2020 through Q1 2024. This sustained ranking reflects France's strong global appeal, likely driven by its rich cultural heritage, major attractions like Paris and the French Riviera, and well-established tourism infrastructure.

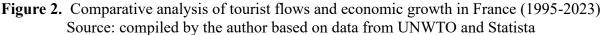
The fluctuations in Italy's and Spain's rankings highlight the dynamic nature of global tourism competition. While France maintains a dominant position, Italy and Spain's varying ranks suggest a more competitive environment where multiple factors influence tourist preferences and travel patterns. The early data for 2024 indicates that while France continues to lead, Italy and Spain are facing increased competition. The decline in Spain's ranking to eighth in Q1 2024 and Italy's drop to sixth may suggest emerging trends or changes in tourist behavior that could impact future rankings.

In summary, France's unwavering top position underscores its enduring global appeal. Italy and Spain's fluctuating rankings reflect the competitive nature of global tourism and highlight the need for these countries to adapt to evolving trends and market conditions.

In this study, the decision was made to analyze the trends in international tourism development in leading EU countries based on the following indicators: number of arrivals and tourism revenue, compared to GDP per capita, as these indicators are considered to be the most indicative.

The graphs below provide a comparative analysis of tourist flows and economic growth in chosen leading EU countries for the period 1995-2023.



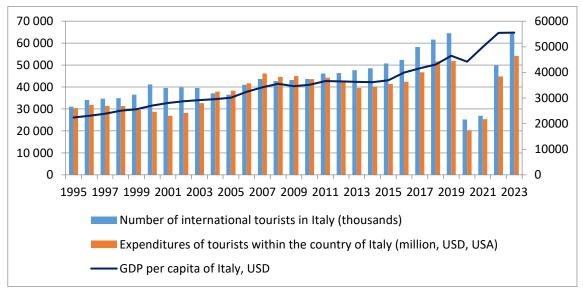


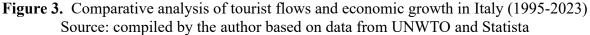
The number of international tourists in France grew from 60.03 million in 1995 to 89.39 million in 2023, indicating a steady increase in France's popularity as a tourist destination. Tourist spending rose from \$31.30 billion in 1995 to \$72.41 billion in 2023, with a notable increase in recent years despite a dip in 2020 due to the pandemic. GDP per capita increased from \$20,763.10 in 1995 to \$59,069.39 in 2023, reflecting significant economic development.

As a result of the 2008 economic crisis, all these indicators declined slightly. However, by 2011, they began to recover gradually, with GDP per capita starting to rebound from 2010.

France shows positive trends in all main indicators. International tourist numbers and tourist spending are increasing, with some fluctuations during the pandemic. GDP per capita has also increased significantly, confirming the country's economic progress and socio-economic development. France remains one of the most popular tourist destinations in the world, and its economy continues to grow. Despite the serious blow caused by the Covid-19 pandemic, the country is showing a rapid recovery in the tourism industry, contributing not only to its economic growth but also to improved socio-economic conditions, including job creation and enhanced public services. the impact of the Russia-Ukraine war in 2022-2023, the data does not show a significant disruption similar to the effects of COVID-19. Both the number of tourists and tourist expenditures display growth in 2022 and 2023, with GDP per capita continuing its upward trend. This suggests that while the war has had profound geopolitical and economic consequences, its direct impact on France's tourism sector appears to be less pronounced, at least compared to the shock caused by the pandemic. However, it is possible that certain effects, such as changes in tourist composition or travel patterns, may not be immediately apparent in this aggregated data.

Economic indicators, such as GDP per capita, also indicate stable growth and a gradual return to pre-crisis levels.





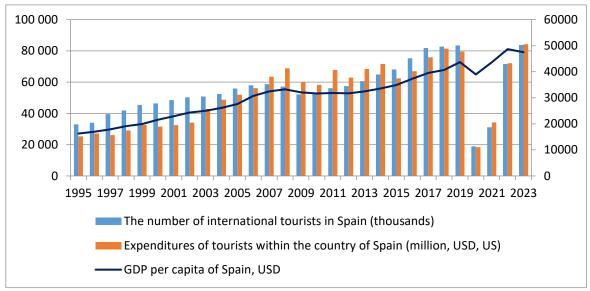
In Italy the number of international tourists, tourist spendings and GDP per capita showed a steady increase during all the period.

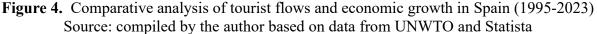
The economic crisis of 2008 did not significantly impact the number of international tourists or their expenditures. However, there was a notable decrease in GDP per capita in 2009. Subsequently, from 2010 onwards, GDP per capita began to recover and showed a consistent upward trend.

The number of international tourists in Italy peaked at 64.51 million in 2019 but fell sharply to 25.19 million in 2020 due to Covid-19. By 2023, it had rebounded to 64.45 million. Tourist spending also showed a strong upward trend, reaching a record \$54.13 billion in 2023 after a drop to \$20.32 billion in 2020. GDP per capita steadily increased, peaking at \$55,540.77 in 2023, reflecting overall

economic growth. Despite the pandemic's impact in 2020, Italy's tourism and economic indicators have recovered and reached new highs.

Despite the ongoing Russia-Ukraine war, the data does not indicate a major disruption to Italy's tourism sector during this period. Tourist numbers, expenditures, and GDP per capita continue to increase, suggesting that the war's direct impact on Italy's tourism industry is not as severe as the effects of the pandemic. However, potential changes in tourist demographics or travel behavior may still be present but are not immediately reflected in the aggregate figures.





The graph for Spain shows a similar pattern to that of France and Italy, with a sharp decline in tourism indicators in 2020 due to the Covid-19 pandemic. However, the industry appears to rebound strongly in 2022 and 2023, with both international tourist numbers and expenditures rising significantly.

Throughout the studied period, there has been an overall growth in the number of international tourists, GDP per capita, and tourism expenditures in Spain, with some minor declines attributable to the economic crisis and the Covid-19 pandemic.

The economic crisis had a notable impact on all three indicators for Spain, resulting in a significant decline. However, from 2011 onward, a gradual recovery and increase in these indicators have been observed.

The number of international tourists in Spain steadily increased until 2019, peaking at 83.51 million. The Covid-19 pandemic caused a sharp decline to 18.93 million in 2020. However, by 2023, tourist numbers had risen again to 83.84 million.

Tourist spending followed a similar pattern, reaching a peak of \$79.57 billion in 2019 before dropping to \$18.38 billion in 2020. Spending rebounded to \$34.18 billion in 2021 and rose to \$84.35 billion in 2023.

GDP per capita in Spain has consistently increased, reaching \$48,685.50 in 2022, reflecting overall economic growth despite occasional dips.

Overall, Spain shows positive trends across all indicators: international tourist numbers, spending, and GDP per capita. Despite the significant impact of Covid-19 in 2020, the rapid recovery in subsequent years highlights the resilience of Spain's tourism industry and economy.

Regarding the impact of the Russia-Ukraine war in 2022-2023, the data does not suggest a noticeable disruption to Spain's tourism sector. Both tourist arrivals and expenditures show recovery and growth during this period, while GDP per capita continues to rise.

This indicates that, as in other Western European countries, the direct effects of the war on Spain's tourism industry are minimal compared to the shock from the pandemic. Nevertheless, certain indirect impacts, such as shifts in tourist origins or travel patterns, may not be immediately reflected in the aggregated data.

Conclusions. This study provides a comprehensive analysis of the development trends in international tourism in leading EU countries, focusing on France, Italy, and Spain, from 2020 to 2024. The analysis underscores several key findings related to both economic and socio-economic development:

1. France remains the world's top tourist destination, thanks to its cultural assets and strong tourism infrastructure. Steady growth in tourist numbers and spending shows resilience and recovery, contributing to job creation and regional development.

2. Italy's tourism ranking peaked in 2020 but dropped significantly due to the Covid-19 pandemic. However, by 2023, the country experienced a strong recovery, with both tourist numbers and spending rebounding. This recovery has also supported economic growth, as seen in the steady rise of GDP per capita, while fostering socio-economic improvements such as increased employment and enhanced local infrastructure.

3. Spain's tourism sector demonstrated a strong recovery after the pandemic-induced slump in 2020. The consistent rise in GDP per capita highlights the overall economic growth, while the recovery of the tourism industry reflects Spain's capacity to rebound and adapt to new market conditions. Moreover, this growth has positively influenced socio-economic development, with improved public services and increased living standards in key tourist regions.

4. The pandemic had a profound impact on international tourism across all analyzed countries, leading to significant declines in tourist numbers and spending in 2020. However, the rapid recovery in subsequent years underscores the resilience of these tourism sectors and their ability to adapt to changing circumstances, driving both economic and socio-economic development in the affected regions.

Leading EU countries have recovered well in tourist arrivals and spending post-pandemic. Adaptive strategies like infrastructure investment and marketing have helped maintain their global tourism competitiveness, supporting socio-economic growth through employment generation and community development.

Overall, the findings from this study provide valuable insights into the dynamics of international tourism in leading EU countries, offering recommendations to bolster economic and socio-economic resilience, and capitalize on growth opportunities in the post-pandemic era and posy-war period.

The Russia-Ukraine war, which began in 2022, has added further complexity to the recovery of the European tourism industry. While its direct impact on France, Italy, and Spain may not be as pronounced as the pandemic, the war has created geopolitical uncertainty, altered travel patterns, and disrupted tourism flows, particularly from Eastern Europe.

Future research could delve into the long-term impacts of global disruptions on tourism resilience and sustainability, comparing recovery patterns with non-EU countries to highlight best practices. Investigating the role of technological advancements in shaping tourist behavior and spending, as well as assessing the economic and social implications of tourism recovery on local communities, will be crucial.

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1. Li, Kevin & Jin, Mengjie & Shi, Wenming. (2017). Tourism as an important impetus to promoting economic growth: A critical review. Tourism Management Perspectives. 10.1016/j.tmp.2017.10.002.

2. Wang, Y., & Tziamalis, A. (2023). International tourism and income inequality: The role of economic and financial development. Tourism Economics, 29(7), 1836-1864. https://doi.org/10.1177/13548166231177106

3. Farynyuk, N. V., Naumova, M. A. (2018). STATYSTYCHNYY ANALIZ RYNKU TURYSTYCHNYKH POSLUH UKRAYINY [Statistical Analysis of the Tourism Services Market in Ukraine]. Retrieved from: https://jvestnik-sss.donnu.edu.ua/article/view/4860/4890 [in Ukrainian]

4. Böhme, K. (2021). Final report regional impacts of the COVID-19 crisis on the tourist sector: CCI 2020CE16BAT074 (1st edition.). Luxembourg: Publications Office of the European Union. doi: 10.2776/179573.

5. Mashika Hanna, Grabar Marina, Kashka Maria. (2023). "The Impact of the Russia-Ukraine War on the Development of the Tourism Industry in EU Countries". Prychornomorski Economic Studies. Issue 79, pp. 236-239. Retrieved from: https://dspace.uzhnu.edu.ua/jspui/handle/lib/50731 [in Ukrainian]

6. Liasidou, S. (2022). Reviewing the Content of European Countries' Official Tourism Websites: A Neo/Post-Fordist Perspective. Tour. Hosp. 3, 380–398. https://doi.org/10.3390/tourhosp3020025.

7. Published by Statista Research Department, & 26, A. (2024, August 26). International tourist arrivals by country 2023. Statista. Retrieved from: https://www.statista.com/statistics/261726/countries-ranked-by-number-of-international-tourist-arrivals

8. The UN Tourism Data Dashboard | Tourism Data. UN Tourism | Bringing the world closer. URL: https://www.unwto.org/tourism-data/un-tourism-tourism-dashboard (date of access: 27.08.2024).